DANA

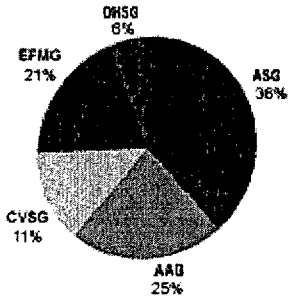
INVESTORS' CORNER

Key Financial Data

	12/31/00	12/31/01
Sales	$12,317	$10,271
Income before non-recurring items	$377	$5
Net income (loss)	$334	$(298)
Earnings per share before non-recurring items (diluted)	$2.46	$0.04
Earnings per share (diluted)	$2.18	$(2.01)
Average common shares outstanding (diluted)	153 million	148 million
Dividends paid per share	$ 1.24	$0.94
Dividend yield	8.1%	6.8%
Total assets	$11,236	$10,207
People at year end	79,288	69,758
Principal facilities	313	300
Countries	35	34

Sales by Foundation Business - full year 2001

Financial Snapshot



Snapshot by SBU

- Automotive Systems
- Automotive Aftermarket
- Engine & Fluid Management Systems
- Commercial Vehicle Systems
- Off-Highway Systems
- Leasing

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People Finding A Better Way®

DANA-341

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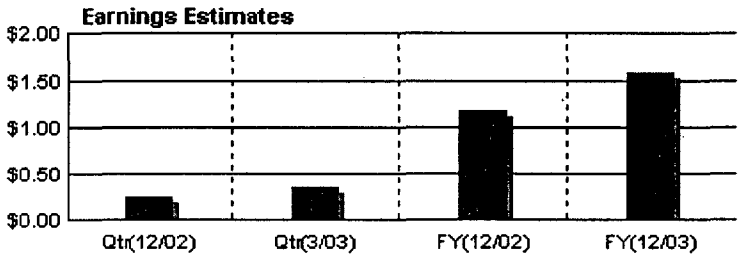
Dana Corporation: Earnings Estimates

Earnings Estimates
Earnings Surprise
Consensus EPS Trend
Earnings Growth Rates



Earnings Estimates	Qtr(12/02)	Qtr(3/03)	FY(12/02)	FY(12/03)
Average Estimate	0.24	0.36	1.17	1.57
Number of Analysts	10	3	14	14
High Estimate	0.32	0.44	1.25	2.20
Low Estimate	0.21	0.23	1.10	1.00
Year Ago EPS	-0.09	0.18	0.04	1.17
Growth Rate	367.78%	98.15%	2,828.57%	34.27%

Zacks Industry: AUTO/TRUCK-ORI

Zacks data updated daily.

Zacks Analyst Recommendations data provided by Zacks Investment Research.

STANDARD & POOR'S COMSTOCK Quotes supplied by Standard & Poor's ComStock, Inc. and are delayed at least 20 minutes.

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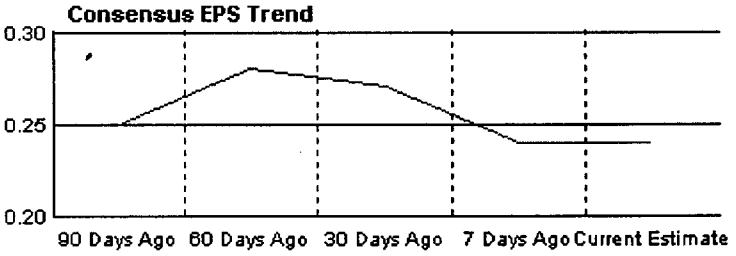
Dana Corporation: Consensus EPS Trend

Earnings Estimates
Earnings Surprise
▸ Consensus EPS Trend
Earnings Growth Rates



Consensus EPS Trend	Qtr(12/02)	Qtr(3/03)	FY(12/02)	FY(12/03)
Current Estimate	0.24	0.36	1.17	1.57
7 Days Ago	0.24	0.38	1.17	1.58
30 Days Ago	0.27	0.40	1.17	1.63
60 Days Ago	0.28	0.40	0.97	1.71
90 Days Ago	0.25	0.40	1.12	1.70

Zacks Industry: AUTO/TRUCK-ORI

Zacks data updated daily.

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Dana Corporation: Earnings Growth Rates

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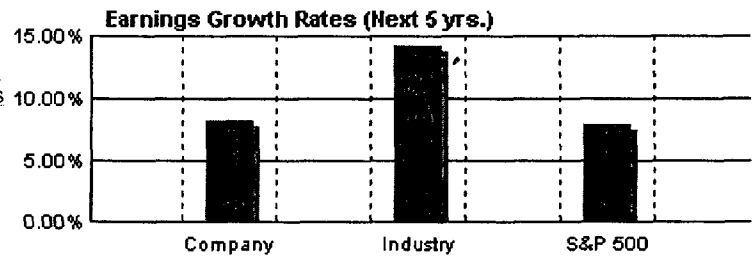
Consensus EPS Trend
Earnings Growth Rates



Earnings Growth Rates	Last 5 yrs.	FY 2002	FY 2003	Next 5 yrs.	02 P/E
Company	-65.80%	NA	32.40%	8.30%	10.20
Industry	-4.00%	37.00%	16.00%	14.20%	12.10
S&P 500	-1.10%	22.70%	13.10%	8.00%	19.10

Zacks Industry: AUTO/TRUCK-ORI

Zacks data updated daily.

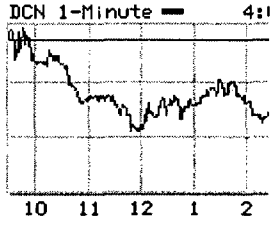
Analyst Recommendations data provided by Zacks Investment Research.

Quotes supplied by Standard & Poor's ComStock, Inc. and are delayed at least 20 minutes.

Dana Corporation (NYSE) Profile News Chart Analyst Insider Financials Msgs SEC

DCN Last: **11.50** Change: **-0.43** **-3.60%** Volume: **622,800** 4:00pm 11/18/2002 Choos

Open:	11.96	Yield:	0.35	Shares Out:	148.56M
High:	11.99	P/E Ratio:	13.69	Market Cap:	1.71B
Low:	11.32	EPS:	0.84	52wk High: 5/17/2002	23.22
Bid:	n/a	Ex Date:	11/26/2002	52wk Low: 10/9/2002	9.28
Ask:	n/a	Dividend:	0.01	Avg Volume:	1.02M



Add to Alerts | Add to My Portfolio **Create DCN Alert at:** $9 $10 $13 $14 ... Chart: 1dy 1mo 3mo 1

News for Dana Corporation **Alert me for news on DCN**

9:58am 11/18/02	Dana Corp completes sale of $33 mln in assets - *CBS MarketWatch.com*
2:15pm 11/14/02	The Ratings Game: J.P. Morgan cautious on auto industry - *Susan Lerner*
10:36am 11/14/02	J.P. Morgan cuts Q1 2003 auto sector earns ests. - *Tomi Kilgore*
6:33am 11/14/02	Wall St seen mixed as Dell looms, Household soars - *Reuters U.S. Company News*
5:00pm 11/11/02	U.S. suppliers tap foreign automakers for growth - *Reuters U.S. Company News*
4:46pm 11/10/02	The Social Graces as a Business Tool - *[at NY Times]*
10:19am 11/01/02	Eaton closes on buy of Dana's hose/fitting operations - *CBS MarketWatch.com*

More...

Press Releases about Dana Corporation

9:52am 11/18/02	Dana Corporation Completes Sale of Several Non-Core Businesses - *PR Newswire*
12:40pm 11/05/02	Dana Corporation Streamlines Sales Analysis With Executive Viewer - *Internet Wire*
12:10pm 11/05/02	Dana Corporation Streamlines Sales Analysis With Executive Viewer - *Internet Wire*

More...

Market Advisers for Dana Corporation

$ Free Stock Analysis of Dana Corporation (DCN) - *Zacks.com*

$ New Stock Rating for Dana Corporation FREE! - *StockPickReport.com*

$ DCN: D&B Business/Credit Reports - *Dun & Bradstreet*

$ The Automobile Parts Industry: A Group Study - *Dow Theory Forecasts*

$ Morningstar Stock Research Report - *Morningstar.com*

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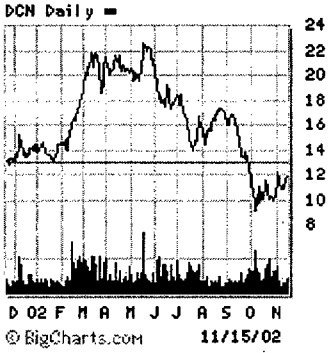
Dana Corporation (NYSE) Chart Financial Analyst Insider Msg News Option SE

DCN **11.50** **-0.43** **-3.60%** Vol: 622,800 4:00pm 11/18/02

Price and Volume



Create DCN Alert at: $10 $13 other

Price Average 50-day:	$ 12.15
Price Average 200-day:	$ 16.93
Vol Average 50-day:	1,024,800
Vol Average 200-day:	1,102,900
52-wk high (5/17/2002):	$ 23.22
52-wk low(10/9/2002):	$ 9.28
Bid:	n/a
Ask:	n/a

Analyst Information | Historical Quote

Share related items

Market cap:	$ 1.71B
Shares out:	148.56M

Company Information

Dana Corporation
4500 Dorr Street
Toledo OHIO 43615

Website Annual Repor
Phone: +1 419 535-45(
Fax: +1 419 535-46

Dana Corporation. The Group's principal activity is t supply components, modules and systems to global vehicle manufacturers and related aftermarkets. Th Group operates through five segments: Automotive systems group (ASG), Automotive aftermarket grou (AAG), Engine and fluid management group (EFMG Commercial vehicle systems (CVS) and Off-highwa systems group (OHSG). The Group supplies axles, driveshaft, brake, fluid systems, structural, bearings and sealing, filtration and other engine products through its segments. The Group provides leasing and financing services. The products are marketed North America, Europe, South America & Asia Pacific. The customers of the Group include Genera Motors, Ford, Daimler Chrysler, Volvo/Renault and Navistar International. Vehicular products accounte for 99% of 2001 revenues and leasing and financing services, 1%.

Company at a Glance

Industry:	Auto Parts	Employees:	70,00(
		Fiscal Year-End:	12/31/200

Latest Insider Transactions

Marilyn R. Marks, Director	8	Exercise of Stock Options	09/30/20(
James P. Kelly, Director	2,000	Open Market Purchase	04/25/20(

Per share data

Earnings (1 year):	-1.69
Current P/E Ratio:	13.69
Cash Flow:	$ 0.99
Cash (last quarter):	$ 447.00M
Annual Dividend:	$ 0.04
Book Value:	$ 13.43
EBITDA:	$ 189.00M

Management effectiveness

Return on Equity (1 year):	-11.48%
Return on assets (1 year):	-2.74%
Return on Investment (1 year):	n/a

Valuation ratios

Price/Earnings (1 year):	-7.06
Price/Book (1 year):	0.89
Price/Cash Flow (1 year):	10.10

Profitability

Gross Margin (1 year):	11.63%
Operating Margin (1 year):	2.49%
Profit Margin (1 year):	-2.20%

M = Millions B=Billions

Charles W. Hinde, Chief Financial Officer	400	Award of Stock	04/18/20C
Michael L. Debacker, Officer	4,000	Award of Stock	04/16/20C
Ismael J. Melgar, Officer	9,310	Award of Stock	03/28/20C

More Insiders

News for DCN

9:58am 11/18/02	Dana Corp completes sale of $33 mln in assets - *CBS MarketWatch.com*
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4:46pm 11/10/02	The Social Graces as a Business Tool - *[at NY Times]*
10:19am 11/01/02	Eaton closes on buy of Dana' hose/fitting operations - *CBS MarketWatch.com*
10:19am 11/01/02	Dana Corp. to record $18 mln gain in Q4 on disposal - *CBS MarketWatch.com*
5:08pm 10/29/02	Dana Sells 3 Cos. in Restructuring - *AP Online*
1:44pm 10/29/02	Dana Corp top sell three non-core businesses - *Reuters U.S Company News*

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WorldScope data provided by Thomson Financial

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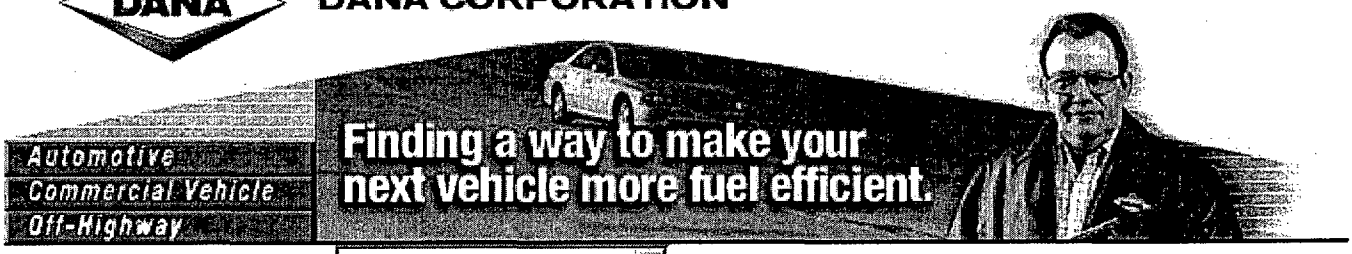
DANA CORPORATION



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Select a Dana Site

- CEO and CFO Statements
- Transfer Agent and Registrar Information
- Dana Corporation 3rd Quarter Slides & Audio are available now...
- Form 10-Q for Quarterly Period Ended Sept. 30, 2002

At A Glance:

Dana Corporation is a global leader in the design, engineering, and manufacture of value-added products and systems for automotive, commercial, and off-highway vehicle manufacturers and their related aftermarkets. The company employs approximately 70,000 people worldwide - all dedicated to achieving innovation through close collaboration with customers. Founded in 1904 and headquartered in Toledo, Ohio, Dana operates hundreds of technology, manufacturing, and customer service facilities in 34 countries. The company reported sales of $10.3 billion in 2001.

Current News:

- Dana Corporation Completes Sale of Non-Core Businesses
- Dana Corporation to Supply Advanced Traction Technologies for Exciting New MC Sports Car
- Dana Corporation's Hose and Tubing Products Facility
- Dana Corporation Completes Sale of Industrial Hose and Fitting Operations to Eaton Corporation

More News

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People Finding A Better Way®

OVERVIEW

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FOUNDATION BUSINESSES: FOCUSED EXCELLENCE

Dana's foundation businesses are: axles, driveshafts, structures, brake and chassis products, fl systems, filtration products, and bearings and sealing products. These products hold strong market positions – number one or two in the markets they serve. They provide value-added manufacturing, are technologically advanced, and each has features that are unique and patented. These foundation businesses serve the production and service sectors of Dana's thre basic markets: automotive, commercial vehicle, and off-highway; and the components they produce can be combined to form a wide array of complete modules and systems.

People Finding A Better Way®

DANA

NEWS ROOM

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- Identity Standards

Press Releases
Dana Corporation releases to the media covering the past year; includes links to market-focused releases from Dana's business units.

Information & Brochures
Annual reports, corporate fact sheet, international pamphlets (multiple languages) and brochures on Dana business conduct, philosophy and policies, strategy and style.

Resources
Quarterly Reports and Investor Relations information, Toledo area information, Dana history, links to trade publications, industry organizations and manufacturers.

Images
Selected photos, including facilities, personnel and products, available for download as high, medium or low-resolution files.

Contacts
Name, title and email address information for Dana's corporate media contacts.

Identity Standards
Guidelines on image and identity elements with detailed specifications on use of colors, fonts, logos and signatures, and trademark and copyright requirements; includes examples of correct usage and a glossary.

News Room Search
Search function confined to the content of the News Room section of the Web site.

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People Finding A Better Way®

NEWS ROOM

Press Releases

Click on the links below to read Dana press releases. The links in the left side bar will take you press releases about particular Dana markets.

We believe that the information contained in each of these press releases was accurate when the release was issued. We have not undertaken to update this information, however, and you should not assume that the contents of any release are accurate as of any date other than the date of the release. Archived releases can be found on the "PR Newswire" link.

11/18/02 - Dana Corporation Completes Sale of Non-Core Businesses

11/12/02 - Do you have what it takes to manage a super NASCAR team? You'll get your chance in 2003!

11/11/02 - Dana Brake and Chassis Named 2002 Silver Progress Towards Excellence Award Recipient

11/05/02 - Dana Corporation to Supply Advanced Traction Technologies for Exciting New MG Sports Car

11/04/02 - Dana Corporation's Hose and Tubing Products Facility

11/01/02 - Dana Corporation Completes Sale of Industrial Hose and Fitting Operations to Eaton Corporation

10/29/02 - Dana Corporation Announces Agreements To Sell Non-Core Businesses

10/25/02 - DANA CORPORATION REPORTS THIRD-QUARTER EARNINGS

10/25/02 - Wix Filter Drag Racing Update

10/22/02 - Dana E-Steering Technology Brings Fuel Economy Benefits To Existing Vehicle Designs

10/22/02 - Dana's Intelligent Cooling System Uses Real-Time Data To Improve Engine

Performance, Fuel Economy

10/22/02 - Dana Corporation Declares Dividend

10/22/02 - Dana Uses Its Thermal Management Expertise To Protect Under-Hood Electronics in High Temperature Environments

10/22/02 - Dana's Intelligent Lubrication System Electronically Manages Oil Flow, Improvin Durability, Fuel Efficiency, and Emissions

10/21/02 - Dana Corporation Wins Fourth IndustryWeek 10 Best Plants Award

10/21/02 - Emerson, Dana Corporation Pursue Joint Development of Advanced Vehicle Technology

10/09/02 - Dana Corporation Introduces New Brake Application Guidelines

10/09/02 - Dana Corporation Celebrates Groundbreaking for Automotive Systems Group Technology Center

10/08/02 - Dana Corporation to Supply Driveshafts, Rear Axles for Nissan Frontier and Xterra in Brazil

10/07/02 - Raybestos® Brand Brakes Receive 2002 Parts Plus "Partner of the Year" Awarc

10/07/02 - Dana Corporation Receives Corporation of the Year Award from Michigan Minority Business Development Council

10/01/02 - Dana Spicer Off-Highway Dedicates New Technology Center

10/01/02 - Dana Corporation Announces Agreement to Sell Industrial Hose and Fitting Operations to Eaton

09/19/02 - Dana Corporation Earns Canadian Quality Award for Excellence

09/18/02 - Could Someone You Know be the 2003 Victor Reinz Machinist of the Year?

09/12/02 - Automotive Hall of Fame Names 2002 Young Leadership and Excellence Awarc Winners

09/12/02 - Dana to Provide Recyclable Cam Covers Modules to Jaguar

09/10/02 - Dana Corporation Announces New European Light-Truck Drive Axles Series

09/10/02 - Dana Spicer Speciality Axle Division Has Expanded Range of NDS Axles

09/09/02 - Dana Venezuela's Tube Mills facility (Tuboauto) received recommendation to be Certified as ISO-14001

09/03/02 - Dana Completes Sale of DCC Real Estate Services Group

08/29/02 - Dana Corporation Venezuela earns ISO 14001 Certification

08/29/02 - Dana Corporation Acquires European Driveshaft Operation

08/28/02 - Dana Corporation Announces New Class 4/5 Single Drive Axle

08/27/02 - Dana Venezuela's Traction Technologies Facility received a recommendation to be certified as ISO-14001

08/23/02 - Three More Years!

08/22/02 - Greatly Enhanced Late Model Coverage in New Clevite 2002 Master Engine Parts Catalog

08/19/02 - Wix Filters Drag Racing Update

08/15/02 - Angola Hose and Tubing Plant Achieves ISO 14001

08/14/02 - Dana Corporation Announces Filing of CEO, CFO Statements with SEC

08/13/02 - Dana Corporation Awarded Masters of Quality by Freightliner

08/09/02 - Dana Executive Advocates Combination of Lean Practices and New Technologies to Move Closer to

08/09/02 - Perfect Circle Piston Facility in Valencia Receives Environmental Recognition Award

08/09/02 - Dana Corporation Announces Plans to Sell Light-Duty Cylider Liner Business

08/08/02 - Dana, GKN Win European Hydroforming Business for Land Rover

07/31/02 - Dana Selected as 'Best of the Best' in Four Product Categories

07/30/02 - Dana Offers Improved Mechanical Transaxle for Riding Mowers and Lawn Tractors

07/30/02 - Dana's New Low-Cost Hydrostatic Transmission Provides Smoother Acceleratic

07/30/02 - Dana's Outdoor Power Equipment Components Division to Consolidate Operati for More Efficient Customer Service

07/30/02 - Environmental Recognition Award for Structural Solutions Facility

07/23/02 - BWD Awards Scholarship to Woman in Ford/AAA National Auto Repair Championship

07/17/02 - Dana Corporation Reports Second-Quarter Earnings

07/16/02 - Dana Corporation Declares Dividend

07/12/02 - Clevite Engine Builder Showdown to air Sunday on Fox Sports Net

07/12/02 - Spicer Off-Highway Product Division in Gravatai, Brazil Achieves ISO 9001 Certification

07/09/02 - New Victor Reinz 2002 Master Catalog Now Available with Over 3,500 New Applications Listings

07/01/02 - Borg-Warner Brand Backed With "No Comeback Guarantee" For High Tech Replacement Products

07/01/02 - BWD Automotive Seeking Applicants for Legacy Scholarships

06/27/02 - Dana Corporation Completes Sale of Selected DCC Subsidiaries

06/21/02 - Wix Awards Scholarships and Funding to FFA Chapters

06/19/02 - Dana Corporation Realigns Automotive Systems Businesses

06/17/02 - Wix Filters Earns Top Supplier Award From Aftermarket Auto Parts Alliance

06/17/02 - Borg-Warner Brand Offers Cool 6-Packs for Summer

06/17/02 - Dana Corporation to Supply Torque Management, Traction Technologies for Lincoln Aviator

06/13/02 - Dana Corporation Raises Second-Quarter Expectations

06/13/02 - Dana Brake Parts Canada, Inc. Honored with 2002 Guelph Environmental Awar for Excellence in Waste Management

06/12/02 - Dana Corporation Announces Expiration of Supply Agreements with Mack Trucks, Inc.

06/11/02 - Dana to Provide Support Modules for Newly Announced Isuzu Pick-up Truck

06/10/02 - Dana Corporation to Supply Axles, Driveshafts, & Full Frames for new Generati of GMC Savana, Chevy Express Vans

06/05/02 - Dana ANCOM Facilities Receive Recommendation for ISO-14001 Certification

05/31/02 - Wix Enters Product Sponsorship Agreement with Hendrick Motorsports

05/30/02 - Wix Filtration Products wins the CARQUEST Order Fill Award

05/24/02 - Raybestos® Brand Brakes Signs Indy Driver Sarah Fisher

05/23/02 - Victor Reinz has been named the 2001 CARQUEST Vendor of the Year

05/22/02 - Josh Starcher Advances to Semi-finals at IHRA Summer Nationals

05/20/02 - Dana Corporation to Supply Independent Rear Suspension Systems for Ford Falcon in Australia

05/20/02 - Dana Europe Facility Obtains QS-9000 Certification

05/15/02 - Dana Corporation Raises Second-quarter Expectations

05/10/02 - Dana Begins Providing Technologically Advanced Hydroformed Structural Systems for the 2003 Ford Expedition and Lincoln Navigator

05/10/02 - Dana Receives receives "Best Project Award" by Partners In Education of Tolec

05/08/02 - Wix Filters Drag Racing Update

05/07/02 - DANA CORPORATION ANNOUNCES FORMATION OF HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP

05/06/02 - Dana Corporation's Hose & Tubing Products Group Consolidates Rubber and Plastic Extrusion Operations

05/06/02 - DANA BRAKE AND CHASSIS NAMED FEDERATED OUTSTANDING VENDOI OF THE YEAR

05/06/02 - BWD AUTOMOTIVE AND PERFECTION HY-TEST CLUTCH ANNOUNCE NEV ALLIANCE FOR BORG WARNER BRANDED CLUTCHES

05/06/02 - WIX OFFERS DRIVERS A BREATH OF FRESH AIR WITH EXPANDED LINE OF CABIN AIR FILTERS

04/30/02 - DANA CORPORATION'S TORQUE MANAGEMENT FACILITY EARNS CCME POLLUTION PREVENTION AWARD

04/30/02 - FEDERATED AUTO PARTS AWARDS BWD AUTOMOTIVE AS VENDOR OF THE YEAR HONORABLE MENTION

04/26/02 - Dana Venezuela Facilities Earn ISO 14001 Certification

04/19/02 - DANA CORPORATION INTEGRATES LIGHT AXLE, DRIVESHAFT BUSINESSES AS PART OF CUSTOMER-FOCUSED REALIGNMENT

04/17/02 - DANA CORPORATION ANNOUNCES FIRST-QUARTER RESULTS

04/16/02 - DANA CORPORATION DECLARES DIVIDEND

04/16/02 - DANA CORPORATION INTRODUCES NEW AXLES AND BRAKES CONDENSED SPECIFICATIONS GUIDE

04/15/02 - NAPA BRAKE AND CHASSIS IS UNPRECEDENTED SIX-TIME WINNER OF SPIRIT AWARD

04/05/02 - ROUND 4 OF CLEVITE ENGINE BUILDER SHOWDOWN USHERS IN NEW CHAMPION AND NEW ENGINE BUILD RECORD

04/03/02 - Dana Engine Management Division Receives ISO-14001 Registration

04/03/02 - DANA CORPORATION ELECTS RETIRED UNITED PARCEL SERVICE CHAIRMAN & CEO JAMES P. KELLY TO BOARD OF DIRECTORS

03/28/02 - DANA'S FORT WAYNE FACILITY EARNS ISO 14001 CERTIFICATION

03/26/02 - DANA CORPORATION INTRODUCES VOCATIONAL STEER AXLE FAMILY

03/26/02 - DANA CORPORATION INTRODUCES NEW CLASS 7 AND 8 AIR DISC BRAK SYSTEM

03/26/02 - DANA CORPORATION RAISES FIRST-QUARTER EXPECTATIONS

03/25/02 - DANA CORPORATION'S SPICER® WING BEARING DRIVESHAFTACCOMMODATES WIDER VARIETY OF APPLICATIONS

03/25/02 - DANA'S NEW MODEL 44 AXLE HYDROSTATIC ADAPTER SAVES SPACE, REDUCES COST

03/25/02 - DANA SPICER SPECIALTY AXLE DIVISION IMPROVES STEER DRIVE AXLE

03/25/02 - DANA CORPORATION OFFERS NEW POWERSHUTTLE TRANSMISSION

03/25/02 - DANA ANNOUNCES ADVANCED DATA MANAGEMENT PLATFORM FOR ASSET AND FLEET MANAGEMENT

03/21/02 - DANA FACILITY OBTAINS ISO 14001 REGISTRATION

03/21/02 - ROUND 2 RESULTS OF CLEVITE ENGINE BUILDER SHOWDOWN 2002

03/18/02 - DANA TO SUPPLY TRACTION AND TORQUE MANAGEMENT TECHNOLOGIES FOR TWO NEW JEEP® MODELS

03/11/02 - DANA CORPORATION COMPLETES NOTES PLACEMENT

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03/05/02 - TOM O'BRIEN NAMED VICE PRESIDENT OF MARKETING FOR DANA BRAK AND CHASSIS

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02/19/02 - GENTLEMEN, BUILD YOUR ENGINES!

02/19/02 - DANA CORPORATION COLLABORATES WITH FORD ON DESIGN OF NEW 2002 HARLEY-DAVIDSON™ F-150 SUPERCREW PICK-UP

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02/13/02 - DANA CORPORATION'S ARCO FACILITY EARNS INTERNATIONAL BEST FACTORY AWARD

02/13/02 - DANA CORPORATION ANNOUNCES YEAR-END RESULTS AND PROGRES ON RESTRUCTURING ACTIONS

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02/04/02 - WIX FILTERS DRIVES RACE FANS INTO AUTO PARTS STORES WITH INNOVATIVE NASCAR PROMOTION

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01/28/02 - DANA CHAIRMAN & CEO JOE MAGLIOCHETTI EARNS AUTOMOTIVE HALL OF FAME DISTINGUISHED SERVICE CITATION

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01/22/02 - DANA TRACTION TECHNOLOGIES GROUP IMPLEMENTS ADVANCED REA TIME QUALITY TRACKING SYSTEM TO DOMESTIC AND GLOBAL SUPPLIERS

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01/08/02 - DANA CORPORATION TO SUPPORT 2003 DODGE VIPER WITH HIGH-PERFORMANCE, ADVANCED TRACTION TECHNOLOGIES

01/04/02 - BWD Automotive Revs Up the Holidays for Needy Children

01/03/02 - COULD SOMEONE YOU KNOW BE THE NEXT VICTOR REINZ MACHINIST OF THE YEAR?

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12/19/01 - DANA CORPORATION'S DRIVESHAFT PRODUCTS GROUP CHANGES NAME TO REFLECT BROADER RANGE OF TECHNOLOGY

12/18/01 - DANA CORPORATION SELECTED AS 4WD SYSTEM SUPPLIER FOR 2002

FORD ESCAPE IN TAIWAN

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12/11/01 - DANA CORPORATION SELECTED AS 'BEST OF THE BEST' AMONG AXLE SUPPLIERS IN INDUSTRY SURVEY

12/07/01 - DANA BRAKE AND CHASSIS PRESIDENT TELLS INDUSTRY GROUP THAT AUTOMOTIVE AFTERMARKET IS EXCITING AND DYNAMIC INDUSTRY

12/05/01 - "CEEK" AND YE SHALL FIND CLEVITE ENGINE PARTS BRINGS ENGINE KI CATALOGING ONLINE

12/03/01 - DANA CORPORATION ANNOUNCES ORGANIZATIONAL CHANGES, APPOINTS TECHNOLOGY OFFICER, AND PROVIDES ADDITIONAL DETAIL ON RESTRUCTURING PLANS

01/01/00 - NAPA Echlin Backed By Worry-Free Warranty

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ɔn & Brochures

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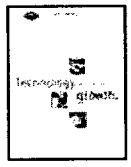
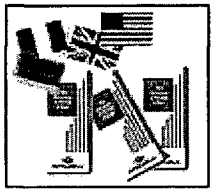
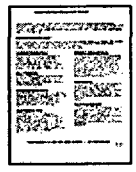
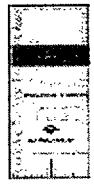
email at: orders@hecksprinting.com

2001 Annual Report		2000 Annual Report	
PDF Versions of the Dana Pamphlets *14 languages including English*		Dana Fact Sheet	
Transformation 2005 (PDF)		The Dana Style (PDF)	
The Philosophy & Policies of Dana (PDF)		Standards of Business Conduct (PDF)	

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People Finding A Better Way®

DANA

NEWS ROOM

Resources

Resources to help you learn more about Dana Corporation:

Quarterly Reports:

2nd Quarter - 2002 Fact Sheet

Dana's Investor Relations Page

Visit Toledo.com:

Toledo.com is a great site to find out about Toledo-area businesses, what to do in the glass city this weekend, where to eat and shop, as well as many other great links - it's the Glass City at yc finger tips!

Dana History

Dana History Book

Additional Industry Resources:
When you click on any of the following hyperlinks, you will leave Dana's web site. We have provided these links for your convenience in learning more about Dana's markets, but none of these linked sites are part of our web site and we do not endorse or accept any responsibility fo the content of these linked sites (or of any other third-party sites linked to them) or for your use such sites.

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Jeff Cole, Manager, Marketing Communications
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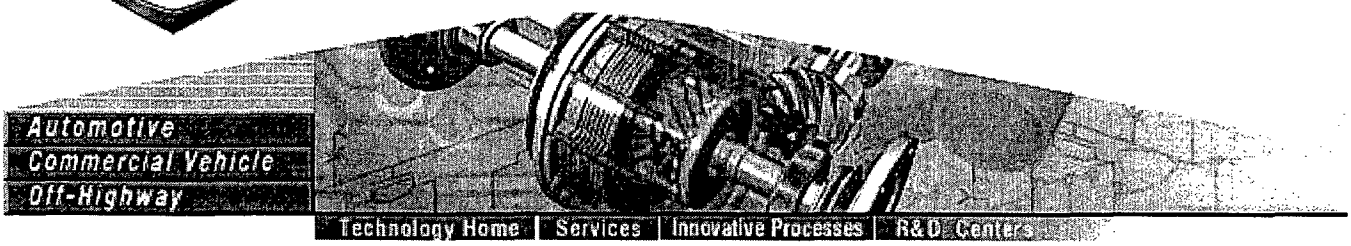
People Finding A Better Way®

DANA

TECHNOLOGY



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- Intelligent Lubrication™ System
- Engine Cooling Solutions
- Off-Highway Suspended Axle
- Commercial Vehicle Independent Front Suspension
- Intelligent Driveshafts
- Fuel Cell Subsystems
- Starter/Alternator with Switched Reluctance Technology
- Intelligent Cooling™ System
- Tailor Metal™ Structures
- Torque Transfer Technology
- Collapsible Driveshafts
- Intelligent Brake System
- Filter Technologies
- Thermal Acoustical Protective Shields
- Torsionally Tuned-40® Tandem Axle

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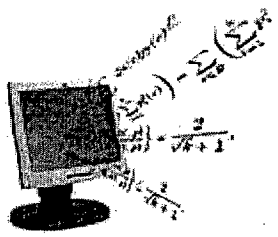
Innovating New Products, Systems, and Services



- Alternative fuel-powered engines
- Increased energy efficiency of internal combustion engines
- Lighter, stronger, and more durable vehicles
- Reduced emissions and increased recyclability
- Reduced noise, vibration, and harshness
- Improved ride and handling
- Speed and flexibility

With technology partners like Motorola, technology tools like the Dana Virtual Test Rig and Tritium Tracer™ System, and technology-development processes like the Front End and Stage Gate, Dana is accelerating vehicular innovation. The wide array of sustaining and disruptive technologies our engineers and technical experts are developing have the common thread of customer needs.

What you see in this section are advanced technologies. For current products and services, check out the Dana overview page, or, for more detail, the market pages - automotive, commercial vehicle and off-highway.

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DANA

INVESTORS' CORNER

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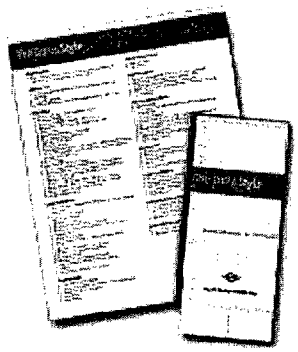
- Key Financial Data
- Current Dana Stock Quote
- CEO and CFO Statements
- Letter to the Shareholders
- Dana's 9 Core Products
- Transfer Agent and Registrar Information
- Dana Corporation 3rd Quarter Slides & Audio are available now...
- Form 10-Q for Quarterly Period Ended Sept. 30, 2002

Today

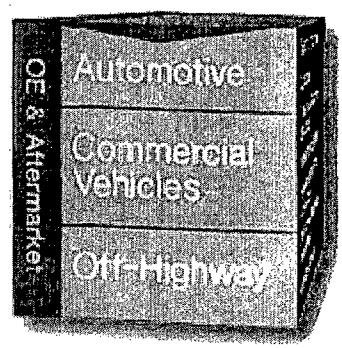
- Scaling Our Business
- Reducing Working Capital
- Optimizing Utilization
- Basic Blocking and Tackling
- Strategic Alignment

Our Future



Near -Term

"the Cube" Information



Roll over our 3D cube to rotate and see its many sides. This cube shows how Dana is aligning its products, markets and services.

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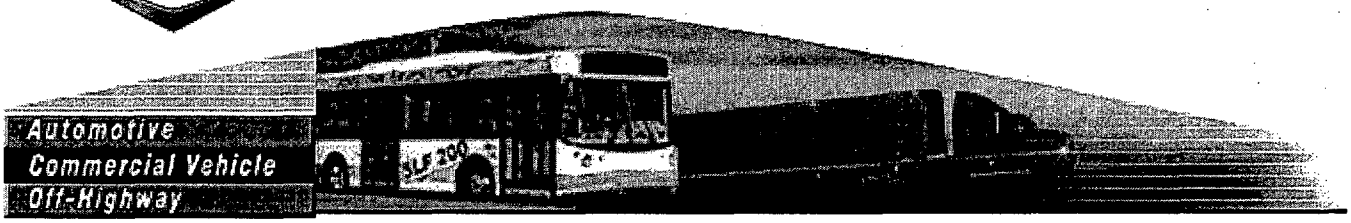
People Finding A Better Way®

COMMERCIAL VEHICLE SOLUTIONS



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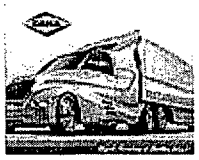
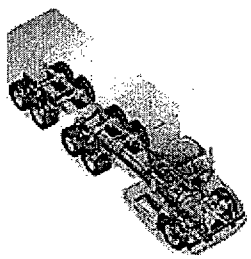
Application Approval Request System



Brake Application Guidelines

Within the medium and heavy-truck segment, Dana provides value-added solutions for original-equipment manufacturers along with service and parts for all customers. Two market-focused business units serve this segment - **Heavy Vehicle Technologies and Systems** and **Engine and Fluid Management.** These two business units focus their resources on the needs of their global customers employing the synergies of the entire corporation.

HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP



Heavy Vehicle Technologies and Systems Group designs, manufacturers, and markets front-steer, rear-drive, trailer, and auxiliary axles; driveshafts; steering shafts; brakes; suspensions; and related systems, modules, and services for the commercial vehicle market.

ENGINE AND FLUID MANAGEMENT GROUP

Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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People Finding A Better Way®

AUTOMOTIVE SOLUTIONS

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- GM Tech World

Within the light-vehicle segment, Dana provides value-added solutions for original-equipment ar aftermarket customers - both under the vehicle and under the hood. Serving this segment are three market focused business units - **Automotive Systems**, **Engine and Fluid Management**, and **Automotive Aftermarket**. These three business units focus their resources on the needs o their global customers while utilizing the synergies of the entire corporation.

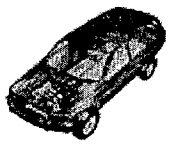
AUTOMOTIVE SYSTEMS GROUP

The Automotive Systems Group is a leading provider of under-the-vehicle integration technologies.

AUTOMOTIVE AFTERMARKET GROUF

The Automotive Aftermarket Group manufactures replacement parts and components for 95% of the world's 650 million vehicles.

ENGINE AND FLUID MANAGEMENT GROUP



Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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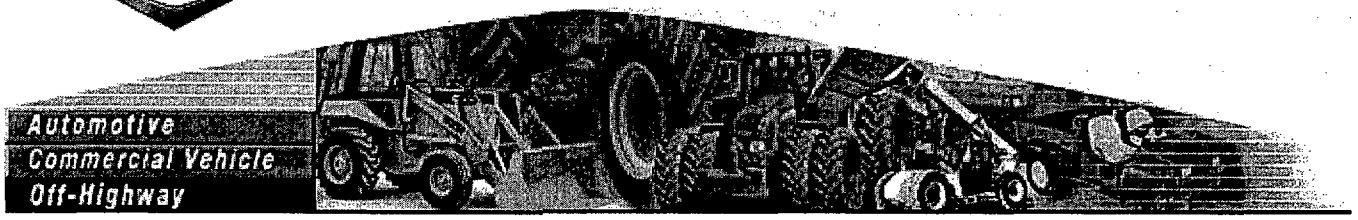
People Finding A Better Way®

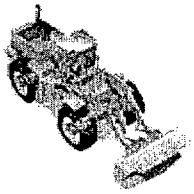
OFF-HIGHWAY SOLUTIONS



Search Here Go

From traditional off-road applications to a range of specialized markets that reach skyward and underground, Dana provides value-added solutions for original-equipment manufacturers. Two market-focused business units - **Heavy Vehicle Technologies and Systems** and **Engine and Fluid Management** - support the needs of their global customers in these markets using the synergies of the entire corporation.

HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP



Heavy Vehicle Technologies and Systems Group provides drivetrain products, along with global-responsive parts and service, for the construction, agriculture, mining, forestry, material handling, specialty chassis, outdoor power equipment, leisure/utility vehicles, and various industrial markets.

ENGINE AND FLUID MANAGEMENT GROUP

Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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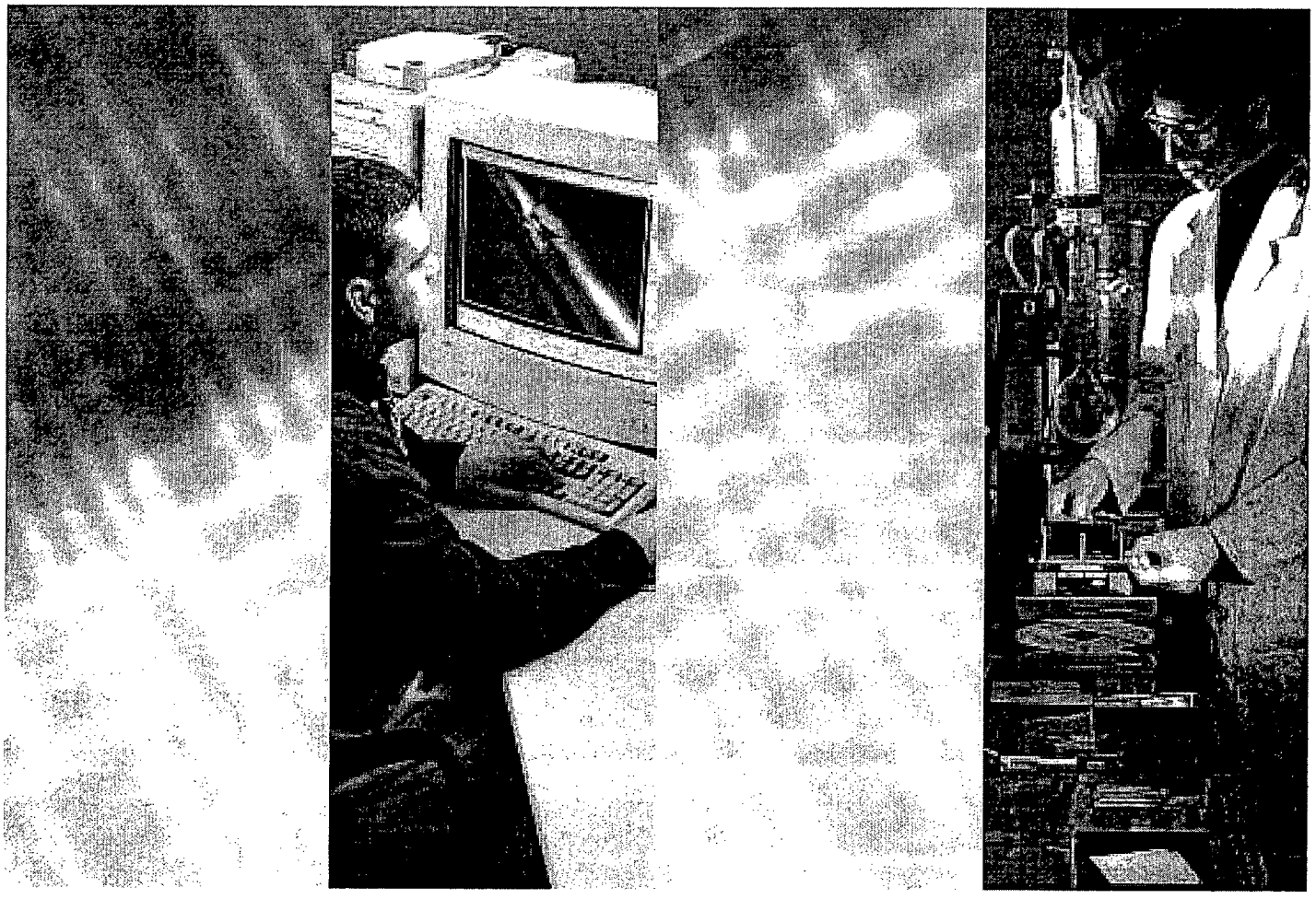
People Finding A Better Way®

Transforming Our Future



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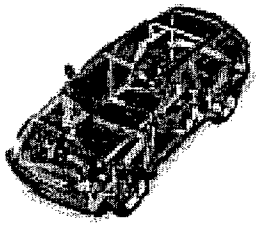
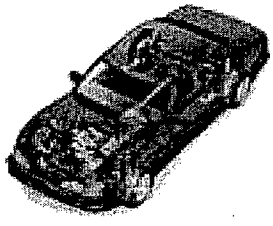
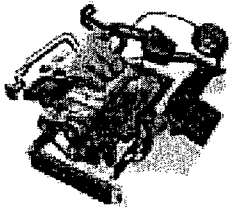
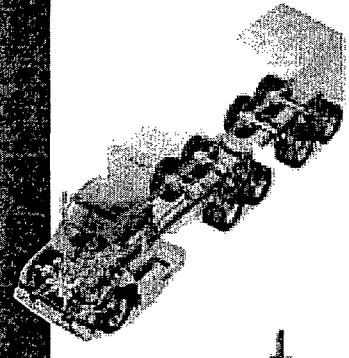
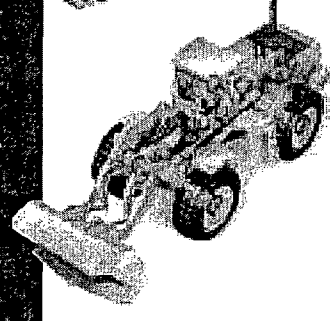
About the Cover

For nearly a century, Dana people have shaped innovations in product and service technology. Drawing strength from this foundation, Dana continues to transform its future through the development of advanced products and customer-focused solutions.

At left, Kevin Frye (11 years of service), an animator with Dana's Advanced Technology Resource Group, generates a photo-realistic rendering of a hydroformed, laser-cut driveshaft currently in development. At right, Mechanical Engineer Bernd Gaugler (one year of service) assembles a fuel-cell test stack at Dana's Neu-Ulm, Germany, Fuel Cell Support Center.

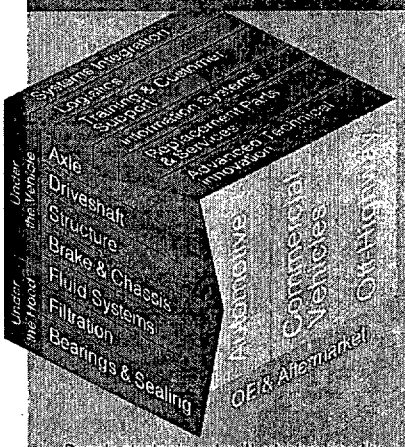
Dana at a Glance

Market-Focused Businesses	Primary Products*	Primary Markets
 **Automotive Systems** 2001 Sales $3.7 Billion Major Facilities 78 Technical Centers 26 People 21,600 Group President Bill Carroll 32 years of service	**Torque and traction technologies (axles, driveshafts, and drivelines), structural and chassis technology solutions (structures** and steering and suspension components), **brake** and clutch systems, and systems integration technology (including advanced modularity concepts and systems).	Personal and light vehicles, including passenger cars and vans, sport utility vehicles, pickup trucks, commercial vans, and motorcycles. Markets encompass two-wheel, four-wheel, and all-wheel-drive vehicles for on- and off-road applications.
 **Automotive Aftermarket** 2001 Sales $2.5 Billion Major Facilities 90 Technical Centers 11 People 19,000 Group President Terry McCormack 28 years of service	**Brakes, filtration products, chassis products,** and engine management products.	Traditional aftermarket, retail, original equipment, original equipment service, and co-manufacturing.
 **Engine and Fluid Management** 2001 Sales $2.1 Billion Major Facilities 99 Technical Centers 15 People 19,400 Group President Mike Laisure 28 years of service	**Gaskets; sealing systems;** thermal acoustical shields; cam covers; powertrain plastics; piston rings; cylinder liners; heavy-duty cams; **engine anti-friction bearings; fuel cell products; and pumping, routing, and thermal management products (vehicular and non-vehicular).**	Automotive, commercial vehicle, off-highway, recreational vehicle, and small engine.
 **Commercial Vehicle Systems** 2001 Sales $1.1 Billion Major Facilities 16 Technical Centers 2 People 4,100 Group President Nick Cole 33 years of service	**Front-steer axles, single- and tandem-drive axles, trailer axles,** chassis and air-ride suspension modules, **brakes,** and **driveshafts.**	Global commercial vehicle market, including medium-duty (Class 5-7) and heavy-duty (Class 8) markets.
 **Off-Highway Systems** 2001 Sales $621 Million Major Facilities 11 Technical Centers 3 People 3,400 Group President Nick Cole 33 years of service	**Single-reduction and planetary axles, brakes (dry disc, hub and drum, and wet disc),** transaxles, transmissions, electronic controls, **driveshafts and end fittings,** and modules and systems.	Construction, agricultural, mining, specialty chassis, forestry, material handling, leisure-utility, outdoor power equipment, and industrial.

*Bold type denotes foundation products

Customer-Focused Solutions	Major Customers	Future Growth Drivers
Solutions based on a solid foundation of core products, bolstered by broad, under-vehicle technologies; strategic collaborative relations (such as GETRAG); demonstrated systems integration success; and global reach. Environmentally focused innovations enhance overall vehicle performance and comfort.	Ford, DaimlerChrysler, General Motors, Toyota, Volkswagen, Isuzu, Nissan, Fiat, BMW, and China Motor.	Customer focus and alignment, focus on innovation and technology, operational excellence, and systems integration technology. Wide array of electronic torque and traction products, magnetic-pulse welding, patented hydroforming process, and space frames. Total systems development and value chain management.
Order-fill rates of 96 percent or higher, 48-hour distribution turnaround, and competitively priced products.	NAPA, CARQUEST, Parts Plus, General Motors, and Pep Boys.	Inventory management system management, 96-percent or higher fill rates, and 48-hour distribution turnaround.
Global collaborative solutions that provide complete engine sealing systems, power cylinder systems, and complete fluid management systems that enhance fuel economy, improve durability, and reduce emissions.	Ford, Visteon, DaimlerChrysler, General Motors, Caterpillar, and PSA.	Technologies for emission reduction, oil consumption reduction, and fuel economy. Vehicular electric systems (42-volt); fuel cells for residential, commercial, and automotive markets; and hybrid/alternative-energy vehicles.
Complete axle and suspension modules, chassis modules, torsionally tuned systems, and enhanced customer service under the Roadranger® banner (through relationship with Eaton Corporation).	PACCAR (Kenworth and Peterbilt), Mack, Navistar, Ford, General Motors, and DaimlerChrysler (Freightliner).	Transportation and logistics business (DTF), intelligent systems, and complete modules and suspensions.
Global drivetrain product and service solutions – from individual products to complete, electronically controlled systems. Intense focus on enhancing customer, distributor, and end-user productivity.	Agco, Case New Holland, Deere & Co., Manitou, and Tamrock.	Local product and service delivery capability in all regions; advanced electronic control, diagnostic, and monitoring collaboration in product design with customers; and major global engineering centers with regional satellite services.

World-Class Products and Services Serving Key Global Markets



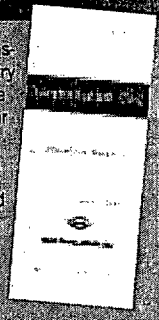
Dana's strategic cube illustrates how the company's foundation businesses (shown on the blue panel) are aligned with its markets (on the gold panel) to serve both original equipment and aftermarket customers. These businesses and markets are supported by the coordinated services located atop the cube.

Foundation Businesses: Focused Excellence

Dana's Foundation Businesses are: axles, driveshafts, structures, brake and chassis products, fluid systems, filtration products, and bearings and sealing products.

These products hold strong market positions – number one or two in the markets they serve. They provide value-added manufacturing, are technically advanced, and each has features that are unique and patented.

Transformation 2005: Technology and Innovation Drive Our Growth



We will lead in the transformation of the industry value chain to generate exceptional benefits for our customers and our shareholders.

Through innovation and technology, we will be the global leader in providing value-added products, systems, and services focused on the vehicular industry.

Financial Summary

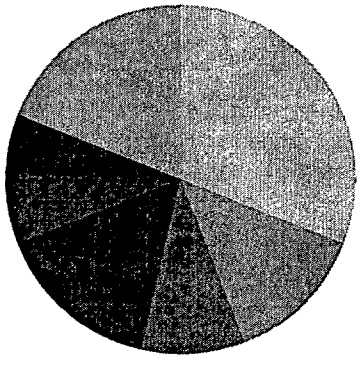
dollars in millions, except per share data

Year Ended	12/31/00	12/31/01
Sales	$12,317	$10,271
Income before non-recurring items	$377	$5
Net income (loss)	$334	$(298)
Return on sales before non-recurring items	3.1%	0.0%
Net return on sales	2.7%	(2.9)%
Earnings per share before non-recurring items (diluted)	$2.46	$0.04
Earnings per share (diluted)	$2.18	$(2.01)
Average common shares outstanding (diluted)	153 million	148 million
Dividends paid per share	$1.24	$0.94
Dividend yield	8.1%	6.8%
Total assets	$11,236	$10,207
Return on beginning equity	11.3%	(11.3)%
Return on average shareholders' equity	12.0%	(13.0)%
People at year end	79,288	69,758
Principal facilities	313	300
Countries	35	34

Sales by Foundation Business – 2001

dollars in millions

Axles	$ 3,188
Brake & Chassis Products	1,344
Driveshafts	982
Fluid Systems	831
Bearings & Sealing Products	743
Structures	667
Filtration Products	573
Other	1,943
Total	$ 10,271



Dear Fellow Shareholders,

The year 2001 is one many of us in the automotive industry might prefer to forget.

We faced broad economic woes, deteriorating markets, and erratic customer production levels. Many of these challenges were particularly frustrating because they were beyond our direct control. And, largely as a result of these conditions, our financial performance was also disappointing.

And yet, I firmly believe we will look back on 2001 as one of the most important years in the transformation of the Dana Corporation.

Within these challenges, we found opportunity. Rather than simply enduring these conditions and hoping to prosper when our markets recovered, we took historic actions to reposition our company:

Joseph M. Magliochetti
Chairman and Chief Executive Officer
(35 years of service)

- We initiated a restructuring of our operations aimed at optimizing our resources, improving our capital efficiency, strengthening our balance sheet, and facilitating sustainable, long-term value for our investors;
- We continued to streamline our organization, sharpening the focus on our core operations by divesting non-strategic assets accounting for more than $235 million in proceeds;
- We announced plans to sell our Dana Commercial Credit operations;
- We introduced a new business model that will enable us to reduce our fixed asset base and lower our break-even point, providing more flexibility to maximize our performance as the industry recovers;
- We secured new business that increased the projected value of our future new business to approximately $6 billion in combined sales from 2002 through 2006; and
- We accelerated our innovation and technology growth with strong patent activity and continued development of customer-focused technologies.

The result of these actions, I believe, will be a stronger, more competitive company better equipped to prevail in difficult times. At the same time, we will be positioned to benefit to an even greater extent from the inevitable upturn in our markets.

In the coming pages, I will review the economic and market-related challenges we have confronted, the aggressive actions we are taking, and the achievements that point to a bright future for Dana.

Disappointing Performance.

Clearly, our financial results were not consistent with our historical performance, or our expectations for the year.

Sales of $10.3 billion, a 17-percent decline from our 2000 results, reflected challenging conditions as customer inventories were reduced and not replenished by

the supplier community. This decline, in combination with the charges associated with our restructuring efforts, resulted in a net loss of $298 million for the year. Before these non-recurring charges, Dana's operating profit totaled $5 million.

Both sales and profitability were severely impacted by a difficult year for the global economy in general, and our key markets in particular.

A Rocky Year for the Economy and Our Markets.

The past year marked the end of the longest economic expansion in U.S. history. But, it wasn't the soft landing most of us had expected. The U.S. economy staggered toward recession, as did markets in many other countries. As *The Wall Street Journal* reported, last year was "arguably the worst for the broad market in nearly 30 years."

Within these challenges, we found opportunity.

The unspeakable attacks of September 11 stunned and saddened us all. Unfortunately, in their aftermath, many existing negative trends were intensified.

Within the automotive sector, it was apparent from the outset of 2001 that nearly a decade of solid growth had drawn to a close. A number of negative factors from the previous year spilled into 2001. Chief among these was the issue of over-capacity. Although light-vehicle sales were relatively strong for much of the past year, there was excess inventory in the supply chain. In other words, the industry had stockpiled far more vehicles than were needed. These bulging inventories led to production cuts that were both severe and erratic.

As an example, during 2001, Dana's major customers eliminated the equivalent of approximately 250 weeks of combined production spanning a variety of programs. These cuts impacted numerous platforms with substantial Dana content.

The delicate balance between sales, inventory, and production was further demonstrated during the fourth quarter, as several manufacturers offered zero-percent financing programs and special terms to stimulate sales. Customer sales surged to record monthly levels, helping to reduce excessive inventories. However, production schedules – which are critical to the supply community – were actually reduced, reflecting a growing concern for our economic malaise.

Compounding the difficulties on the light-vehicle side of our industry, the heavy-truck market experienced a catastrophic drop in volume – resulting in severe over-capacity. Two years after registering a record North American build of more than 330,000 units, heavy-truck production dropped precipitously in 2001 to less than 150,000 units. The drop from the record build of 1999 to our 2002 forecast of a 130,000-unit build rate represents the steepest percentage decline in the history of this sector.

While our issues in the light- and heavy-vehicle marketplaces can be largely attributed to "outside forces," some of our struggles in the automotive aftermarket are still associated with internal issues related to the former Echlin warehouse consolidation project. Nevertheless, an experienced Dana aftermarket team has made solid progress over the past 18 months – fine-tuning its strategic plan, improving order-fill and delivery performance, and scaling the operations to more prudently meet present and future demand.

Looking ahead, we see this market being essentially flat for Dana in 2002. But it's encouraging to note that the aftermarket typically provides greater stability during a recession. Plus, there are a number of signals pointing to recovery in the longer term. Favorable vehicle demographics such as an aging vehicle population, a large number of vehicles entering the prime repair window, and unperformed maintenance estimated to be as much as $70 billion, should yield increased future demand for our related products. In addition, a number of timely and appropriate price increases should enable Dana to realize greater returns from some of our premium aftermarket products.

Dana Takes Action.

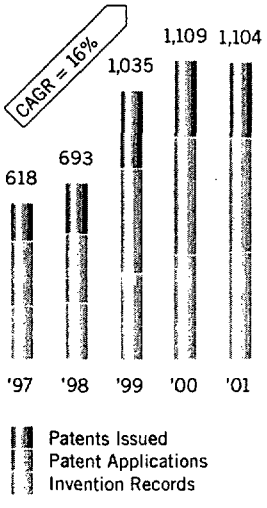
In response to these extraordinary circumstances, Dana initiated a series of major actions in October, including:

- A $445 million (after tax) restructuring of the company's operations involving the closure or consolidation of more than 30 facilities;
- A workforce reduction directly impacting more than 15 percent of our people worldwide;
- A reduction of the fourth-quarter dividend from 31 cents to one cent per share; and
- Plans to sell the businesses of our leasing services unit, Dana Commercial Credit (DCC).

While extremely difficult, each of these decisions was nonetheless essential to our future success.

The most recent workforce reductions announced in October came on the heels of more than 10,000 layoffs during the preceding 18 months. Unfortunately, there's an inescapable relationship between customer production and our staffing levels. These actions affected not only those who left the company, but also those who remained – as many of our people have been asked to take on new or additional responsibilities. Clearly, the progress Dana has made amid these difficult circumstances is due to the ongoing efforts of our exceptional people.

For many of you reading this letter, the decision to reduce the fourth-quarter dividend was perhaps the most disappointing action of all. With a 65-year heritage of paying quarterly dividends without a reduced or missed payment, this action clearly did not come lightly.

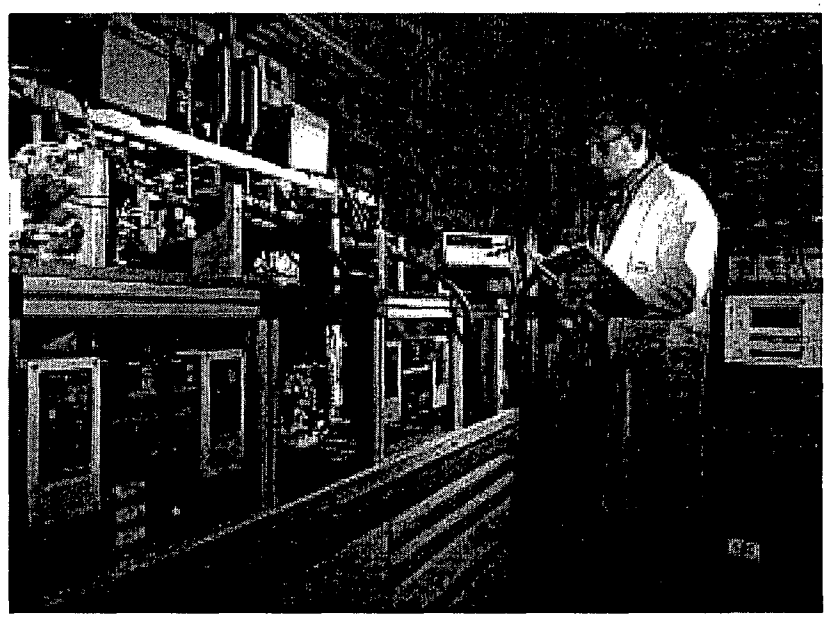


Dana's accelerated emphasis on innovation and technology has driven solid growth in patent activity.

We are also acutely aware that many Dana shareholders have come to depend on healthy dividend payments. However, at the same time, our broader responsibility to the company and its investors is to ensure that Dana represents a solid, long-term investment. In the midst of such daunting circumstances, it was not appropriate to maintain what was one of the highest yields among the S&P 500 at the time of this action.

In the near term, the cash flow benefit will help us focus our financial resources on strengthening our balance sheet. But we are not abandoning the dividend. To the contrary, as conditions allow, we intend to reward shareholders with a dividend rate that appropriately relates to our performance.

Finally, given the expected duration of the downturn in our markets – and its direct impact on the ability of DCC to conduct transactions – we are pursuing the sale of the businesses of Dana Commercial Credit. We believe these very successful businesses will be served well as part of a different corporate structure where the cost of capital is more competitive.



Chemical Technician Markus Lemm (six years of service) monitors a fuel-cell stack at Dana's Neu-Ulm, Germany, Fuel Cell Support Center. Dana has established fuel cell support centers in three countries where engineers are developing technology and high-volume production methods for numerous components and subsystems.

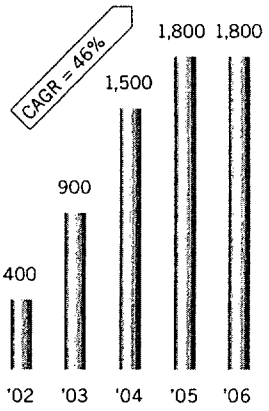
The Good News.

In addition to our restructuring actions, Dana made important progress in a number of other key areas during 2001.

We increased our emphasis on innovation and technology, as combined invention records, patent applications, and patents awarded continued an impressive five-year growth trend illustrated in the chart at left. This innovation is feeding the development of performance-enhancing traction technologies, electronic vehicle-control systems, intelligent cooling systems, and many more new technologies.

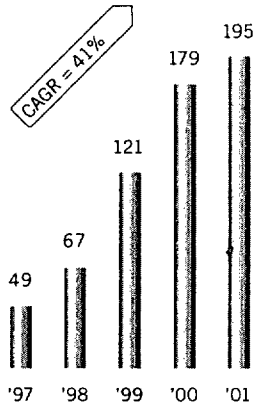
For example, Dana also continued to grow its role in the research and development of fuel-cell technology. Fuel cells have the potential to eventually replace internal combustion engines. Dana has established fuel-cell support centers in Canada, Germany, and the United States, where engineers are working to develop technology and high-volume production methods for numerous components and subsystems. Our first steps toward becoming a supplier of systems to the fuel-cell industry will be in the residential and industrial markets. Fuel cell-based home heating systems are expected to reach relatively widespread production within the next three years. Automotive applications should follow during the latter part of this decade.

$ in millions



New technology has been a major factor in helping Dana secure approximately $6 billion in new business over the next five years with a variety of global customers.

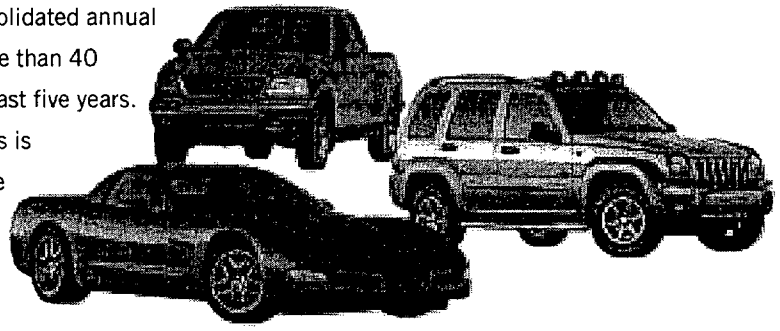
$ in millions



Automotive Systems sales to overseas manufacturers with U.S. operations has grown at an impressive 41% compound annual growth rate over the past five years, providing important diversification.

These new technologies and other promising innovations demonstrate our ongoing commitment to developing proprietary, high-value solutions to better serve our customers. They have also been major factors in helping to secure new business with a variety of global customers. In fact, Dana has been awarded net new business which is projected to add approximately $6 billion in total over the next five years.

Included among these programs are several projects with overseas manufacturers with U.S. operations, such as Toyota, Nissan, BMW, Land Rover, and others. As the graphic at bottom left illustrates, Automotive Systems growth in this area has been strong with a consolidated annual growth rate of more than 40 percent over the past five years.



Of course, this is not to diminish the importance of our largest customers, the traditional "Big Three" vehicle manufacturers: Ford, General Motors, and DaimlerChrysler. Despite a more intense competitive environment within the automotive industry, these manufacturers clearly remain global market leaders. We take pride in continuing to work closely with these customers in developing some of the world's most exciting cars and trucks, and we believe strongly in our collective future.

Our new business growth is also supported by a strong quality heritage. In April, I was honored to be among those representing the Dana Corporation in accepting our nation's highest quality honor, the Malcolm Baldrige National Quality Award, from U.S. President George W. Bush. Awarded to the U.S. operations of our Torque Management Group, the award is the second Baldrige earned by a Dana operation. Only five companies have earned this recognition twice.

Globally, we continued to build on this quality commitment with 19 state and national quality awards in 2001, as well as 55 quality certifications from our customers. We are honored by these awards, but the underlying statement they make is even more impressive: Dana people are committed to providing our customers with world-class products and services.

A New Model for Profitable Growth.

So where do we go from here? For starters, our industry – and our company – simply cannot continue to conduct business the way we have in the past. Over the years, there has been a great deal of conjecture about whether we are in a cyclical business.

And while we can argue semantics, the bottom line is that as long as our economy and our customers are cyclical, so too is our business. Our charge, then, is to evolve our business model into one that is dynamic and flexible enough to withstand, and prosper in, this environment.

Against this backdrop, a new business model has developed at Dana. This model represents a refinement of our business process, as we accelerate the shift from traditional asset-intensive manufacturing to a focus on deriving value from unique technologies and a network of partnerships serving our customers. This more efficient approach is designed to optimize our resources and improve capital efficiency. In doing so, we'll provide our customers with the products and services they desire. At the same time, this model will improve our return on invested capital and facilitate sustainable, long-term value for our investors.

We believe strongly in our collective future.

The key elements of our new business model involve:

- Streamlining our operations to achieve a higher plane of performance;
- Strengthening our foundation businesses through an intensified focus on core content;
- Expanding our focus on modularity and systems integration;
- Leveraging strategic alliances to expand our capabilities at reduced levels of investment;
- Developing even more proprietary, uniquely valuable technologies; and
- Partnering with a strong base of reliable suppliers.

In April, President George W. Bush and U.S. Secretary of Transportation Norman Y. Mineta (at left) presented the Malcolm Baldrige National Quality Award to Dana Chairman and CEO Joe Magliochetti (second from left), and Joe Sober, vice president and general manager of Dana's Torque Management Group.

With the planned sale of DCC and the combination of our former Engine Systems and Fluid Systems business units, we essentially streamlined, and more tightly focused, our operations. The result is business units serving five distinct market segments: automotive systems, the automotive aftermarket, engine and fluid management, commercial vehicle systems, and off-highway systems.

We further sharpened our focus on foundation businesses with the divestiture of non-core operations accounting for more than $235 million in proceeds.

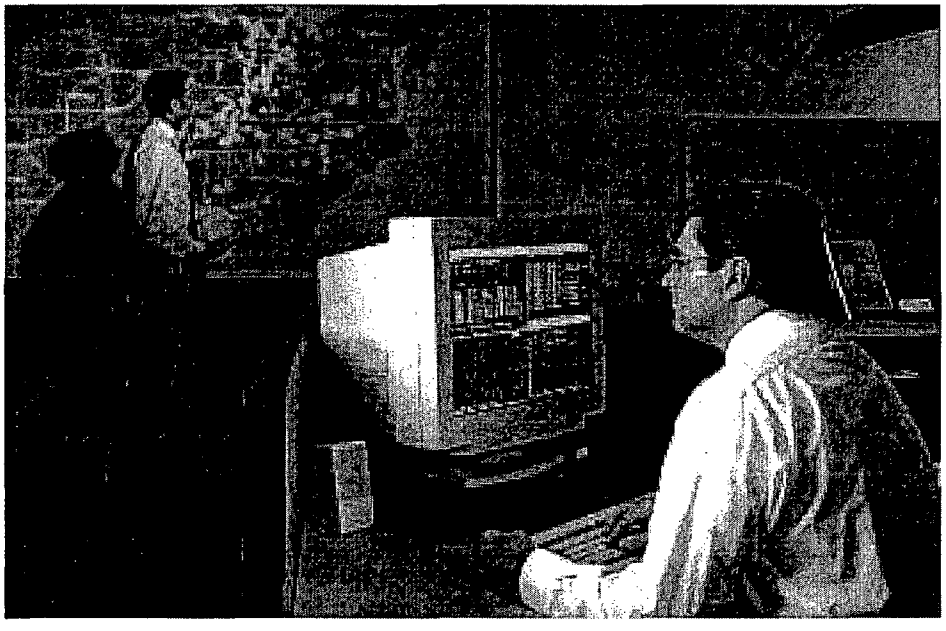
The restructuring and refocusing actions I've outlined are an integral part in our transition to this new business model. To optimize our resources, we're aggressively reducing our fixed asset base and lowering our break-even point (the production volume at which we begin to become profitable). In the near term, these actions will enable us to compete more profitably at lower levels of production. Over the longer term, this approach will help us optimize our performance as our markets recover.

Along with scaling our business to be profitable at lower production volumes, we're also working to combine operations – dissolving organizational boundaries in some cases. For example, we will see growing integration among some of our light axle and driveshaft operations. This will maximize the return on our investment and provide greater cross-functional support to our customers.

The Road Ahead.

Although our new business model was developed in today's challenging circumstances, I believe its greatest benefit lies in the future. This is because the fundamentals of this new model are aligned with our vision of tomorrow's automotive landscape.

In last year's annual report, we introduced *Transformation 2005,* Dana's strategic roadmap to growth. The rapid pace of change in our industry does not permit us to think of *Transformation 2005* as a distant objective. Our new business model will help ensure that we make daily progress toward these goals.



Steve Wilson (at left, five years of service) and Troy Husband (14 years of service) track and expedite customer shipments with the help of a satellite-based communication system at the Dana Truck Fleet Command Center in Columbia City, Ind. The system is linked to each of the more than 500 trucks in the Dana fleet, providing two-way communication and the ability to track the status of deliveries across the United States down to the city-block level.

Technology development will be central to our success, by serving our customers, and ultimately, our shareholders. In order to fully exploit our current technologies, and quicken our pace of development, we recently appointed Chuck Heine to serve in the role of chief technology officer. Chuck's solid engineering background will serve Dana well as he works to secure longer-term opportunities related to our technologies, and pursue broader applications for our intellectual properties.

This heightened emphasis on technology also supports our industry's most significant trend – the move toward modularity and systems integration. A recent Schroder SalomonSmithBarney study projects outsourced modular assembly business growing from about $43 billion globally in 2000 to $73 billion in 2005, and more than $110 billion in 2010. Our future plans are linked to this projected growth.

Currently, our major automotive customers are telling us we may see vehicles composed of 15 to 20 major modules by the end of this decade. Our foundation product array is strategically aligned with what are expected to be five to seven of the most significant modules where our technical expertise has the greatest application. We believe this strategically focused product offering, coupled with our unparalleled systems integration experience, bodes well for the future.

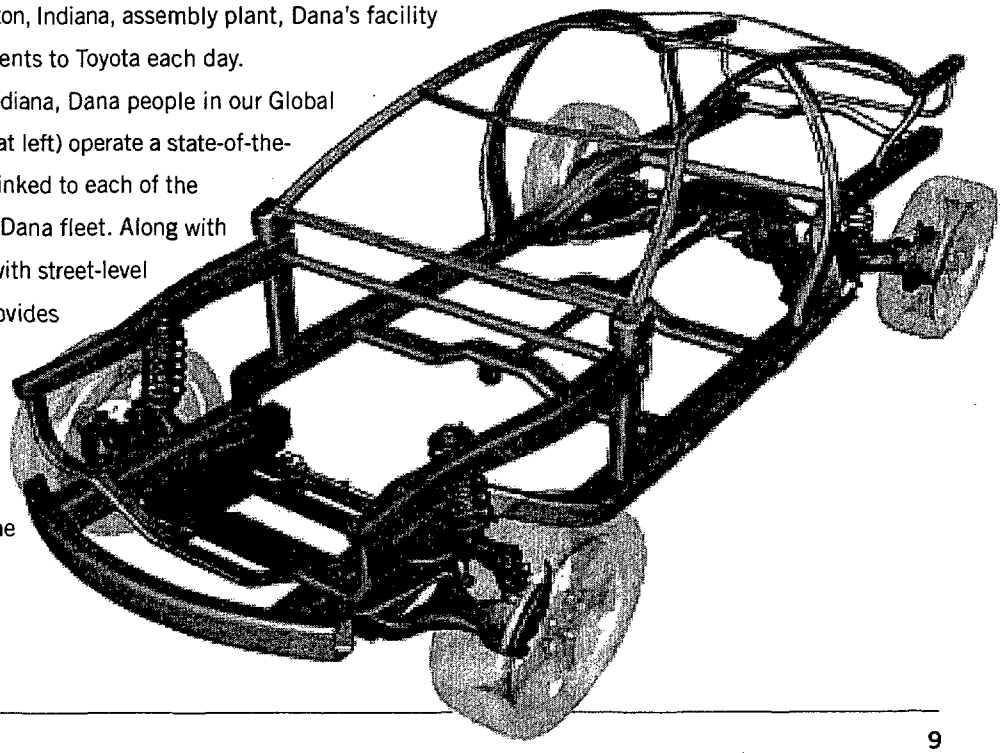
Technology development will be central to our success.

Customer Focus is Our Focus.

Amid the challenge and change of 2001, one aspect of our business has remained the same: our commitment to providing customers with value-driven products. We're also setting new standards in teaming with our customers to boost their productivity.

For example, our Owensboro, Kentucky, Structural Solutions facility produces sequenced frames for the Toyota Sequoia and Tundra vehicles. Electronic systems in the facility enable our people to accomplish model changeovers in just three seconds. Located near Toyota's Princeton, Indiana, assembly plant, Dana's facility makes 28 customized shipments to Toyota each day.

And in Columbia City, Indiana, Dana people in our Global Logistics operation (pictured at left) operate a state-of-the-art satellite tracking system linked to each of the more than 500 trucks in the Dana fleet. Along with tracking the status of trucks with street-level precision, the system also provides important advisories and directions that assist drivers and help keep customer shipments on schedule and within demanding just-in-time delivery requirements.

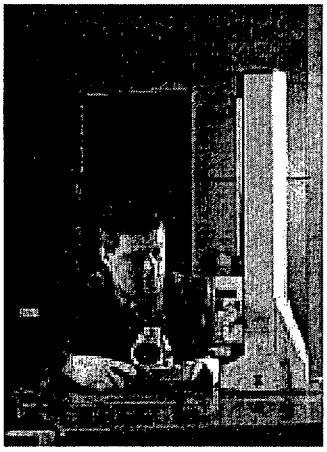


Dana's Rolling Spaceframe™ system is indicative of our emphasis on modularity and systems integration. The system will integrate product and material technologies with the benefits of modular manufacturing to produce a system with enhanced structural stability.

Of course, these are just two illustrations of customer-oriented activities within our company. Around the world, Dana continues to position itself relative to leading customers and strategic allies. This approach ties directly to the *Transformation 2005* goal of supporting our customers and pursuing those markets in which we can achieve an appropriate return on our investment.

Our transformation is well underway at Dana.

In Europe, which boasts the world's largest passenger car market, we are capitalizing on our partnership with Germany-based GETRAG (see photo at left) to expand our related capabilities. We also provide product and technology support to major customers through Dana operations in 17 countries throughout the region.



Andreas Fender, an engineer at GETRAG since 1990, takes precise measures of a differential at the company's Untergruppenbach, Germany, headquarters and research and development center. The partnership with GETRAG, a manufacturer of transaxles, axles, and other automotive components, has allowed Dana to expand its capabilities in the passenger car market.

The Asia-Pacific region reflects a number of customer-oriented approaches. In some areas, such as Thailand, we are investing to help support our customers' growth. In countries like Japan and Korea, we have established technical and sales operations that largely support our relationships with local automakers that also manufacture vehicles in the United States. And in emerging markets, such as China, we are strategically growing our presence.

Dana has maintained a presence in South America for more than four decades, supporting a wide range of customers. Recently, economic and political turbulence has contributed to disappointing performance in this market. But even as we streamline our operations to meet the current level of demand, we remain confident that as South America emerges from this situation, our core businesses in the region will play an important role in Dana's future.

Why Invest in Dana?

Recent events have been extremely challenging. However, Dana has successfully navigated many difficulties over its 98-year history. As we move forward, I am encouraged by:

- Our strong heritage of innovation and excellence;
- A growing number of leading-edge technologies;
- A dynamic business model propelled by actions begun in 2001; and
- The enduring spirit of our people.

At this critical juncture, we've taken historic actions to streamline our operations and accelerate the development of customer-focused technologies. As we continue to execute our plans, I'm confident our financial performance will improve.

History tells us that value stocks such as Dana perform well over the long term. And at our current valuation, we certainly believe Dana represents an excellent investment for the future.

Transforming Our Future.

Despite its challenges, I believe we're involved in the most exciting industry in the world. From the Model T to the striking concept vehicles and innovations of tomorrow, the automotive business has quite literally moved our world for generations. At Dana, we're proud of the role we've played in helping to shape the first century of the automotive industry. And we're genuinely enthused about the future.

State-of-the-art engineering resources, such as this hemi-anechoic sound chamber and chassis dynamometer at Dana's Customer and Engineering Support Center in Farmington Hills, Mich., provide valuable test data to enhance product performance.

Looking ahead, it's clear that the concepts of change and transformation will be pivotal to the future of our industry. Change, of course, is inevitable. But transformation is essential.

Our transformation is well underway at Dana. We have sharpened our focus. We are making fundamental refinements to improve our competitive advantage. And our future is bright.

I thank you for your continued support of Dana and its people as we work to accelerate this transition and better serve the needs of our customers and our shareholders.

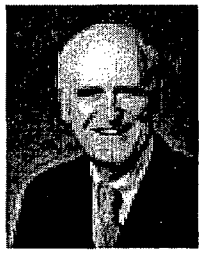
Sincerely,

Joseph M. Magliochetti
Chairman & Chief Executive Officer
February 12, 2002

Board of Directors

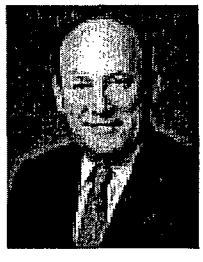
Benjamin F. Bailar

Benjamin F. Bailar, 67, served as Dean and Professor of Administration Emeritus of the Jesse H. Jones Graduate School of Administration at Rice University from 1997 to 2001. He was Dean and Professor of Administration at the Jesse H. Jones Graduate School of Administration from 1987 to 1997. A Director of Dana since 1980, Mr. Bailar is also a director of Smith International, Inc., and Trico Marine Services, Inc. He is Chairman of the Advisory Committee and a member of the Audit and Finance committees.



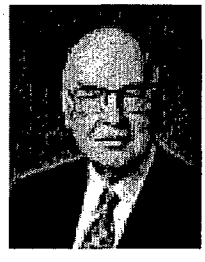
A. Charles Baillie

A. Charles Baillie, 62, has served as Chairman and Chief Executive Officer of The Toronto-Dominion Bank since 1997, and President since 1995. Mr. Baillie has been a Director of Dana since 1998. He serves on the Compensation, Finance, and Funds committees.



Edmund M. Carpenter

Edmund M. Carpenter, 60, has served as President and Chief Executive Officer of the Barnes Group, a diversified international company serving a range of industrial and transportation markets, since 1998. He was Senior Managing Director of Clayton, Dubilier & Rice, a private equity firm specializing in management buyouts, from 1996 to 1998. A Director of Dana since 1991, Mr. Carpenter is also a director of Campbell Soup Company. He is Chairman of the Funds Committee and a member of the Advisory, Audit, and Finance committees.



Eric Clark

Eric Clark, 67, served as Director of BICC plc, a United Kingdom company serving the international market for infrastructure development, from 1985 to 1996. He was Chairman and Managing Director of BICC Cables Limited from 1986 to 1996. Mr. Clark has been a Director of Dana since 1994, and served as a member of the Dana Europe Advisory Board from 1991 to 1999. He is a member of the Advisory, Audit, Compensation, and Finance committees.

Glen H. Hiner

Glen H. Hiner, 67, has served as Chairman and Chief Executive Officer of Owens Corning, a manufacturer of advanced glass and composite materials, since 1992. A Director of Dana since 1993, Mr. Hiner is also a director of Prudential Financial Inc., and Kohler Company. He is Chairman of the Audit Committee and a member of the Advisory, Compensation, and Finance committees.

Joseph M. Magliochetti

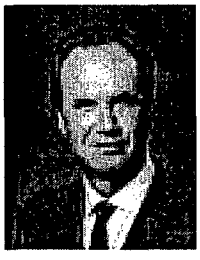
Joseph M. Magliochetti, 59, was appointed Chairman of the Board of Dana on April 5, 2000. Mr. Magliochetti has served as Chief Executive Officer of Dana since 1999, President of Dana since 1996, Chief Operating Officer of Dana since 1997, and a Director of Dana since 1996. He has served the company in various capacities since 1966. Mr. Magliochetti is also a director of BellSouth Corporation and CIGNA Corporation. He is Chairman of the Finance Committee, and a member of the Funds Committee.

Marilyn R. Marks

Marilyn R. Marks, 49, served as Chairman of the Board of Dorsey Trailers, Inc., a manufacturer of truck trailers, from 1987 to 2000. She was Chief Executive Officer of Dorsey Trailers from 1987 to December 1999. Ms. Marks served as Chairman and Chief Executive Officer of TruckBay.com, Inc., an Internet source for goods and services serving the trucking industry, from December 1999 to December 2000. A Director of Dana since 1994, Ms. Marks is also a director of the Eastman Chemical Company. She is a member of the Advisory, Finance, and Funds committees.

Richard B. Priory

Richard B. Priory, 55, has served as Chairman, President, and Chief Executive Officer of Duke Energy Corporation, a supplier of energy and related services, since 1997. He was President and Chief Operating Officer of Duke Power Company from 1994 to 1997. A Director of Dana since 1996, Mr. Priory is also a director of US Airways, Inc., and Duke Fluor Daniel Company. He is Chairman of the Compensation Committee and serves on the Audit and Finance committees.



Fernando M. Senderos

Fernando M. Senderos, 51, has served as Chairman of the Board and Chief Executive Officer of DESC, S.A. de C.V. ("DESC"), a Mexican diversified holding company engaged in automotive parts, chemical, food, and real estate businesses, since 1989. Mr. Senderos is former Chairman of the Board of the following wholly owned subsidiaries of DESC: Unik, S.A. de C.V. (1991 through 2001); Girsa, S.A. de C.V. (1989 through 2001); and Dine, S.A. de C.V. (1981 through 2001). Mr. Senderos is also a director of Industrias Peñoles, S.A. de C.V., a Mexican-natural resources industrial group; Televisa, S.A. de C.V., a Spanish-language entertainment business; Telefonos de Mexico, S.A. de C.V., a business providing telephone and Internet access services throughout Mexico; Kimberly Clark de Mexico, S.A. de C.V., a manufacturer and distributor of consumer, industrial, and institutional hygiene products; and Alfa, S.A. de C.V., which through its subsidiaries operates petrochemical, steel, synthetic fiber, food, automotive parts, and telecommunications businesses. Mr. Senderos has been a Director of Dana since 2000. He serves on the Finance and Funds committees.

World Operating Committee

The World Operating Committee is the management group responsible for Dana's product strategies and the global coordination of Dana's operations. Dana people have no more than five layers of management between them and the World Operating Committee.

Its members are:

Paul J. Bishop
President, Dana Credit Corporation
12 years of service

D. Bruce Butcher
Vice President, Structural Solutions
19 years of service

William J. Carroll ▪▲
President, Automotive Systems Group
32 years of service

Bernard N. "Nick" Cole ▲
President, Commercial Vehicle Systems and Off-Highway Systems groups
33 years of service

Michael L. DeBacker
Vice President, General Counsel, and Secretary
22 years of service

Heinz-Ubbo Eilks
Vice President, Sealing Products
9 years of service

Hugo E.I. Ferreira
President, Dana South America
39 years of service

Mark A. Fleischhauer (ex-officio)
Vice President, Dana Asia Pacific
23 years of service

Marvin A. "Gus" Franklin ▪▲
President, Dana International and Global Initiatives
27 years of service

Michael F. Greene
President, Torque Management Group
27 years of service

Stephen J. Hanley
Vice President, Systems Integration
24 years of service

Charles F. Heine ▲
President, Technology Development and Diversified Products
27 years of service

James M. "Mike" Laisure ▲
President, Engine and Fluid Management Group
28 years of service

Joseph M. Magliochetti ▪▲
Chairman and Chief Executive Officer
35 years of service

Terry R. McCormack ▲
President, Automotive Aftermarket Group
28 years of service

José Ismael Melgar
Global President, Traction Technologies Group
23 years of service

Daniel J. Moody
Vice President, Engine Products
29 years of service

Kevin P. Moyer ▲
Vice President and Director of e-Business
19 years of service

Karl A. Nitsch
President, Dana Europe
16 years of service

Larry A. Pavey
President, Under Vehicle – Aftermarket
18 years of service

Robert C. Richter ▪▲
Vice President and Chief Financial Officer, Dana Corporation;
Chairman, Dana Credit Corporation
27 years of service

John R. Washbish
President, Under Hood – Aftermarket
20 years of service

▪ denotes membership on Dana's Policy Committee, the management group responsible for corporate strategies and partnership relations, as well as the development of Dana's people, policies, and philosophies.

▲ denotes membership on Dana's Strategic Operating Committee, the management group responsible for business unit strategies and performance. Mr. Moyer is an ex-officio member.

Management Statement

We have prepared the accompanying consolidated financial statements and related information included herein for the three years ended December 31, 2001.

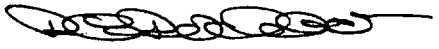
The management of Dana Corporation is primarily responsible for the accuracy of the financial information that is presented in this annual report. These statements were prepared in accordance with generally accepted accounting principles and, where appropriate, we used our estimates and judgment with consideration to materiality.

To meet management's responsibility for financial reporting, we have established internal control systems which we believe are adequate to provide reasonable assurance that our assets are protected from loss. These systems produce data used for the preparation of financial information.

We believe internal control systems should be designed to provide accurate information at a reasonable cost which is not out of line with the benefits to be received. These systems and controls are reviewed by our internal auditors in order to ensure compliance, and by our independent accountants to support their audit work.

The Audit Committee of the Board of Directors meets regularly with management, internal auditors and our independent accountants to review accounting, auditing and financial matters. Our Audit Committee is composed of only outside directors. This committee and the independent accountants have free access to each other with or without management being present.

We believe people are Dana's most important asset. The proper selection, training and development of our people is a means of ensuring that effective internal controls and fair, uniform reporting are maintained as standard practice throughout the Company.



Robert C. Richter
Vice President and
Chief Financial Officer

Report of Independent Accountants

PRICEWATERHOUSECOOPERS

To the Board of Directors and Shareholders of Dana Corporation

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, of shareholders' equity and of cash flows, including pages 16 through 33, present fairly, in all material respects, the financial position of Dana Corporation and its subsidiaries at December 31, 2000 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Toledo, Ohio
February 11, 2002

Statement of Income

In millions except per share amounts

	Year Ended December 31		
	1999	2000	**2001**
Net sales	$13,159	$12,317	**$10,271**
Revenue from lease financing	111	143	**115**
Other income, net	83	231	**83**
	13,353	12,691	**10,469**
Costs and expenses			
Cost of sales	10,964	10,599	**9,268**
Selling, general and administrative expenses	1,192	1,132	**985**
Restructuring and integration charges	181	173	**390**
Interest expense	279	323	**309**
	12,616	12,227	**10,952**
Income (loss) before income taxes	737	464	**(483)**
Estimated taxes on income	251	171	**(161)**
Income (loss) before minority interest and equity in earnings of affiliates	486	293	**(322)**
Minority interest	(13)	(13)	**(8)**
Equity in earnings of affiliates	40	54	**32**
Net income (loss)	$ 513	$ 334	**$ (298)**
Net income (loss) per common share			
Basic income (loss) per share	$ 3.10	$ 2.20	**$ (2.01)**
Diluted income (loss) per share	$ 3.08	$ 2.18	**$ (2.01)**
Cash dividends declared and paid per common share	$ 1.24	$ 1.24	**$ 0.94**
Average shares outstanding - Basic	165	152	**148**
Average shares outstanding - Diluted	166	153	**148**

The accompanying notes are an integral part of the financial statements.

Balance Sheet

In millions except par value

	December 31	
	2000	2001
Assets		
Current assets		
Cash and cash equivalents	$ 179	$ 199
Accounts receivable		
Trade, less allowance for doubtful accounts of $42 - 2000 and $45 - 2001	1,548	1,371
Other	318	371
Inventories	1,564	1,299
Other current assets	714	557
Total current assets	4,323	3,797
Investments and other assets	2,367	2,209
Investment in leases	1,037	1,068
Property, plant and equipment, net	3,509	3,133
Total assets	$11,236	$10,207
Liabilities and Shareholders' Equity		
Current liabilities		
Notes payable, including current portion of long-term debt	$ 1,945	$ 1,120
Accounts payable	1,015	1,045
Accrued payroll and employee benefits	398	317
Other accrued liabilities	856	873
Taxes on income	117	134
Total current liabilities	4,331	3,489
Deferred employee benefits and other noncurrent liabilities	1,507	1,640
Long-term debt	2,649	3,008
Minority interest in consolidated subsidiaries	121	112
Total liabilities	8,608	8,249
Shareholders' equity		
Common stock, $1 par value, shares authorized, 350; shares issued, 148 - 2000 and 149 - 2001	148	149
Additional paid-in capital	159	163
Retained earnings	2,909	2,471
Accumulated other comprehensive loss	(588)	(825)
Total shareholders' equity	2,628	1,958
Total liabilities and shareholders' equity	$11,236	$10,207

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows

In millions

	Year Ended December 31		
	1999	2000	**2001**
Net cash flows from operating activities	$ 608	$ 984	**$ 639**
Cash flows from investing activities:			
Purchases of property, plant and equipment	(807)	(662)	**(425)**
Purchases of assets to be leased	(480)	(191)	**(50)**
Acquisitions	(18)	(511)	**(21)**
Divestitures	36	571	**236**
Changes in investments and other assets	(155)	(183)	**1**
Loans made to customers and partnerships	(259)	(643)	**(68)**
Payments received on leases	200	146	**48**
Proceeds from sales of certain assets	45	41	**132**
Proceeds from sales of leased assets	135	82	**60**
Payments received on loans	206	561	**180**
Other	(4)	(5)	**(14)**
Net cash flows - investing activities	(1,101)	(794)	**79**
Cash flows from financing activities:			
Net change in short-term debt	(341)	577	**(888)**
Issuance of long-term debt	1,396	368	**847**
Payments on long-term debt	(376)	(504)	**(501)**
Dividends paid	(206)	(187)	**(140)**
Shares repurchased	(100)	(381)	
Other	1	5	**(16)**
Net cash flows - financing activities	374	(122)	**(698)**
Net increase (decrease) in cash and cash equivalents	(119)	68	**20**
Cash and cash equivalents - beginning of year	230	111	**179**
Cash and cash equivalents - end of year	$ 111	$ 179	**$ 199**
Reconciliation of net income (loss) to net cash flows from operating activities:			
Net income (loss)	$ 513	$ 334	**$(298)**
Depreciation and amortization	519	523	**548**
Unremitted earnings of affiliates	(37)	(54)	**4**
Deferred income taxes	74	57	**(116)**
Minority interest	6	10	**4**
Asset impairment	62	27	**206**
Change in accounts receivable	(528)	327	**137**
Change in inventories	(207)	108	**166**
Change in other operating assets	(11)	(58)	**(31)**
Change in operating liabilities	300	(144)	**78**
Additions to lease and loan loss reserves	8	18	**(9)**
Gains on divestitures	(5)	(106)	**(10)**
Other	(86)	(58)	**(40)**
Net cash flows from operating activities	$ 608	$ 984	**$ 639**

The accompanying notes are an integral part of the financial statements.

Statement of Shareholders' Equity

In millions

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss): Foreign Currency Translation	Accumulated Other Comprehensive Income (Loss): Minimum Pension Liability	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gain (Loss)	Shareholders' Equity
Balance, December 31, 1998	$166	$591	$2,455	$(264)	$(11)	$ 3	$2,940
Comprehensive income:							
Net income for 1999			513				
Foreign currency translation				(214)			
Minimum pension liability					(2)		
Total comprehensive income							297
Cash dividends declared			(206)				(206)
Cost of shares repurchased	(3)	(105)					(108)
Issuance of shares for director and employee stock plans, net		34					34
Balance, December 31, 1999	163	520	2,762	(478)	(13)	3	2,957
Comprehensive income:							
Net income for 2000			334				
Foreign currency translation				(90)			
Minimum pension liability					(10)		
Total comprehensive income							234
Cash dividends declared			(187)				(187)
Cost of shares repurchased	(15)	(366)					(381)
Issuance of shares for director and employee stock plans, net		5					5
Balance, December 31, 2000	148	159	2,909	(568)	(23)	3	2,628
Comprehensive income:							
Net loss for 2001			**(298)**				
Foreign currency translation				**(152)**			
Minimum pension liability					**(80)**		
Unrealized loss						**(5)**	
Total comprehensive loss							**(535)**
Cash dividends declared			**(140)**				**(140)**
Issuance of shares for director and employee stock plans, net	**1**	**4**					**5**
Balance, December 31, 2001	**$149**	**$163**	**$2,471**	**$(720)**	**$(103)**	**$(2)**	**$1,958**

The accompanying notes are an integral part of the financial statements.

Notes to Financial Statements

In millions except share and per share amounts

Note 1. Summary of Significant Accounting Policies

Dana is a global leader in the engineering, manufacturing and distribution of components and systems for worldwide vehicular and industrial manufacturers and the related aftermarkets and a leading provider of lease financing services in selected markets through its wholly-owned subsidiary, Dana Credit Corporation (DCC).

The preparation of these financial statements requires estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying disclosures. Some of the more significant estimates include depreciation, amortization and impairment of long-lived assets; deferred tax assets and inventory valuations; sales returns, restructuring, environmental, product liability and warranty accruals; postemployment and postretirement benefits; residual values of leased assets and allowances for doubtful accounts. Actual results could differ from those estimates.

The following summary of significant accounting policies should help you evaluate the financial statements. Certain amounts in 1999 and 2000 have been reclassified to conform with the 2001 presentation.

Principles of Consolidation
The consolidated financial statements include all subsidiaries in which we have the ability to control operating and financial policies. Affiliated companies (20% to 50% ownership) are generally recorded in the statements using the equity method of accounting. Operations of affiliates accounted for on the equity method of accounting are generally included for periods ended within one month of our year end. Less-than-20%-owned companies are included in the financial statements at the cost of our investment. Dividends, royalties and fees from these cost basis affiliates are recorded in income when received.

Foreign Currency Translation
The financial statements of subsidiaries and equity affiliates outside the United States (U.S.) located in non-highly inflationary economies are measured using the currency of the primary economic environment in which they operate as the functional currency, which for the most part is the local currency. Transaction gains and losses which result from translating assets and liabilities of these entities into the functional currency are included in net earnings. When translating into U.S. dollars, income and expense items are translated at average monthly rates of exchange and assets and liabilities are translated at the rates of exchange at the balance sheet date. Translation adjustments resulting from translating the functional currency into U.S. dollars are deferred as a component of accumulated other comprehensive income in shareholders' equity. For affiliates operating in highly inflationary economies, non-monetary assets are translated into U.S. dollars at historical exchange rates and monetary assets are translated at current exchange rates. Translation adjustments for these affiliates are included in net earnings.

Inventories
Inventories are valued at the lower of cost or market. Cost is generally determined on the last-in, first-out (LIFO) basis for U.S. inventories and on the first-in, first-out (FIFO) or average cost basis for non-U.S. inventories.

Pre-Production Costs Related to Long-Term Supply Arrangements
The cost of tooling used to make products sold under long-term supply arrangements is capitalized as part of property, plant and equipment and amortized over its useful life if we own the tooling. These costs are also capitalized and amortized if we fund the purchase but our customer owns the tooling and grants us the noncancelable right to use the tooling over the contract period. Costs incurred in connection with the design and development of tooling that will be billed to customers upon completion is carried as a component of other accounts receivable. Design and development costs related to customer products are deferred if we have an agreement to collect such costs from the customer; otherwise, they are expensed.

Lease Financing
Lease financing consists of direct financing leases, leveraged leases and equipment on operating leases. Income on direct financing leases is recognized by a method which produces a constant periodic rate of return on the outstanding investment in the lease. Income on leveraged leases is recognized by a method which produces a constant rate of return on the outstanding net investment in the lease, net of the related deferred tax liability, in the years in which the net investment is positive. Initial direct costs are deferred and amortized using the interest method over the lease period. Equipment under operating leases is recorded at cost, net of accumulated depreciation. Income from operating leases is recognized ratably over the term of the leases.

Allowance for Losses on Lease Financing
Provisions for losses on lease financing receivables are determined based on loss experience and assessment of inherent risk. Adjustments are made to the allowance for losses to adjust the net investment in lease financing to an estimated collectible amount. Income recognition is generally discontinued on accounts which are contractually past due and where no payment activity has occurred within 120 days. Accounts are charged against the allowance for losses when determined to be uncollectible. Accounts where asset repossession has started as the primary means of recovery are classified within other assets at their estimated realizable value.

Goodwill
Cost in excess of net assets of companies acquired generally has been amortized on a straight-line basis over the estimated period of expected benefit, ranging from 10 to 40 years. The issuance of Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets," was approved by the Financial Accounting Standards Board in June 2001. The new guidance changes the post-acquisition accounting for goodwill and certain intangible assets by discontinuing the amortization of these assets and requiring impairment testing at least annually. After recording the impact of adopting the Statement, any reductions in the carrying value of goodwill or certain intangible assets will be included in the results of operations. Adoption of SFAS No. 142 is required in 2002.

We believe that the initial application of this Statement is likely to result in the impairment of a portion of our goodwill. We have substantially completed the first step of the initial impairment test required by the Statement and identified approximately $400 of goodwill that may be impaired based upon the new requirements. We will complete the impairment testing required to determine the actual amount of goodwill impairment in 2002.

Accordingly, we are unable to quantify the amount of impairment that may result from determining the implied fair value of the related goodwill at this time. Any adjustment of goodwill resulting from the initial assessment will be recognized as the effect of a change in accounting as of the beginning of 2002. The results of operations for the year ending December 31, 2002 would have included approximately $36 of goodwill amortization, including our share of amounts recorded by equity affiliates, if not for the adoption of SFAS No. 142.

Loans Receivable
Loans receivable consist primarily of loans to partnerships in which DCC has an interest and loans secured by equipment and first mortgages on real property. The loans to partnerships are collateralized by the partnerships' assets. Income on all loans is recognized using the interest method. Interest income on impaired loans is recognized as cash is collected or on a cost recovery basis.

Allowance for Losses on Loans Receivable
Provisions for losses on loans receivable are determined on the basis of loss experience and assessment of inherent risk. Adjustments are made to the allowance for losses to adjust loans receivable to an estimated collectible amount. Income recognition is generally discontinued on accounts which are contractually past due and where no payment activity has occurred within 120 days. Accounts are charged against the allowance for losses when determined to be uncollectible.

Properties and Depreciation
Property, plant and equipment are valued at historical costs. Depreciation is recognized over the estimated useful lives using primarily the straight-line method for financial reporting purposes and accelerated depreciation methods for federal income tax purposes. Long-lived assets are reviewed for impairment and where appropriate are adjusted to fair market value.

Revenue Recognition
Sales are recognized when products are shipped and title has transferred to the customer. Accruals for warranty costs, sales returns and other allowances are provided at the time of shipment based upon experience. Adjustments are made as new information becomes available. Shipping and handling fees billed to customers are included in sales and the costs of shipping and handling are included in cost of sales.

Income Taxes
Current tax liabilities and assets are recognized for the estimated taxes payable or refundable on the tax returns for the current year. Deferred tax balances reflect the impact of temporary differences between the carrying amount of assets and liabilities and their tax bases. Amounts are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered. Deferred tax assets are reduced, if necessary, by the amount of any tax benefits not expected to be realized.

The "flow-through" method of accounting is used for investment tax credits, except for investment tax credits arising from leveraged leases and certain direct financing leases for which the deferred method is used for financial statement purposes.

Financial Instruments
The reported fair values of financial instruments are based on a variety of factors. Where available, fair values represent quoted market prices for identical or comparable instruments. Where quoted market prices are not available, fair values are estimated based on assumptions concerning the amount and timing of estimated future cash flows and assumed discount rates reflecting varying degrees of credit risk. Fair values may not represent actual values of the financial instruments that could be realized as of the balance sheet date or that will be realized in the future.

Derivative Financial Instruments
We enter into forward exchange contracts to hedge our exposure to the effects of currency fluctuations on a portion of our projected sales and purchase commitments. The changes in the fair value of these contracts are generally offset by exchange gains or losses on the underlying exposures. We also use interest rate swaps to manage exposure to fluctuations in interest rates and to balance the mix of our fixed and floating rate debt. We do not use derivatives for trading or speculative purposes.

In January 2001, we adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," and SFAS No. 138, "Accounting for Certain Derivative Instruments and Certain Hedging Transactions." These Statements require, among other things, that all derivative instruments be recognized on the balance sheet at fair value. Interest rate swap arrangements have been formally designated as hedges. The effect of marking these contracts to market has been recorded as a direct adjustment of the underlying debt for those contracts designated as fair value hedges and as an adjustment of other comprehensive income for those contracts designated as cash flow hedges. Foreign currency forwards and other derivatives have not been designated as hedges and the effect of marking these instruments to market has been recognized in the results of operations. We will evaluate these transactions from time to time to determine whether they should be designated as hedges.

The adoption of SFAS Nos. 133 and 138 did not have a material effect on the results of operations.

Environmental Compliance and Remediation
Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to existing conditions caused by past operations which do not contribute to current or future revenue generation are expensed. Liabilities are recorded when environmental assessments and/or remedial efforts are probable and the costs can be reasonably estimated. Estimated costs are based upon current laws and regulations, existing technology and the most probable method of remediation. The costs are not discounted and exclude the effects of inflation and other societal and economic factors. If the cost estimates result in a range of equally probable amounts, the lower end of the range is accrued.

Pension Plans
Annual net periodic pension costs under defined benefit pension plans are determined on an actuarial basis. Our policy is to fund these costs as accrued, including amortization of the initial unrecognized net obligation over 15 years and obligations arising due to plan amendments over the period benefited, through deposits with trustees. Benefits are determined based upon employees' length of service, wages or a combination of length of service and wages.

Notes to Financial Statements

In millions except share and per share amounts

Postretirement Benefits Other Than Pensions
Annual net postretirement benefits liability and expense under the defined benefit plans are determined on an actuarial basis. Our policy is to pay these benefits as they become due. Benefits are determined primarily based upon employees' length of service and include applicable employee cost sharing.

Postemployment Benefits
Annual net postemployment benefits liability and expense under our benefit plans are accrued as service is rendered for those obligations that accumulate or vest and can be reasonably estimated. Obligations that do not accumulate or vest are recorded when payment of the benefits is probable and the amounts can be reasonably estimated.

Statement of Cash Flows
For purposes of reporting cash flows, we consider highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Cash and Marketable Securities
The majority of our marketable securities satisfy the criteria for cash equivalents and are classified accordingly. The remainder of our marketable securities are classified as available for sale. Available- for-sale securities, which are included in investments and other assets, are carried at fair value and any unrealized gains or losses, net of income taxes, are reported as a component of accumulated other comprehensive income or loss in shareholders' equity. Cash includes bank deposits of $31 that support letters of credit and may not be withdrawn under the terms of the arrangements.

Stock-Based Compensation
Stock-based compensation is accounted for using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. No compensation expense is recorded for stock options when granted as the option price is set at the market value of the underlying stock.

Note 2. Preferred Share Purchase Rights

We have a Preferred Share Purchase Rights Plan which is designed to deter coercive or unfair takeover tactics. One right has been issued on each share of our common stock outstanding on and after July 25, 1996. Under certain circumstances, the holder of each right may purchase 1/1000th of a share of our Series A Junior Participating Preferred Stock, no par value, for the exercise price of $110 (subject to adjustment as provided in the Plan). The rights have no voting privileges and will expire on July 15, 2006, unless exercised, redeemed or exchanged sooner.

Generally, the rights cannot be exercised or transferred apart from the shares to which they are attached. However, if any person or group acquires (or commences a tender offer that would result in its acquiring) 15% or more of our outstanding common stock, the rights not held by the acquirer will become exercisable. In that event, instead of purchasing 1/1000th of a share of the Participating Preferred Stock, the holder of each right may elect to purchase from us the number of shares of our common stock that have a market value of twice the right's exercise price (in effect, a 50% discount on our stock). Thereafter, if we merge with or sell 50% or more of our assets or earnings power to the acquirer or engage in similar transactions, any rights not previously exercised (except those held by the acquirer) can also be exercised. In that event, the holder of each right may elect to purchase from the acquiring company the number of shares of its common stock that have a market value of twice the right's exercise price (in effect, a 50% discount on the acquirer's stock).

The Board may authorize the redemption of the rights at a price of $.01 each before anyone acquires 15% or more of our common shares. After that, and before the acquirer owns 50% of our outstanding shares, the Board may authorize the exchange of each right for one share of our common stock.

Note 3. Preferred Shares

There are 5,000,000 shares of preferred stock authorized, without par value, including 1,000,000 shares reserved for issuance under the Rights Plan. No shares of preferred stock have been issued.

Note 4. Common Shares

Certain of our employee and director stock plans provide that employees and directors may tender stock to satisfy the purchase price of the shares, the income taxes required to be withheld on the transaction, or both. In connection with these stock plans, we repurchased 304,927 shares in 1999, 91,074 in 2000 and 11,000 in 2001.

During 1999, the Board of Directors (Board) authorized the expenditure of up to $350 to repurchase shares of our common stock and in 2000 it authorized an additional expenditure of $250 for a total authorization of $600. The authorizations expired at the end of 2000. The repurchases were accomplished through open market transactions. In 1999, we repurchased 2,994,400 shares at an aggregate cost of $100 and in 2000, 15,455,747 shares were repurchased at a cost of $381.

All shares repurchased were cancelled and became authorized but unissued shares.

Common stock transactions in the last three years are as follows:

	1999	2000	**2001**
Shares outstanding at beginning of year	165,690,844	163,151,142	**147,877,034**
Issued for director and employee stock plans	764,535	272,713	**664,430**
Repurchased under stock plans	(309,837)	(91,074)	**(11,000)**
Repurchase program	(2,994,400)	(15,455,747)	
Shares outstanding at end of year	163,151,142	147,877,034	**148,530,464**
Average shares outstanding for the year - basic	165,322,644	152,038,862	**148,241,265**
Plus: Incremental shares from assumed conversion of -			
Deferred compensation units	461,112	571,029	**608,757**
Deferred restricted stock units	106,044	226,253	**232,257**
Stock options	608,165	95,182	**2,371**
Potentially dilutive shares	1,175,321	892,464	**843,385**
Average shares outstanding for the year - diluted	166,497,965	152,931,326	**149,084,650**

A net loss causes dilutive shares to have an antidilutive effect, so the potentially dilutive shares have been disregarded in calculating diluted earnings per share for the year ended December 31, 2001.

Note 5. Inventories

The components of inventory are as follows:

	December 31	
	2000	2001
Raw materials	$ 436	$ 377
Work in process and finished goods	1,128	922
	$1,564	$1,299

Inventories amounting to $1,005 and $841 at December 31, 2000 and 2001, respectively, were valued using the LIFO method. If all inventories were valued at replacement cost, inventories would be increased by $119 and $111 at December 31, 2000 and 2001, respectively.

Note 6. Short-Term Debt

Until the end of 2000, we had generally relied on the issuance of commercial paper to satisfy a significant portion of our short-term financing requirements. These commercial paper borrowings were supported by committed bank lines. However, the debt rating services lowered our credit ratings in the first quarter of 2001, primarily due to the significant downturn in our markets since the fourth quarter of 2000 and the impact of this downturn on our operations. Following the downgrade, the commercial paper markets ceased to be available to us and we began borrowing against the committed bank lines.

In March 2001, we established a $400 accounts receivable securitization program to supplement our committed bank lines. Under the program, certain of our divisions and subsidiaries either sell or contribute accounts receivable to Dana Asset Funding LLC (DAF), a special purpose entity. DAF funds its accounts receivable purchases in part by pledging a portion of the receivables as collateral for short-term loans from participating banks. DAF uses the amounts borrowed under the program to fund the purchase of accounts receivable. We used the sale proceeds received from DAF to reduce other debt.

The securitized accounts receivable are owned in their entirety by DAF and are not available to satisfy claims of our creditors. However, we are entitled to any dividends paid by DAF and would be entitled to all proceeds from the liquidation of DAF's assets upon the termination of the securitization program and the dissolution of DAF. DAF's receivables are included in our consolidated financial statements solely because DAF does not meet certain technical accounting requirements for treatment as a "qualifying special purpose entity" under generally accepted accounting principles. Accordingly, the sales and contributions of the accounts receivable are eliminated in consolidation and the loans to DAF are reflected as short-term borrowings in our consolidated financial statements.

Expenses incurred to establish the program are being amortized over five years, the contractual life of the program.

In December 2001, we entered into a new 364-day revolving credit facility with a group of banks and amended our existing long-term facility, which matures on November 15, 2005. The 364-day facility provides for a maximum borrowing capacity of $250 while the long-term facility has a borrowing capacity of $500. The 364-day facility provides each participating bank the option to terminate its commitment on April 30, 2002 unless we receive net cash proceeds of at least $200 from the issuance of debt in the capital markets or stock or the sale of assets by April 1, 2002. If the net cash proceeds exceed $200, the maximum borrowing capacity under the 364-day facility will be reduced by 50% of the excess. Both facilities require us to maintain specified financial ratios as of the end of each quarter, including the ratio of net senior debt to tangible net worth; the ratio of earnings before interest, taxes and depreciation and amortization (EBITDA) less capital spend to interest expense; and the ratio of net senior debt to EBITDA. For purposes of these ratios, tangible net worth excludes deferred currency translation adjustments, the 2001 minimum pension liability adjustment and intangible assets, while EBITDA is modified to exclude cash restructuring charges incurred from the fourth quarter of 2001 through the first quarter of 2003, to a maximum of $500, equity earnings, minority interest and certain other non-cash items. The ratio calculations are based on the additional financial information which presents Dana's consolidated financial statements with DCC accounted for on the equity basis.

Because our financial performance is impacted by various economic, financial and industry factors, we may not be able to satisfy these covenants in the future. Noncompliance with these covenants would constitute an event of default, allowing the lenders to accelerate the repayment of any borrowings outstanding under the related arrangement. We believe that we would be able to successfully negotiate amended covenants or obtain waivers if an event of default were imminent; however, we might be required to provide collateral to the lenders or make other financial concessions. Default under either of these facilities or any of our significant note agreements may result in defaults under other debt instruments. Our business, results of operations and financial condition might be adversely affected if we were unable to successfully negotiate amended covenants or obtain waivers on acceptable terms.

Dana, excluding DCC, had total committed borrowing lines of $1,252 and uncommitted borrowing lines of $296 at December 31, 2001. At December 31, 2001, Dana, excluding DCC, had $150 borrowed against the long-term facility, $260 borrowed under the accounts receivable securitization program and $33 of notes payable at its non-U.S. subsidiaries.

DCC had also relied on the issuance of commercial paper for short-term borrowings prior to 2001. Its borrowings against committed bank lines also increased after its credit ratings were lowered in the first quarter of 2001.

DCC had committed borrowing lines of $544, including approximately $67 denominated in British pounds and Canadian dollars, and uncommitted borrowing lines of $15 at December 31, 2001. Various lines totaling $292 mature in 2002; $250 available under a long-term facility matures in June 2004. DCC had $231 borrowed against committed U.S. bank lines at December 31, 2001.

Fees are paid to the banks for providing committed lines, but not for uncommitted lines. We paid fees of $9 in 2001 in connection with our committed bank lines. A portion of these fees is being amortized over the lives of the related credit facilities.

Selected details of short-term borrowings are as follows:

	Amount	Weighted Average Interest Rate
Balance at December 31, 2000	$1,526	7.0 %
Average during 2000	1,614	6.6
Maximum during 2000 (month end)	1,872	6.7
Balance at December 31, 2001	**$ 674**	**3.5 %**
Average during 2001	**1,450**	**5.4**
Maximum during 2001 (month end)	**1,919**	**6.9**

Notes to Financial Statements

In millions except share and per share amounts

Note 7. Interest Rate Agreements

Under our interest rate swap agreements, we agree to exchange with third parties, at specific intervals, the difference between fixed rate and floating rate interest amounts calculated by reference to an agreed notional amount. Differentials to be paid or received under these agreements are accrued and recognized as adjustments to interest expense. At December 31, 2001, Dana, exclusive of DCC, was committed to receive a rate of 9% on notional amounts of $575 and €200 and to pay variable rates equal to the six-month London interbank offered rate (LIBOR) plus an average of 3.09% (the combined rate was 5.07% at December 31, 2001) on a notional amount of $575 and the six-month Euro interbank offered rate (EURIBOR) plus an average of 3.79% (the combined rate was 7.04% on December 31, 2001) on a notional amount of €200. These agreements were entered in August 2001 in conjunction with the issuance of the 9% notes and expire when the notes mature in 2011. At December 31, 2001, DCC was committed to receive interest rates which change periodically in line with prevailing short-term market rates (the average rate being received at December 31, 2001 was 2.72%) and to pay an average rate of 7.13% which is fixed over the period of the agreements on notional amounts of $95. DCC's notional amounts of interest rate swaps expire as follows: 2002, $50 and 2003, $45.

Note 8. Long-Term Debt

	December 31	
	2000	**2001**
Indebtedness of Dana, excluding consolidated subsidiaries —		
Unsecured notes payable, fixed rates -		
6.25% notes, due March 1, 2004	$ 250	**$ 250**
6.5% notes, due March 15, 2008	150	**150**
7.0% notes, due March 15, 2028	196	**196**
6.5% notes, due March 1, 2009	349	**349**
7.0% notes, due March 1, 2029	371	**371**
9.0% notes, due August 15, 2011		**575**
9.0% euro notes, due August 15, 2011		**175**
6.92% - 7.04% notes, due 2002	470	**135**
Indebtedness of DCC —		
Unsecured notes payable, variable rates, 2.18% - 5.77%, due 2002 to 2006	220	**182**
Unsecured notes payable, fixed rates, 2.00% - 8.54%, due 2002 to 2011	865	**844**
Nonrecourse notes payable, fixed rates, 6.77% - 12.05%, due 2002 to 2010	108	**79**
Nonrecourse notes payable, variable rate of 5.38%, due 2003		**19**
Indebtedness of other consolidated subsidiaries	89	**129**
Total long-term debt	3,068	**3,454**
Less: Current maturities	419	**446**
	$2,649	**$3,008**

The total maturities of all long-term debt for the five years after 2001 are as follows: 2002, $446; 2003, $152; 2004, $482, 2005, $90 and 2006, $102.

We filed universal shelf registration statements in December 1997 and December 1998 authorizing us to issue debt or equity securities, or a combination thereof, in an aggregate amount not to exceed $1,350. In March 1998, we issued $150 of 6.5% unsecured notes due March 15, 2008 and $200 of 7.0% unsecured notes due March 15, 2028. In March 1999, we issued $250 of 6.25% unsecured notes due March 1, 2004, $350 of 6.5% unsecured notes due March 1, 2009 and $400 of 7.0% unsecured notes due March 1, 2029.

During 2001, Dana issued $575 and €200 of 9% unsecured notes due August 15, 2011. The indenture agreement related to these notes places certain limits on the borrowings, payments and transactions that we might wish to undertake.

During 1999, DCC established a $500 Medium Term Note Program. Notes under the program are offered on terms determined at the time of issuance. At December 31, 2001, notes totaling $500 were outstanding under the program. These notes are general, unsecured obligations of DCC. DCC has agreed that it will not issue any other notes which are secured or senior to notes issued under the program, except as permitted by the program.

Nonrecourse obligations represent debt collateralized by the assignment of contracts and a security interest in the underlying assets. In the event of a default under the nonrecourse debt obligation, the lender's recourse is limited to the collateral with no further recourse against DCC.

Interest paid on short-term and long-term debt was $285 in 1999, $314 in 2000 and $304 in 2001.

Note 9. Stock Option Plans

The Compensation Committee of the Board grants stock options to selected Dana employees under the 1997 Stock Option Plan. The option price is equal to the market price of our common stock at the date of grant. One-fourth of the options granted become exercisable at each of the first four anniversary dates of the grant; options generally expire ten years from the date of grant. Stock appreciation rights may be granted separately or in conjunction with the options.

This is a summary of transactions under the plan in the last three years:

	Number of Shares	**Weighted Average Exercise Price**
Outstanding at December 31, 1998	8,510,657	$36.43
Granted - 1999	2,333,919	45.50
Exercised - 1999	(569,933)	30.65
Cancelled - 1999	(193,138)	43.24
Outstanding at December 31, 1999	10,081,505	$38.78
Granted - 2000	3,322,750	23.06
Exercised - 2000	(120,857)	17.93
Cancelled - 2000	(420,999)	38.08
Outstanding at December 31, 2000	12,862,399	$34.94
Granted - 2001	2,763,200	25.05
Exercised - 2001	(52,003)	15.97
Cancelled - 2001	(632,643)	35.85
Outstanding at December 31, 2001	14,940,953	$33.14

The following table summarizes information about stock options under this plan at December 31, 2001:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
$19.63-28.13	7,526,087	7.7	$24.60	2,617,753	$25.40
29.06-38.44	3,094,246	4.4	34.49	3,094,246	34.49
40.08-52.56	4,320,620	7.0	47.05	3,085,939	47.22
	14,940,953	6.8	$33.14	8,797,938	$36.25

In April 2001, shareholders authorized an additional 5,000,000 shares under this plan. At December 31, 2001, 4,196,461 shares were available for future grants.

In accordance with our accounting policy for stock-based compensation, we have not recognized any expense relating to these stock options. If we had used the fair value method of accounting, the alternative policy set out in SFAS No. 123, "Accounting for Stock-Based Compensation," the after-tax expense relating to the stock options would have been $11 in 1999, $14 in 2000 and $16 in 2001. If we had charged this expense to income, our net income (loss) and earnings per share would have been as follows:

	1999	2000	2001
Net Income (Loss)	$502	$320	**$(314)**
Basic EPS	3.03	2.10	**(2.12)**
Diluted EPS	3.01	2.09	**(2.12)**

The fair value of each option grant was estimated on the date of grant using the Black-Scholes model with the following assumptions:

	1999	2000	2001
Risk-free interest rate	5.82%	6.16%	**4.63%**
Dividend yield	2.73%	5.38%	**4.95%**
Expected life	5.4 years	5.4 years	**5.4 years**
Stock price volatility	38.60%	40.72%	**44.67%**

Based on the above assumptions, the weighted average fair value per share of options granted under the plans was $15.79 in 1999, $6.51 in 2000 and $7.49 in 2001.

Under our Directors' Stock Option Plan, options for 3,000 common shares are automatically granted to each non-employee director once a year. The option price is the market value of the stock at the date of grant. The options can be exercised after one year and expire ten years from the date of grant, except in the event of the retirement or death of the director.

This is a summary of the stock option activity of the Directors' plan in the last three years:

	Number of Shares	Weighted Average Exercise Price
Outstanding at December 31, 1998	120,000	$35.12
Granted - 1999	21,000	50.25
Exercised - 1999	(3,000)	24.25
Outstanding at December 31, 1999	138,000	$37.66
Granted - 2000	21,000	28.78
Outstanding at December 31, 2000	159,000	$36.49
Granted - 2001	24,000	17.64
Outstanding at December 31, 2001	183,000	$34.02

The following table summarizes information about stock options under this plan at December 31, 2001:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
$17.64-32.25	138,000	3.7	$27.01	114,000	$28.98
50.25-60.09	45,000	6.8	55.50	45,000	55.50
	183,000	4.4	$34.02	159,000	$36.49

At December 31, 2001, 82,000 shares were available for future grants under this plan.

The non-employee directors of Echlin Inc., which we acquired in 1998, participated in the Echlin Inc. 1996 Non-Executive Director Stock Option Plan under which options for 232,325 shares were authorized for issuance. Options were granted at market value at the date of grant, were exercisable after one year and expire ten years from the date of grant, except in the event of the retirement or death of the director. During 1999, options to purchase 39,265 shares were exercised at $35.43. No options were exercised in 2000 or 2001. At December 31, 2001, there were 38,752 options outstanding and exercisable at exercise prices ranging from $33.49 to $37.93 per share with a weighted average exercise price of $34.40. The weighted average remaining contractual life of these options was 5.2 years. No future grants are expected under this plan.

Note 10. Employees' Stock Purchase Plan

The majority of our full-time U.S. and some of our non-U.S. employees are eligible to participate in our stock purchase plan. Plan participants can authorize us to withhold up to 15% of their earnings and deposit this amount with an independent custodian. The custodian uses the funds to purchase our common stock at current market prices. As record keeper for the plan, we allocate the purchased shares to the participants' accounts. Shares are distributed to the participants on request.

We match up to 50% of the participants' contributions in cash over a five-year period beginning with the year the amounts are withheld. If a participant withdraws any shares before the end of five years, the amount of our match will depend on how long the shares were in the account. The custodian purchased 1,177,541 shares in 1999, 2,212,391 shares in 2000 and 2,405,040 shares in 2001. The charge to expense for our match was $9 in 1999, $10 in 2000 and $11 in 2001.

Notes to Financial Statements

Dollars in millions

Note 11. Additional Compensation Plans

We have numerous additional compensation plans under which we pay our employees for increased productivity and improved performance. One such plan is our Additional Compensation Plan for certain officers and other key employees. Under this plan, a percentage of the participants' compensation is accrued for additional compensation if we attain certain annual corporate performance goals. The Compensation Committee selects the participants and determines whether to pay the awards immediately in cash or to defer them for payment later in cash, stock or a combination of both. Participants may elect to convert deferred awards to units which are the economic equivalent of shares of Dana common stock. Units are credited with the equivalent of dividends on our common stock and adjusted in value based on the market value of our common stock. Compensation expense was credited $3 in 1999, $7 in 2000 and $1 in 2001 in connection with reductions in the value of deferred units. Awards not converted to units are credited quarterly with interest earned at a rate tied to the prime rate.

Activity related to the plan for the last three years is as follows:

	1999	2000	**2001**
Awarded to participants based on preceding year's performance	$14	$15	**$ 0**
Dividends and interest credited to participants' accounts	4	2	**2**
Charge (credit) to expense	19	(5)	**1**
Shares issued to participants	3,721	5,240	**25,106**

We also have two successive Restricted Stock Plans under which the Compensation Committee grants restricted common shares to certain key employees. The shares are subject to forfeiture until the restrictions lapse or terminate. Generally, the employee must remain employed with us for a specified number of years after the date of grant to receive the shares. Since 1997, participants have been able to convert their restricted stock into restricted stock units under certain conditions. The number of restricted shares converted to restricted units was 200,037 in 1999, 32,736 in 2000 and 27,500 in 2001. The units are payable in unrestricted stock upon retirement or termination of employment.

Grants occurred under the 1989 Restricted Stock Plan through February 1999, at which time the authorization to grant restricted stock under the plan lapsed. There were 20,500 shares granted in 1999 under the 1989 Plan. At December 31, 2001, there were 474,605 shares available for issuance in connection with dividends payable on shares granted under this plan.

Shareholders approved the 1999 Restricted Stock Plan in April 1999 and authorized the issuance of up to 750,000 shares. There were 82,000 shares granted in 1999, 31,200 shares in 2000 and 529,000 shares in 2001 under the 1999 Plan. At December 31, 2001, there were 74,319 shares available for future grants and dividends under the 1999 Plan.

Charges to expense for these plans were $2 in 1999, $2 in 2000 and $3 in 2001.

Note 12. Pension and Other Postretirement Benefits

We provide defined contribution and defined benefit, qualified and nonqualified, pension plans for certain employees. We also provide other postretirement benefits including medical and life insurance for certain employees upon retirement.

Under the terms of the defined contribution retirement plans, employee and employer contributions may be directed into a number of diverse investments. None of these plans allows for direct investment of contributions in Dana stock.

The following tables provide a reconciliation of the changes in the defined benefit pension plans' and other postretirement plans' benefit obligations and fair value of assets over the two-year period ended December 31, 2001, statements of the funded status and schedules of the net amounts recognized in the balance sheet at December 31, 2000 and 2001:

	Pension Benefits		Other Benefits	
	2000	**2001**	2000	**2001**
Reconciliation of benefit obligation				
Obligation at January 1	$2,425	**$2,477**	$ 1,140	**$ 1,198**
Service cost	76	**66**	16	**14**
Interest cost	168	**172**	79	**91**
Employee contributions	4	**4**	4	**7**
Plan amendments	6	**1**		**4**
Actuarial loss	28	**29**	56	**206**
Benefit payments	(224)	**(196)**	(84)	**(99)**
Settlement, curtailment and terminations	15	**7**	(12)	**(4)**
Acquisitions and divestitures	11	**9**		
Translation adjustments	(32)	**(20)**	(1)	**(2)**
Obligation at December 31	$2,477	**$2,549**	$ 1,198	**$ 1,415**
Reconciliation of fair value of plan assets				
Fair value at January 1	$2,931	**$2,752**		
Actual return on plan assets	49	**(294)**		
Acquisitions and divestitures	(26)	**11**		
Employer contributions	24	**18**		
Employee contributions	4	**4**		
Benefit payments	(198)	**(186)**		
Settlements	(1)	**(4)**		
Translation adjustments	(31)	**(18)**		
Fair value at December 31	$2,752	**$2,283**		
Funded Status				
Balance at December 31	$ 275	**$ (264)**	$(1,198)	**$(1,415)**
Unrecognized transition obligation	(1)	**(1)**		**(19)**
Unrecognized prior service cost	57	**43**	(30)	
Unrecognized (gain) loss	(351)	**229**	321	**512**
Accrued cost	$ (20)	**$ 7**	$ (907)	**$ (922)**
Amounts recognized in the balance sheet consist of:				
Prepaid benefit cost	$ 88	**$ 108**		
Accrued benefit liability	(168)	**(299)**	$ (907)	**$ (922)**
Intangible assets	23	**30**		
Accumulated other comprehensive loss	37	**168**		
Net amount recognized	$ (20)	**$ 7**	$ (907)	**$ (922)**

Benefit obligations of the U.S. non-qualified and certain non-U.S. pension plans, amounting to $114 at December 31, 2001, and the other postretirement benefit plans are not funded.

Components of net periodic benefit costs for the last three years are as follows:

	Pension Benefits			Other Benefits		
	1999	2000	**2001**	1999	2000	**2001**
Service cost	$78	$76	**$ 66**	$18	$16	**$ 14**
Interest cost	153	168	**172**	69	79	**91**
Expected return on plan assets	(219)	(232)	**(241)**			
Amortization of transition obligation	3	3	**1**			
Amortization of prior service cost	23	23	**13**	(10)	(7)	**(6)**
Recognized net actuarial gain (loss)	5	(6)	**(20)**	4	10	**13**
Net periodic benefit cost	43	32	**(9)**	81	98	**112**
Curtailment (gain) loss		18	**4**		(23)	**(2)**
Settlement (gain) loss		(3)	**2**			
Termination expenses			**10**			
Net periodic benefit cost after curtailments and settlements	$43	$47	**$7**	$81	$75	**$110**

The assumptions used in the measurement of pension benefit obligations are as follows:

	U.S. Plans		
	1999	2000	**2001**
Discount rate	7.25%	7.75%	**7.5%**
Expected return on plan assets	9.25%	9.25%	**9.5%**
Rate of compensation increase	4.31 - 5%	4.31 - 5%	**5%**

	Non-U.S. Plans		
	1999	2000	**2001**
Discount rate	5.5 - 7%	5.5 - 7.75%	**6% - 6.75%**
Expected return on plan assets	6.5 - 9%	6.5 - 9%	**7% - 7.5%**
Rate of compensation increase	3 - 5%	2.5 - 5%	**3% - 5%**

The assumptions used in the measurement of other postretirement benefit obligations are as follows:

	1999	2000	**2001**
Discount rate	7.25%	7.75%	**7.5%**
Initial weighted health care costs trend rate	7.2%	6.8%	**8.1%**
Ultimate health care costs trend rate	5%	5%	**5%**
Years to ultimate	9	9	**9**

Assumed health care costs trend rates have a significant effect on the health care plan. A one-percentage-point change in assumed health care costs trend rates would have the following effects for 2001:

	1% Point Increase	1% Point Decrease
Effect on total of service and interest cost components	$9	$(7)
Effect on postretirement benefit obligations	115	(99)

Note 13. Business Segments

Our operations are organized into six market-focused Strategic Business Units (SBUs). This structure allows our people in each of these areas to focus their resources to benefit Dana and our global customers. In December 2001, we combined the Fluid Systems Group and most of the operations of the Engine Systems Group to form the Engine and Fluid Management Group. The segment information has been restated to reflect all changes made to the SBU alignment in 2001.

The Automotive Systems Group (ASG) produces light duty axles, driveshafts, structural products (such as engine cradles and frames), transfer cases, original equipment brakes and integrated modules and systems for the light vehicle market and driveshafts for the heavy truck market.

The Automotive Aftermarket Group (AAG) sells primarily hydraulic brake components and disc brakes for light vehicle applications, internal engine hard parts, chassis products and a complete line of filtration products for a variety of applications.

The Engine and Fluid Management Group (EFMG) serves the automotive, light to heavy truck, leisure and outdoor power equipment and industrial markets with sealing products, internal engine hard parts, electronic modules, sensors and an extensive line of products for the pumping, routing and thermal management of fluid systems.

Commercial Vehicle Systems (CVS) is a major supplier of heavy axles and brakes, drivetrain components and trailer products to the medium and heavy truck markets.

The Off-Highway Systems Group (OHSG) produces axles and brakes, transaxles, power-shift transmissions, torque converters and electronic controls for the construction, agriculture, mining, specialty chassis, outdoor power, material handling, forestry and leisure/utility equipment markets.

For some time, we have also been a leading provider of lease financing services in selected markets through our wholly-owned subsidiary, Dana Credit Corporation (DCC). DCC and its subsidiaries provide leasing and financing services to selected markets primarily in the U.S., Canada, the United Kingdom and continental Europe. We announced our intention to pursue the sale of the businesses of DCC in October 2001.

Dollars in millions

Note 13. Business Segments (Continued)

Management evaluates the operating segments and regions as if DCC were accounted for on the equity method of accounting. Information used to evaluate the SBUs and regions is as follows:

1999	Sales	EBIT	Operating PAT	Net Profit (Loss)	Net Assets	Capital Spend	Depreciation/ Amortization
ASG	$ 4,403	$ 534	$ 341	$ 269	$1,759	$190	$142
AAG	2,955	294	180	127	1,965	117	76
EFMG	2,495	223	143	104	1,861	135	117
CVS	1,904	208	127	91	688	48	34
OHSG	870	61	37	24	560	31	37
DCC			34	34	145		
Other	532	(169)	(184)	29	262	26	23
Total operations	13,159	1,151	678	678	7,240	547	429
Restructuring and nonrecurring items		(229)	(165)	(165)			
Consolidated	$13,159	$ 922	$ 513	$ 513	$7,240	$547	$429
North America	$10,308	$ 1,235	$ 771	$ 612	$5,222	$379	$283
Europe	2,051	99	57	20	1,267	102	96
South America	549	16	13	3	581	48	37
Asia Pacific	251		(1)	(10)	143	13	9
DCC			34	34	145		
Other		(199)	(196)	19	(118)	5	4
Total operations	13,159	1,151	678	678	7,240	547	429
Restructuring and nonrecurring items		(229)	(165)	(165)			
Consolidated	$13,159	$ 922	$ 513	$ 513	$7,240	$547	$429
2000							
ASG	$ 4,522	$ 415	$ 282	$ 193	$2,036	$180	$149
AAG	2,768	116	71	6	1,903	74	78
EFMG	2,400	180	121	77	1,735	119	113
CVS	1,598	126	76	41	555	32	42
OHSG	786	58	35	21	500	19	29
DCC			35	35	174		
Other	243	(219)	(243)	4	77	10	16
Total operations	12,317	676	377	377	6,980	434	427
Restructuring and nonrecurring items		(25)	(43)	(43)			
Consolidated	$12,317	$ 651	$ 334	$ 334	$6,980	$434	$427
North America	$ 9,449	$ 804	$ 525	$ 346	$4,730	$306	$286
Europe	1,947	74	44	4	1,542	78	96
South America	563	24	11		451	32	30
Asia Pacific	358	7	5	(8)	169	11	11
DCC			35	35	174		
Other		(233)	(243)		(86)	7	4
Total operations	12,317	676	377	377	6,980	434	427
Restructuring and nonrecurring items		(25)	(43)	(43)			
Consolidated	$12,317	$ 651	$ 334	$ 334	$6,980	$434	$427
2001							
ASG	**$ 3,717**	**$ 194**	**$ 146**	**$ 68**	**$1,997**	**$188**	**$168**
AAG	**2,538**	**12**	**7**	**(54)**	**1,510**	**36**	**80**
EFMG	**2,137**	**77**	**50**	**8**	**1,430**	**56**	**117**
CVS	**1,118**	**33**	**20**	**(10)**	**407**	**19**	**39**
OHSG	**621**	**22**	**13**	**1**	**431**	**13**	**29**
DCC			**31**	**31**	**198**		
Other	**140**	**(191)**	**(262)**	**(39)**	**161**	**5**	**14**
Total operations	**10,271**	**147**	**5**	**5**	**6,134**	**317**	**447**
Restructuring and nonrecurring items		**(466)**	**(303)**	**(303)**			
Consolidated	**$10,271**	**$ (319)**	**$(298)**	**$(298)**	**$6,134**	**$317**	**$447**
North America	**$ 7,684**	**$ 280**	**$ 167**	**$ 10**	**$4,027**	**$212**	**$299**
Europe	**1,704**	**43**	**45**	**8**	**1,314**	**49**	**90**
South America	**553**	**13**	**(3)**	**(14)**	**475**	**28**	**38**
Asia Pacific	**330**	**5**	**3**	**(8)**	**177**	**25**	**14**
DCC			**31**	**31**	**198**		
Other		**(194)**	**(238)**	**(22)**	**(57)**	**3**	**6**
Total operations	**10,271**	**147**	**5**	**5**	**6,134**	**317**	**447**
Restructuring and nonrecurring items		**(466)**	**(303)**	**(303)**			
Consolidated	**$10,271**	**$ (319)**	**$(298)**	**$(298)**	**$6,134**	**$317**	**$447**

With the exception of DCC, operating profit after taxes (PAT) represents earnings before interest and taxes (EBIT), tax effected at 39% (our estimated long-term effective rate), plus equity in earnings of affiliates. The Other category includes operations not assigned to the SBUs, discontinued businesses, trailing liabilities for certain closed plants, interest expense net of interest income, corporate expenses and adjustments to reflect the actual effective tax rate. SBU and regional expenses are included in the respective SBU or region; otherwise they are included in Other. In arriving at net profit from operating PAT, allocations are based on sales.

Equity earnings included in the operating PAT and net profit reported in 1999, 2000 and 2001 were $15, $29 and $27 for ASG and $7, $11 and $3 for EFMG. Equity earnings included for the other SBUs were not material.

Net assets at the SBU and regional level is intended to correlate with invested capital. It includes accounts receivable, inventories (on a first-in, first-out basis), net property, plant and equipment, investments in affiliates, goodwill, trade accounts payable and 2% of annualized sales as an assumption for cash and prepaid expense.

DCC is evaluated based upon numerous criteria of which net profit and net assets (equity investment) shown above are the major items.

Restructuring and nonrecurring items consist of the gains on sales of business discussed in Note 19, restructuring and integration charges discussed in Note 20 and other nonrecurring charges.

Sales by region are based upon location of the entity recording the sale. Sales from the U.S. amounted to $9,413 in 1999, $8,552 in 2000 and $6,863 in 2001. No other country's sales exceeded 10% of total sales. U.S. long-lived assets were $1,835 in 1999, $1,865 in 2000 and $1,631 in 2001. No other country's long-lived assets exceeded 10% of total long-lived assets.

Net operating assets differ from consolidated assets as follows:

	1999	2000	**2001**
Net operating assets	$ 7,240	$ 6,980	**$ 6,134**
Accounts payable	1,129	1,014	**1,042**
DCC's assets in excess of equity	1,902	2,279	**2,012**
Non-trade receivables and other current assets	655	755	**775**
Other long-term assets	197	208	**244**
Consolidated assets	$11,123	$11,236	**$10,207**

The difference between operating capital spend and depreciation shown above and purchases of property, plant and equipment and depreciation shown on the cash flow statement represents the method of measuring DCC for operating purposes. DCC's capital spend and depreciation are not included above. In addition, DCC purchases equipment and leases the equipment to the other SBUs. These operating leases are included in the consolidated statements as purchases of assets and depreciated over their useful life.

Export sales from the U.S. to customers outside the U.S. amounted to $939 in 1999, $832 in 2000 and $649 in 2001. Total export sales (including sales to our non-U.S. subsidiaries which are eliminated for financial statement presentation) were $1,229 in 1999, $1,115 in 2000 and $874 in 2001.

Worldwide sales to Ford Motor Company and subsidiaries amounted to $2,130 in 1999, $2,396 in 2000 and $1,888 in 2001, which represented 16%, 19% and 18% of our consolidated sales. Sales to DaimlerChrysler AG and subsidiaries were $1,777 in 1999, $1,669 in 2000 and $1,169 in 2001 representing 14%, 14% and 11% of our consolidated sales. Sales to Ford were primarily from our ASG and EFMG segments, while sales to DaimlerChrysler were primarily from the ASG and CVS segments. No other customer accounted for more than 10% of our consolidated sales.

Note 14. Estimated Income Taxes

Income tax expense (benefit) consists of the following components:

	Year Ended December 31		
	1999	2000	**2001**
Current			
U.S. federal	$ 23	$ 22	**$ (94)**
U.S. state and local	15	18	**(5)**
Non-U.S.	139	74	**54**
	177	114	**(45)**
Deferred			
U.S. federal and state	120	48	**(111)**
Non-U.S.	(46)	9	**(5)**
	74	57	**(116)**
Total expense (benefit)	$251	$171	**$(161)**

Deferred tax benefits (liabilities) consist of the following:

	December 31		
	1999	2000	**2001**
Postretirement benefits other than pensions	$387	$328	**$339**
Expense accruals	150	210	**252**
Net operating loss carryforwards	117	128	**234**
Inventory reserves	35	58	**77**
Foreign tax credits recoverable		23	**79**
Other tax credits recoverable		7	**27**
Pension accruals			**33**
Postemployment benefits	38	32	**32**
Other employee benefits	24	23	**20**
Other	63	58	**85**
	814	867	**1,178**
Valuation allowances	(83)	(102)	**(128)**
Deferred tax benefits	731	765	**1,050**
Leasing activities	(441)	(557)	**(678)**
Depreciation - non-leasing	(215)	(239)	**(233)**
Pension accruals	(15)	(12)	
Other	(17)	(17)	**(24)**
Deferred tax liabilities	(688)	(825)	**(935)**
Net deferred tax benefits (liabilities)	$ 43	$ (60)	**$115**

Notes to Financial Statements

Dollars in millions

Note 14. Estimated Income Taxes (Continued)

Worldwide, we have operating loss carryforwards of approximately $687 with remaining lives ranging from one year to an indefinite period. Valuation allowances are provided for deferred benefits if the realization of the benefits is uncertain. To reflect uncertainties related to utilization of specific loss carryforwards, we increased the valuation allowance by $19 in 2000 and $26 in 2001. Net benefits recognized for loss carryforwards generally relate to the U.S., where we have traditionally been a taxpayer, and Brazil and the United Kingdom, where operating losses may be carried forward indefinitely. Foreign tax credits may be used to offset the U.S. income taxes due on income earned from foreign sources; however, the credit is limited to the total U.S. taxes payable on income from all sources. Excess foreign tax credits may be carried back two years and forward five years. As of December 31, 2000 and 2001, we believe it is more likely than not that we will generate a sufficient level and proper mix of taxable income within the appropriate period to utilize all the foreign tax credits. If we are unable to generate a sufficient level and proper mix of taxable income within the appropriate periods we may be unable to utilize some or all of these tax benefits. The foreign tax credit carryforwards expire as follows: 2003, $5; 2004, $20; 2005, $28; 2006, $26.

Cumulative undistributed earnings of non-U.S. subsidiaries for which U.S. income taxes, exclusive of foreign tax credits, have not been provided approximated $852 at December 31, 2001. U.S. income taxes have not been provided on these undistributed earnings since we intend to permanently reinvest them. If the total undistributed earnings of non-U.S. subsidiaries had been remitted in 2001, a significant amount of the additional tax provision would have been offset by foreign tax credits.

We paid income taxes of $136 in 1999 and $98 in 2000 and received a net refund of $38 in 2001.

The effective income tax rate differs from the U.S. federal income tax rate for the following reasons:

	Year Ended December 31		
	1999	2000	**2001**
U.S. federal income tax rate	35.0%	35.0%	**35.0%**
Increases (reductions) resulting from:			
State and local income taxes, net of federal income tax benefit	2.1	2.3	**4.2**
Non-U.S. income	(4.0)	(5.1)	**(1.6)**
Valuation adjustments	3.3	4.0	**(5.3)**
General business tax credits	(1.9)	(1.7)	**1.9**
Amortization of goodwill	0.6	1.2	**(0.8)**
Miscellaneous items	(1.0)	1.1	**(0.2)**
Effective income tax rate	34.1%	36.8%	**33.2%**

Note 15. Composition of Certain Balance Sheet Amounts

The following items comprise the net amounts indicated in the respective balance sheet captions:

	December 31	
	2000	**2001**
Investments and Other Assets		
Goodwill	$ 969	**$ 841**
Investments at equity	965	**877**
Marketable securities, cost of $37 - 2000 and $32 - 2001	41	**33**
Loans receivable	109	**80**
Other	283	**378**
	$2,367	**$2,209**
Property, Plant and Equipment, net		
Land and improvements to land	$ 146	**$ 133**
Buildings and building fixtures	1,167	**1,099**
Machinery and equipment	4,859	**4,808**
	6,172	**6,040**
Less: Accumulated depreciation	2,663	**2,907**
	$3,509	**$3,133**
Deferred Employee Benefits and Other Noncurrent Liabilities		
Postretirement other than pension	$ 831	**$ 834**
Deferred income tax	310	**214**
Pension	109	**299**
Postemployment	82	**82**
Compensation	54	**48**
Other noncurrent liabilities	121	**163**
	$1,507	**$1,640**
Investment in Leases		
Direct financing leases	$ 141	**$ 118**
Leveraged leases	867	**920**
Property on operating leases, net of accumulated depreciation	93	**75**
Allowance for credit losses	(43)	**(31)**
	1,058	**1,082**
Less: Current portion	21	**14**
	$1,037	**$1,068**

The components of the net investment in direct financing leases are as follows:

	December 31	
	2000	**2001**
Total minimum lease payments	$154	**$125**
Residual values	42	**38**
Deferred initial direct costs	2	**2**
	198	**165**
Less: Unearned income	57	**47**
	$141	**$118**

The components of the net investment in leveraged leases are as follows:

	December 31 2000	2001
Rentals receivable	$ 7,597	$ 7,574
Residual values	874	944
Nonrecourse debt service	(6,409)	(6,445)
Unearned income	(1,185)	(1,143)
Deferred investment tax credit	(10)	(10)
	867	920
Less: Deferred taxes arising from leveraged leases	423	513
	$ 444	$ 407

Total minimum lease payments receivable on direct financing leases as of December 31, 2001 are as follows:

Year Ending December 31:	
2002	$ 23
2003	21
2004	18
2005	16
2006	12
Later years	35
Total minimum lease payments receivable	$125

Total minimum lease payments receivable on operating leases as of December 31, 2001 are as follows:

Year Ending December 31:	
2002	$ 20
2003	16
2004	12
2005	10
2006	8
Later years	15
Total minimum lease payments receivable	$ 81

Note 16. Fair Value of Financial Instruments

The estimated fair values of Dana's financial instruments are as follows:

	December 31 2000		2001	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets				
Cash and cash equivalents	$ 179	$ 179	$ 199	$ 199
Loans receivable (net)	219	228	108	115
Investment securities	55	55	46	45
Currency forwards		2	1	1
Financial liabilities				
Short-term debt	1,526	1,526	674	674
Long-term debt	3,068	2,943	3,454	3,298
Security deposits - leases	1		2	2
Deferred funding commitments under leveraged leases	1	1	1	1
Interest rate swaps		3	6	6

Note 17. Commitments and Contingencies

At December 31, 2001, we had purchase commitments for property, plant and equipment of approximately $128. DCC had commitments to provide loan and lease financing in the aggregate amount of $80. Subsequent financing under the DCC commitments is subject to satisfactory completion of normal conditions precedent to the execution of such lease financing arrangements.

At December 31, 2001, we had contingent obligations of up to $134 related to partial guarantees of third-party loans to equity affiliates.

Future minimum rental commitments under operating leases were $469 at December 31, 2001, with rental payments during the next five years of: 2002, $76; 2003, $70; 2004, $64; 2005, $55 and 2006, $60. Net rental expense was $117 in 1999, $103 in 2000 and $113 in 2001.

We are a party to various pending judicial and administrative proceedings arising in the ordinary course of business. These include, among others, proceedings based on product liability claims and alleged violations of environmental laws.

With respect to contingent asbestos-related product liability, we had approximately 100,000 asbestos-related claims outstanding at December 31, 2001, including approximately 27,000 claims that were settled pending payment. We have agreements with our insurance carriers providing for the payment of a significant majority of the defense and indemnity costs for pending claims as well as claims which may be filed against us in the future. At December 31, 2001, we had accrued $102 for contingent asbestos-related product liability costs and recorded $89 as an asset for probable recoveries from insurers for asbestos-related product liability claims, compared to $78 accrued for liabilities and $67 recorded as an asset at December 31, 2000.

At December 31, 2001 and 2000, amounts accrued for contingent environmental liabilities with no recovery expected from other parties were $52 and $40, respectively. At December 31, 2001, $11 was accrued for contingent non-asbestos product liability costs, with no recovery anticipated from third parties; $21 was accrued for liabilities and $2 recorded as an asset at the end of 2000.

Until 2001, the majority of our asbestos-related claims were administered by the Center for Claims Resolution (CCR), which settled claims for its member companies on a shared settlement cost basis. In February 2001, the CCR was reorganized and discontinued negotiating shared settlements. Certain former CCR members have defaulted on the payment of their shares of certain of the CCR-negotiated settlements. As a result, some of the settling parties are seeking payment of the unpaid shares from Dana and the other companies that were members of the CCR at the time of the settlements. We have been working with the CCR, other former CCR members, our insurers and the claimants plaintiffs to resolve these issues. At December 31, 2001, we estimated our contingent liability with respect to these matters to be approximately $44, of which we expect $39 to be recoverable from our insurers and under surety bonds provided by the defaulting CCR members. Our financial statements include our obligation relative to these contingencies, which are separate from the asbestos-related product liabilities discussed above.

We have reviewed our pending judicial and legal proceedings, including the probable outcomes, reasonably anticipated costs and expenses, availability and limits of our insurance coverage and our established reserves for uninsured liabilities. We do not believe that any liabilities that may result from these proceedings are reasonably likely to have a material adverse effect on our liquidity, financial condition or results of operations.

Notes to Financial Statements

Dollars in millions

Note 18. Acquisitions

In 1999, we acquired Innovative Manufacturing, Inc., a machining operation that supplies machined castings to our Spicer Outdoor Power Equipment Components Division. We also acquired the remaining interests not previously owned in Industrias Serva S.A. (30%), Dana Heavy Axle Mexico S.A. de C.V. (9%), Automotive Motion Technology Limited (49%) and Echlin Charger Mfg. Co. Pty. Ltd. (8%). These acquisitions were accounted for as purchases and the results of operations and earnings previously allocated to minority owners have been included from the dates of acquisition. The sales and total assets were not material.

In January 2000, we acquired the cardan-jointed propeller shaft business of GKN plc. In March, we acquired a majority interest in Tribometal a.s., a manufacturer of polymer bearings. The automotive axle manufacturing and stamping operations of Invensys plc were acquired in July 2000. In November 2000, we acquired a 30-percent interest in GETRAG Cie, a manufacturer of transmissions, transaxles, axles and other automotive components, and a 49-percent interest in GETRAG's North American operations. Except for the interests in GETRAG, which are being accounted for as equity investments, the acquisitions were accounted for as purchases and the results of their operations have been included in the consolidated financial statements from the dates of acquisition. The acquisitions accounted for as purchases had total assets of $373 at acquisition and recorded sales of $195 in 2000.

In June 2001, we acquired the remaining 51% interest in Danaven, a Venezuelan operation in which we previously held a minority position. This acquisition was accounted for as a purchase and the results of operations have been included in the consolidated financial statements since the date we attained 100% ownership. We previously accounted for our 49% interest in Danaven under the equity method of accounting. Total assets and debt of Danaven approximated $202 and $92 at June 30, 2001. Sales related to Danaven approximated $64 in 2001.

Note 19. Divestitures

In October 1999, we sold the Coldform operations of our Engine and Fluid Management Group and in November we sold Sierra International Inc. Coldform manufactured starter components, steering hubs and suspension components and Sierra manufactured and distributed marine and power equipment engine, drive and hose products. Annual sales of these operations were approximately $50.

In January 2000, we sold our Gresen Hydraulics business, the Truckline Parts Centres heavy-duty distribution business and certain portions of our constant velocity (CV) joint businesses. In February, we sold most of the global Warner Electric businesses and, in March, we sold Commercial Vehicle Cab Systems. In September 2000, we sold the remaining 35% interest in our Brazilian CV joint operation. Net gain recorded on these divestitures totaled $106. These businesses reported sales of $666 in 1999; through the dates of divestiture, 2000 sales for these operations totaled $103.

In March 2001, we sold Mr. Gasket, Inc., a wholly owned subsidiary. In the second quarter of 2001, we divested our Marion, Ohio forging facility and the assets of our Dallas, Texas and Washington, Missouri Engine and Fluid Management Group operations. In July 2001, we completed the sale of our Chelsea power take-off business to Parker Hannifin Corporation. In September 2001, we completed the sale of our Glacier industrial polymer bearings businesses to Goodrich Corporation. A net after-tax gain of $10 was recorded on these divestitures. Sales reported by these businesses were $241 in 2000 and $105 in 2001, through the dates of divestiture.

Note 20. Restructuring of Operations

During 1999, we continued executing the restructuring and integration plans announced in 1998 following our acquisition of Echlin Inc., including the closing and downsizing of facilities begun in 1998. We incurred integration charges of $51 for relocating assets, training and relocating employees and other integration activities at the acquired operations. These costs were charged to expense as incurred.

During the fourth quarter of 1999, we announced plans to downsize and close additional operations in the U.S., South America and Europe and recorded restructuring and integration charges totaling $170. The charges included the costs of exiting businesses, asset impairments and termination benefits. The announced restructuring and integration plans included closing five facilities, downsizing three facilities and terminating 1,280 people. The largest component of these plans was the downsizing of our Reading, Pa., structures facility. In total, $229 was charged to income during 1999. This amount consisted of $181 charged to restructuring and integration, $57 charged to cost of sales and a $9 gain on the sale of Sierra credited to other income.

During the third quarter of 2000, we announced plans to close our Reading structures facility and terminate approximately 690 people and recorded restructuring charges of $53. In the fourth quarter of 2000, we approved plans to close facilities in France, the United Kingdom and Argentina, resulting in $34 of charges and a workforce reduction of approximately 230 people. We also incurred integration expenses in 2000 related to consolidating our Engine Management warehouse operations and moving operations from closed facilities.

In the first quarter of 2001, we recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. We announced additional facility closings in the third quarter and accrued additional restructuring charges of $12, affecting earnings by $7.

In October 2001, we announced plans to reduce our global workforce by more than 15 percent and initiated a review of more than 30 facilities for possible consolidation or closure. These actions were undertaken to reduce capacity and outsource the manufacturing of non-core content. As of December 31, 2001, we had announced the closing of 21 facilities and reduced our work force by more than 7 percent in connection with these plans. Charges related to our actions announced in October were $431 and affected net earnings by $279. Charges for all restructuring activities totaled $440, including $155 for employee terminations, $196 for asset impairments and $89 for exit and other costs. We charged cost of sales for $85 of these expenses, including $38 for inventory impairment. Net earnings in the fourth quarter were impacted by $284.

For the year ended December 31, 2001, we recorded total expenses of $476, including $390 charged to restructuring expense and $86 charged to cost of sales, in connection with our restructuring actions. We expect our actions to reduce our break-even point by eliminating excess capacity.

The following summarizes the restructuring charges and activity recorded in the last three years:

	Employee Termination Benefits	Long-Lived Asset Impairment	Exit Costs	Integration Expenses	Total
Balance at December 31, 1998	$ 116	$	$ 11	$	$ 127
Activity during the year					
Charges to expense	60	59	11	51	181
Cash payments	(85)		(9)	(51)	(145)
Write-off of assets		(59)			(59)
Balance at December 31, 1999	91	-	13	-	104
Activity during the year					
Charges to expense	62	8	27	76	173
Cash payments	(60)		(20)	(76)	(156)
Write-off of assets		(8)			(8)
Balance at December 31, 2000	93	-	20	-	113
Activity during the year					
Charges to expense	**171**	**166**	**53**		**390**
Cash payments	**(58)**		**(20)**		**(78)**
Write-off of assets		**(166)**			**(166)**
Balance at December 31, 2001	**$ 206**	**$ -**	**$ 53**	**$ -**	**$ 259**

Employee terminations relating to the plans were as follows:

	1999	2000	**2001**
Total estimated	1,280	1,020	**7,690**
Less terminated:			
1999	(595)		
2000	(615)	(765)	
2001	(30)	(254)	**(3,571)**
Balance at December 31, 2001	**40**	**1**	**4,119**

At December 31, 2001, $259 of restructuring charges remained in accrued liabilities. This balance was comprised of $206 for the reduction of approximately 4,200 employees to be completed in 2002 and $53 for lease terminations and other exit costs. The estimated annual cash expenditures will be approximately $120 in 2002, $38 in 2003 and $101 thereafter. Our liquidity and cash flows will be materially impacted by these actions. It is anticipated that our operations over the long term will benefit from these realignment strategies through reduction of overhead and certain material costs.

Note 21. Noncash Investing and Financing Activities

In leveraged leases, the issuance of nonrecourse debt financing and subsequent repayments thereof are transacted directly between the lessees and the lending parties to the transactions. Nonrecourse debt issued to finance leveraged leases was $878 in 1999, $403 in 2000 and $163 in 2001; nonrecourse debt obligations repaid were $273 in 1999, $106 in 2000 and $76 in 2001.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Dollars in millions

We began the year 2001 experiencing the fluctuations in production runs that resulted from our original equipment (OE) customers trying to balance existing inventories and production schedules with the demands of an uncertain marketplace. Our efforts were focused on trying to scale our businesses to levels that would get us below conservative estimates for production and avoid the underabsorption of overhead that adversely affected our operating results in 2000. The second quarter provided the first signs that production schedules, while well below prior year levels, might be returning to more predictable patterns and that the efforts to downsize our operations were having a positive effect. Sales in our Automotive Systems Group rose 5% over the first quarter after falling 25% during the four previous quarters. Our automotive aftermarket business also reported measurable sales growth for the first time since the middle of 1999, and consolidated profit after tax increased substantially from the first quarter on a modest overall sales gain.

The optimism generated during the second quarter faded as we moved through the third quarter. Dealer inventory of light vehicles, especially models that are key to Dana, was increasing again despite increased incentives, and additional days were carved out of OE production schedules already reduced by seasonal closings. Hopes for a general recovery in the economy, which would have benefited the vehicular markets, were swept away in the days following September 11. The terrorist attacks resulted in immediate changes in how people and products were transported, especially movement across international borders. For a period of time, production schedules based on just-in-time deliveries were severely impacted by the delays resulting from increased security. The United States acknowledged that its economy was in a recession and consumer confidence declined amid uncertainty as to how long the weakness would last.

We faced the extraordinary challenges posed by the situation by making a number of difficult decisions that were necessary to properly align our resources with customer demand, ensure an adequate return on committed capital and preserve cash. In October, we initiated a review of more than 30 facilities for consolidation or closure, committed to reducing our work force by more than 15%, announced plans to sell the businesses of Dana Credit Corporation (DCC) and reduced our fourth quarter dividend to one cent per share. By the end of the quarter, we had announced the closure of 21 facilities and had reduced our work force by 7%. Additional closures are planned for 2002. Executing these restructuring plans continues to be our primary focus in 2002.

Liquidity and Capital Resources

Cash Flows – Operating activities in 2001 generated positive cash flow of $639, declining $345 from the prior year. The primary component of the change was earnings, as the $298 net loss in 2001 represents a $632 decrease from the net income of $334 reported in 2000. Included in the $476 of expenses related to our 2001 restructuring activities were charges of $206 related to the impairment of inventory and long-lived assets which did not require the use of cash. Our continuing focus on reducing working capital helped generate $350 during the year, including $303 from reductions in accounts receivable and inventory. This result was achieved despite the repayment of approximately $100 financed by a sale of accounts receivable at the end of 2000 and payment of $104 representing the final installment on our investment in GETRAG Cie. The latter item affected working capital through its inclusion in other accrued liabilities at the end of 2000.

Efforts to control capital spending impacted cash flows from investing activities in 2001. After reducing capital spending by 18% in 2000, we carved $237 or 36% from last year's total to finish at $425. Divestitures generated proceeds of $236 in 2001, while the acquisition of the remaining 51% interest in Danaven, a Venezuelan affiliate in which we previously held a minority position, required a $21 outlay. Net loan activity of our DCC businesses in 2001 resulted in proceeds of $112, while loan activity in 2000 required $82.

Our 2001 cash flows related to financing activities included an $888 reduction of net short-term borrowings, reflecting the application of a large portion of the proceeds from our August note placement and also cash available from the working capital reduction. Due to the reduced level of investments in new leases, DCC was able to use lease payments and proceeds from asset sales to fund $205 of the reduction in short-term debt. The new notes drove the net cash inflow of $346 related to long-term debt; however, a portion of the proceeds from those issues was used to retire medium-term notes. These debt reductions were partially offset on our balance sheet by the consolidation of approximately $90 of debt in the second quarter of 2001 in connection with our purchase of the interest in Danaven. The $140 of dividends paid in 2001 reflects a $47 reduction over 2000 as a result of reducing our quarterly dividend to one cent per share in the final quarter of 2001. Financing cash flows in 2000 included $381 expended for stock repurchases, which were discontinued in September 2000.

Managing our cash remains a high priority in 2002, especially in light of the $300 of cash outlays expected in connection with our restructuring activities. Based on the levels of production we have assumed for 2002, we are currently projecting a $100 decrease in working capital, exclusive of our restructuring activities. Within our investing activities, we have budgeted capital spending of approximately $275 in 2002 and expect to realize $300 or more in proceeds from divestitures. Annualizing the present quarterly dividend would result in related outflows of $6 versus the $140 paid in 2001. Hitting these targets should enable us to significantly reduce our outstanding debt during 2002.

Financing Activities – Until the end of 2000, we had generally relied on the issuance of commercial paper to satisfy a significant portion of our short-term financing requirements. However, the debt rating services lowered our credit ratings in the first quarter of 2001, primarily due to the significant downturn in our markets since the fourth quarter of 2000 and the impact of the downturn on our operations. Following the rating actions, the commercial paper markets ceased to be available to us and we began borrowing against our committed bank lines.

In March 2001, we established a $400 accounts receivable securitization program. The initial proceeds were used to reduce debt, including amounts outstanding under our revolving credit facilities. The amounts outstanding under the program are reflected as short-term borrowings in our consolidated financial statements. The amounts available under the program are subject to reduction based on significant adverse changes in the credit ratings of our customers, customer concentration levels or certain characteristics of the underlying accounts receivable. This program is subject to termination by the lenders in the event our credit ratings are lowered beyond a level specified in the agreement.

In August 2001, we completed the private placement of $575 and €200 of 10-year unsecured senior notes. We used the proceeds from these notes, along with a portion of the proceeds from divestitures, to further reduce borrowings under Dana's revolving credit facilities and satisfy maturities of existing medium-term debt, thereby extending the overall maturity of our outstanding debt.

In December 2001, we entered into a new 364-day revolving credit facility with a group of banks and amended our existing long-term facility, which matures on November 15, 2005. The 364-day facility provides for a maximum borrowing capacity of $250 while the long-term facility has a borrowing capacity of $500. The interest rates under these facilities equal LIBOR or the prime rate, plus a spread that varies depending on our credit ratings. The 364-day facility provides each participating bank the option to terminate its commitment on April 30, 2002 unless we receive net cash proceeds of at least $200 by April 1, 2002 from the issuance of debt in the capital markets or equity interests, or the sale of assets. If the net cash proceeds generated by these activities through December 18, 2002 exceed $200, the maximum borrowing capacity under the 364-day facility will be reduced by 50% of the excess. Both facilities require us to maintain specified financial ratios as of the end of each quarter, including the ratio of net senior debt to tangible net worth; the ratio of earnings before interest, taxes and depreciation and amortization (EBITDA) less capital spend to interest expense; and the ratio of net senior debt to EBITDA. For purposes of these ratios, tangible net worth excludes deferred currency translation adjustments, the 2001 minimum pension liability adjustment and intangible assets, and EBITDA excludes cash restructuring charges incurred from the fourth quarter of 2001 through the first quarter of 2003, to a maximum of $500, equity earnings, minority interest and certain other non-cash items. The ratio calculations are based on Dana's consolidated financial statements with DCC accounted for on the equity basis.

Because our financial performance is impacted by various economic, financial and industry factors, we cannot say with certainty whether we will satisfy these covenants in the future. Noncompliance with these covenants would constitute an event of default, allowing the lenders to accelerate the repayment of any borrowings outstanding under the related arrangement. While no assurance can be given, we believe that we would be able to successfully negotiate amended covenants or obtain waivers if an event of default were imminent; however, we might be required to provide collateral to the lenders or make other financial concessions. Default under either of these facilities or any of our significant note agreements may result in defaults under our other debt instruments. Our business, results of operations and financial condition may be adversely affected if we were unable to successfully negotiate amended covenants or obtain waivers on acceptable terms.

Committed and uncommitted bank lines enable us to make direct bank borrowings. Excluding DCC, we had committed and uncommitted borrowing lines of $1,148 at December 31, 2001. This amount includes our revolving credit facilities, of which $250 matures in December 2002 and $500 matures in November 2005. We also have a total capacity of $400 under the accounts receivable securitization program. Accordingly, we have a total short-term borrowing capability of $1,548, of which $1,105 was available at the end of 2001. In addition, DCC had credit lines of $559 at December 31, 2001, including two revolving credit facilities with an aggregate maximum borrowing capacity of $463. One facility matures in June 2002 and has a maximum borrowing capacity of $213. The other facility matures in June 2004 and has a maximum borrowing capacity of $250. The interest rates under these facilities equal LIBOR or the prime rate, plus a spread that varies depending on DCC's credit ratings. At December 31, 2001, approximately $231 was outstanding under the DCC lines, including $195 under the revolving credit facilities.

Based on our rolling forecast, we expect our cash flows from operations, combined with these credit facilities and the accounts receivable securitization program, to provide sufficient liquidity to fund our debt service obligations, projected working capital requirements, restructuring obligations and capital spending for a period that includes the next twelve months.

Hedging Activities – We utilize derivative financial instruments, to a limited extent, to hedge principally against the effects of fluctuations of foreign currency exchange rates and interest rate movements (see Notes 1, 7 and 16 to the financial statements). To accomplish these purposes, we use forward contracts to hedge against foreign currency movements and interest rate swaps to hedge against interest rate fluctuations and to balance the mix of fixed and variable rate debt. We do not use derivative instruments for trading purposes. Our policy requires that our business units involve our Treasury staff in the execution of all derivative contracts.

At December 31, 2001, we had a number of open forward contracts to hedge against certain anticipated net purchase and sale commitments. These contracts are for a short duration and none extend beyond 2002. The aggregate fair value of these contracts is a favorable amount less than $1. These contracts have been valued by independent financial institutions using the exchange spot rate on December 31, 2001, plus or minus quoted forward basis points to determine a settlement value for each contract.

In order to provide a better balance of fixed and variable rate debt, we have interest rate swap agreements in place to effectively convert the fixed interest rate on our 9% dollar and euro denominated notes to variable rates. These swap contracts have been designated as hedges and the impact of the change in their value is offset by an equal and opposite change in the carrying value of the notes. Under the contracts, we receive a fixed rate of interest of 9% on notional amounts of $575 and €200 and we pay a variable rate based on either the LIBOR, plus a spread, or the EURIBOR, plus a spread, respectively. The swap contracts expire in August 2011, which coincides with the term of the notes. DCC also has several interest rate swap contracts that have an aggregate notional amount of $95. Unlike the swap agreements hedging the 9% notes, the DCC swap contracts call for DCC to receive a variable amount of interest, based on prevailing short term market rates, and pay a fixed amount that averages 7.13%. DCC's swaps expire in 2002 ($50) and 2003 ($45). The fair value of all interest rate swaps at December 31, 2001 is reflected as a $6 liability in the balance sheet. The fair values of these swaps, by year of maturity, are net credits of $1 in 2002, $3 in 2003 through 2004 and $2 beyond 2006. The fair values of all swaps were determined by obtaining pricing estimates from independent financial institutions.

Cash Obligations – Under various agreements, we are obligated to make future cash payments in fixed amounts. These include payments under our long-term debt agreements, rent payments required under operating lease agreements, firm commitments made to acquire equipment and other fixed assets and purchases of certain raw materials. With the exception of payments required under our long-term debt and operating lease agreements, we do not have fixed cash payment obligations beyond 2003.

The following table summarizes our fixed cash obligations over various future periods.

Dollars in millions

	Payments Due by Period				
Contractual Cash Obligations	Total	Less than 1 Year	1 – 3 Years	4 – 5 Years	After 5 Years
Long-Term Debt	$ 3,454	$ 446	$ 634	$ 192	$ 2,182
Operating Leases	469	76	134	115	144
Unconditional Purchase Obligations	244	236	8	-	-
Total Contractual Cash Obligations	$ 4,167	$ 758	$ 776	$ 307	$ 2,326

The unconditional purchase obligations presented are composed principally of commitments for procurement of fixed assets and the purchase of raw materials.

In addition to fixed cash commitments, we may have future cash payment obligations under arrangements where we are contingently obligated if certain events occur or conditions are present. We have guaranteed $1 of short-term borrowings of a non-U.S. affiliate accounted for under the equity method of accounting. DCC has guaranteed portions of the borrowings of its affiliates that are accounted for under the equity method. DCC's aggregate exposure under several of the guarantees is $24. Under another guarantee, DCC's exposure for changes in interest rates resulting from specific events described in the financing arrangements would vary but should not exceed $49 and its exposure for certain of the other guaranteed obligations is limited to $60. The term of the affiliates' financing agreements is one year. DCC anticipates that the affiliates will renew these arrangements on substantially the same terms as the current agreements. If this occurs, it is likely that DCC would provide similar guarantees. We do not expect to make any cash payments relating to these potential obligations.

At December 31, 2001, we had contingent liability for stand-by letters of credit totaling $109 issued on our behalf by financial institutions. These letters of credit are used principally for the purpose of meeting various states' requirements in order to self-insure our workers compensation obligations. These stand-by letters of credit must be renewed each year. We accrue the estimated liability for workers compensation claims, including incurred but not reported claims. Accordingly, no significant impact on our financial condition would result if the letters of credit were drawn.

Contingencies – We are a party to various pending judicial and administrative proceedings arising in the ordinary course of business. These include, among others, proceedings based on product liability claims and alleged violations of environmental laws. We have reviewed our pending judicial and legal proceedings, including the probable outcomes, reasonably anticipated costs and expenses, availability and limits of our insurance coverage and our established reserves for uninsured liabilities. We do not believe that any liabilities that may result from these proceedings are reasonably likely to have a material adverse effect on our liquidity, financial condition or results of operations.

For some time, the vast majority of our asbestos-related claims were administered by the Center for Claims Resolution (CCR), which settled claims for its member companies on a shared settlement cost basis. In February 2001, the CCR was reorganized and discontinued negotiating shared settlements. The CCR continued to administer Dana's claims and provide some legal and claims adjusting support through July 31, 2001. Since February 2001, there has been no sharing of indemnity costs and we have independently controlled our legal strategy and settlements. As of August 1, 2001, our claims administration was moved to a new organization, PACE, which is a subsidiary of Peterson Consulting, Inc. We do not expect these changes to materially affect our handling of asbestos claims or the costs thereof. However, there has been a marked increase in the number of claims filed against Dana since the CCR was reorganized. We believe that claimants are naming all former members of the CCR in individual claims, since all members of the CCR had previously participated in claims filed against any single member. As a result, many of the new claimants are parties that have no direct association with products manufactured by Dana. Since the reorganization of the CCR, a greater number of claims against Dana have been dismissed and the average cost of settlement has declined.

With respect to contingent asbestos-related product liability, we had approximately 100,000 asbestos-related claims outstanding at December 31, 2001, including approximately 27,000 claims that were settled pending payment. We have agreements with our insurance carriers providing for the payment of a significant majority of the defense and indemnity costs for pending claims as well as claims which may be filed against us in the future. At December 31, 2001, we had accrued $102 for contingent asbestos-related product liability costs and recorded $89 as an asset for probable recoveries from insurers for asbestos-related product liability claims, compared to $78 accrued for such liabilities and $67 recorded as an asset at December 31, 2000.

At December 31, 2001, $11 was accrued for contingent non-asbestos product liability costs with no recovery anticipated from third parties; at the end of 2000, $21 was accrued for such liabilities and $2 recorded as an asset for probable recoveries.

We estimate contingent environmental liabilities based on the most probable method of remediation, current laws and regulations and existing technology. Estimates are made on an undiscounted basis and exclude the effects of inflation. If there is a range of equally probable remediation methods or outcomes, the lower end of the range is accrued. At December 31, 2000 and 2001, the amounts accrued for contingent environmental liabilities with no recovery expected from other parties were $40 and $52, respectively.

At December 31, 2001, the difference between our minimum and maximum estimates for contingent liabilities, while not considered material, was $13 for the non-asbestos product liability claims and $2 for the environmental liability claims, compared to $14 and $2, respectively, at the end of 2000.

As noted above, the majority of our asbestos-related claims were administered by the CCR through February 2001, at which time the CCR was reorganized and discontinued negotiating shared settlements. Certain former CCR members have defaulted on the payment of their shares of certain of the CCR-negotiated settlements. As a result, some of the settling parties are seeking payment of the unpaid shares from Dana and the other companies that were members of the CCR at the time of the settlements. We have been working with the CCR, other former CCR member companies, our insurers and the claimants to resolve these issues. At December 31, 2001, we estimated our contingent liability with respect to these matters to be approximately $44, of which

we expect $39 to be recoverable from our insurers and under surety bonds provided by the defaulting CCR members. Our financial statements include our obligation relative to these contingencies, which are separate from the asbestos-related product liabilities discussed above.

Restructuring

During 1999, we continued executing the restructuring and integration plans announced in 1998 following our acquisition of Echlin Inc., including the closing and downsizing of facilities begun in 1998. We incurred integration charges of $51 for relocating assets, training and relocating employees and other integration activities at the acquired operations. These costs were charged to expense as incurred.

During the fourth quarter of 1999, we announced plans to downsize and close additional operations in the U.S., South America and Europe and recorded restructuring and integration charges totaling $170. The charges included the costs of exiting businesses, asset impairments and termination benefits. The announced restructuring and integration plans included closing five facilities, downsizing three facilities and terminating 1,280 people. The largest component of these plans was the downsizing of our Reading, Pa., structures facility. In total, $229 was charged to income during 1999. This amount consisted of $181 charged to restructuring and integration, $57 charged to cost of sales and a $9 gain recorded in other income on the sale of our marine and outdoor power equipment business, Sierra International Inc. (Sierra).

During the third quarter of 2000, we announced plans to close our Reading structures facility and terminate approximately 690 people and recorded restructuring charges of $53. In the fourth quarter of 2000, we approved plans to close facilities in France, the United Kingdom and Argentina, resulting in $34 of charges and a workforce reduction of approximately 230 people. We also incurred integration expenses in 2000 related to consolidating our Engine Management warehouse operations and moving operations from closed facilities.

In the first quarter of 2001, we recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. We announced additional facility closings in the third quarter and accrued additional restructuring charges of $12, affecting earnings by $7.

In October 2001, we announced plans to reduce our global workforce by more than 15% and initiated a review of more than 30 facilities for possible consolidation or closure. These actions were undertaken to reduce capacity and outsource the manufacturing of non-core content and other non-core processes. As of December 31, 2001, we had announced the closing of 21 facilities and reduced our work force by more than 7% in connection with these plans. Charges related to our actions announced in October were $431 and affected net earnings for the quarter by $279. Charges for all restructuring activities during the quarter totaled $440, including $155 for employee terminations, $196 for asset impairments and $89 for exit and other costs. We charged cost of sales for $85 of these expenses, including $38 for inventory impairment. Net earnings in the fourth quarter of 2001 were impacted by $284.

For the year ended December 31, 2001, we recorded total expenses of $476, including $390 charged to restructuring expense and $86 charged to cost of sales, in connection with our restructuring actions. In 2002, we expect to reduce our workforce further and announce additional facility closures related to our October 2001 initiatives. We expect the cost of these actions, along with related activities that must be expensed as incurred, to reduce our 2002 net income by $166. Including these projected expenses, the total after-tax cost of our October 2001 initiatives is estimated at $445. We expect our actions to reduce our break-even point by eliminating excess capacity. The related savings for the year ending December 31, 2002 are projected to be at least $80 after tax.

The following table summarizes the restructuring charges and activity recorded in the last three years:

	Employee Termination Benefits	Long-Lived Asset Impairment	Exit Costs	Integration Expenses	Total
Balance at December 31, 1998	$116	$	$ 11	$	$ 127
Activity during the year					
Charges to expense	60	59	11	51	181
Cash payments	(85)		(9)	(51)	(145)
Write-off of assets		(59)			(59)
Balance at December 31, 1999	91	-	13	-	104
Activity during the year					
Charges to expense	62	8	27	76	173
Cash payments	(60)		(20)	(76)	(156)
Write-off of assets		(8)			(8)
Balance at December 31, 2000	93	-	20	-	113
Activity during the year					
Charges to expense	**171**	**166**	**53**		**390**
Cash payments	**(58)**		**(20)**		**(78)**
Write-off of assets		**(166)**			**(166)**
Balance at December 31, 2001	**$206**	**$ -**	**$ 53**	**$ -**	**$ 259**

Dollars in millions

Employee terminations relating to the plans were as follows:

	1999	2000	2001
Total estimated	1,280	1,020	**7,690**
Less terminated:			
1999	(595)		
2000	(615)	(765)	
2001	(30)	(254)	**(3,571)**
Balance at December 31, 2001	**40**	**1**	**4,119**

At December 31, 2001, $259 of restructuring charges remained in accrued liabilities. This balance was comprised of $206 for the reduction of approximately 4,200 employees to be completed in 2002 and $53 for lease terminations and other exit costs. The estimated annual cash expenditures will be approximately $120 in 2002, $38 in 2003 and $101 thereafter. Additional cash requirements will arise in 2002 as the remaining facility closures and work force reductions under the October 2001 plan are implemented. We currently expect the total cash expenditures in 2002 relative to the October 2001 initiatives to approximate $300. Our liquidity and cash flows, while projected to be more than adequate to satisfy our obligations related to our restructuring plans, will be adversely impacted in 2002 by these expenditures.

Critical Accounting Policies

The following discussion of accounting policies is intended to supplement the Summary of Significant Accounting Policies presented as Note 1 to our 2001 financial statements. These policies were selected because they are broadly applicable within our operating units. The expenses and accrued liabilities or allowances related to certain of these policies are initially based on our best estimates at the time of original entry in our accounting records. Adjustments are recorded when our actual experience differs from the expected experience underlying the estimates. These adjustments could be material if our experience were to change significantly in a short period of time. We make frequent comparisons of actual experience and expected experience in order to mitigate the likelihood of material adjustments.

Goodwill and Impairment of Long-Lived Assets – We perform impairment analyses of our recorded goodwill and long-lived assets whenever events and circumstances indicate that they may be impaired. When the undiscounted cash flows, without interest or tax charges, are less than the carrying value of the assets being reviewed for impairment, the assets are written down to fair market value. During 2001, we recorded goodwill and long-lived asset impairment provisions of $166, which largely resulted from the downturn in our markets and the resulting restructuring of our operations.

The adoption of SFAS 142, Goodwill and Other Intangible Assets (SFAS 142) on January 1, 2002, will change our methodology for assessing goodwill impairments. We believe that the initial application of this statement is likely to result in the impairment of goodwill due to the differences in the methods of calculating impairment. We have substantially completed the first step of the initial impairment test required by SFAS 142 and identified $400 of goodwill that may be impaired based upon the new accounting requirements. We will complete the impairment testing required to determine the actual amounts of goodwill impaired in 2002.

Inventory – Inventories are valued at the lower of cost or market. Cost is generally determined on the last-in, first-out basis for U.S. inventories and on the first-in, first-out or average cost basis for non-U.S. inventories. Where appropriate, standard cost systems are utilized for purposes of determining cost; the standards are adjusted as necessary to ensure they approximate actual costs. Estimates of lower of cost or market value of inventory are determined at the reporting unit level and are based upon the inventory at that location taken as a whole. These estimates are based upon current economic conditions, historical sales quantities and patterns and, in some cases, the specific risk of loss on specifically identified inventories.

Sales Returns and Allowances – Accruals for sales returns and allowances are provided at the time of shipment based upon past experience and are recorded as a reduction of sales. The estimated value of product that will be returned to inventory as a result of returns is recorded as a reduction of cost of sales and the accrued returns allowance. As new information becomes available the accruals are adjusted accordingly. Accrued liabilities at December 31, 2000 and 2001 were $67 and $66, respectively.

Warranty – Estimated costs related to product warranty are accrued at the time of sale and included in cost of sales. Estimated costs are based upon past warranty claims and sales history and adjusted as required to reflect actual costs incurred, as information becomes available. Warranty expense totaled $68, $90 and $92 in 1999, 2000 and 2001, respectively. Accrued liabilities for warranty expense at December 31, 2000 and 2001 was $127 and $138, respectively.

Pension and Postretirement Benefits Other Than Pensions – Annual net periodic expense and benefit liabilities under our defined plans are determined on an actuarial basis. Each September, we review the actual experience compared to the more significant assumptions used and make adjustments to the assumptions, if warranted. The healthcare trend rates are reviewed with the actuaries based upon the results of their review of claims experience. Discount rates are based upon an expected benefit payments duration analysis and the equivalent average yield rate for high-quality fixed-income investments. Pension benefits are funded through deposits with trustees and the expected long-term rate of return on fund assets is based upon actual historical returns modified for known changes in the market and any expected change in investment policy. Postretirement benefits are not funded and our policy is to pay these benefits as they become due.

Certain accounting guidance, including the guidance applicable to pensions, does not require immediate recognition of the effects of a deviation between actual and assumed experience or the revision of an estimate. This approach allows the favorable and unfavorable effects that fall within an acceptable range to be netted. Although this netting occurs outside the basic financial statements, disclosure of the net amount is disclosed as an unrecognized gain or loss in the footnotes to our financial statements. The actuarial loss related to our 2001 return on pension plan assets was offset, in part, by the unamortized portion of gains experienced in prior years. A portion of the unrecognized loss of $229 will be amortized into earnings in 2002. The effect on years beyond 2002 will depend in large part on the actual experience of the plans in 2002.

Other Loss Reserves – We have numerous other loss exposures, such as environmental claims, product liability, litigation, recoverability of deferred income tax benefits, accounts receivable and loan and lease loss reserves. Establishing loss reserves for these matters requires the use of estimates and judgment in regards to risk exposure and ultimate liability. We estimate losses under the programs using consistent and appropriate methods; however, changes to our assumptions could materially affect our recorded liabilities for loss. Where available we utilize published credit ratings for our debtors to assist us in determining the amount of required reserves.

Results of Operations (2001 versus 2000)

Our worldwide sales decreased $2,046 in 2001 to $10,271, a 17% decline from the $12,317 recorded in 2000. The decline included $113 related to the effect of divestitures, net of acquisitions, and $232 of adverse effects of currency fluctuations. Excluding these effects, worldwide sales decreased $1,701 or 14%. Our worldwide experience was largely based on our volume in the U.S., where 2001 sales of $6,863 represented a decline of $1,689 or 20% versus the prior year. Excluding the net effect of acquisitions and divestitures, U.S. sales declined $1,538 or 18%.

Overall sales outside the U.S. fared better, slipping $357 or 9% compared to last year. Nearly two-thirds of the decline resulted from the strengthening of the U.S. dollar relative to foreign currencies since last year. The currencies accounting for the largest components of the approximately $232 adverse impact were the Brazilian real ($87), the euro ($44), the Canadian dollar ($30), the Australian dollar ($24), and the British pound ($21). Excluding the adverse effects of currency fluctuations and acquisitions and divestitures, sales decreased $89 or 2%. The net decline related to acquisitions and divestitures was $36.

Sales by region for the year were as follows:

	2000	**2001**	% Change	% Change Excluding Acquisitions & Divestitures
North America	$9,449	**$7,684**	(19)	(17)
Europe	1,947	**1,704**	(12)	(11)
South America	563	**553**	(2)	(15)
Asia Pacific	358	**330**	(8)	(9)

Sales in North America decreased $1,765 or 19% for the period. Excluding the effect of divestitures, the decline was $1,614 or 17%. As noted above, the relative weakness of the Canadian dollar accounted for $30 of the reduction in sales. European sales were down 9% in local currency but conversion to U.S. dollars pared another $69 for a total decline of $243 or 12%. Sales lost through divestitures exceeded the amount added through acquisitions by $39. South American sales improved 16% in local currencies and net acquisitions added $73, but sales were down $10 or 2% after absorbing $100 of adverse currency effects. Sales in Asia Pacific were down $28 as $35 of adverse currency impact was partially offset by local growth of $3 and a $4 net effect of acquisitions and divestitures.

Our Strategic Business Units (SBUs) – Automotive Systems Group (ASG), Automotive Aftermarket Group (AAG), Engine and Fluid Management Group (EFMG), Commercial Vehicle Systems (CVS), Off-Highway Systems Group (OHSG) and Dana Credit Corporation (DCC) – represent our business segments. We realigned certain businesses within our SBU structure in 2001. The most significant change was consolidating our Engine Systems and Fluid Systems Groups into the newly created EFMG. Our segment information has been restated to reflect the changes made to the SBU alignment in 2001.

Sales by SBU for 2000 and 2001 are presented in the following table. DCC did not record sales in either year. The "Other" category in the table represents facilities that have been closed or sold and operations not assigned to the SBUs.

	2000	**2001**	% Change	% Change Excluding Acquisitions & Divestitures
ASG	$4,522	**$3,717**	(18)	(20)
AAG	2,768	**2,538**	(8)	(7)
EFMG	2,400	**2,137**	(11)	(10)
CVS	1,598	**1,118**	(30)	(27)
OHSG	786	**621**	(21)	(20)
Other	243	**140**	(42)	(32)

ASG incurred a sales decline in 2001 of $805 or 18% when compared to 2000. The North American region experienced $742 of this shortfall. The decline in production volume which began in the second half of 2000 continued for North American light vehicle and heavy truck manufacturers in 2001, with light vehicle production dropping to 15.5 million units from 17.2 million units in 2000. Sales in both markets were generally flat in the first quarter of 2001 when compared to the fourth quarter of 2000, but demand was sporadic and margins were adversely affected by the high volume of production shift cancellations by our OE customers. The production schedules improved in the second quarter of 2001 in terms of volume but still displayed some of the irregularities of the first quarter. In the third quarter, the number of production shifts cancelled by our OE customers was nearly identical to what we experienced in the first quarter of 2001, as our customers countered excess dealer inventories with incentives and reduced production. Record incentives late in the year were effective in reducing the overall dealer inventories of our customers to a 15-year low, but production levels declined further. In addition, Ford and Chrysler vehicles in general and certain models with high Dana content in particular declined more than the light vehicle market overall in 2001. The decline in heavy truck production which began in the middle of 2000 continued through the end of 2001. The North American heavy truck market saw more than a 40% reduction in volume when compared to 2000. Outside North America, the regions reported an aggregate sales decrease of $63. Sales in Europe were down $49 as an adverse currency impact of $19 and $42 of organic declines (organic decline being the residual change after excluding the effects of acquisitions, divestitures and currency changes) more than offset acquisition benefits of $12. Sales in South America were $10 below the same period in the prior year, as the $14 of organic decline and $45 of adverse effects of weaker currencies more than offset the net acquisition impact of $49. Sales in Asia Pacific were flat with currency declines of $29 offsetting acquisition impact of $21 and modest organic growth.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Dollars in millions

AAG also ended the year with a decline in sales. Most of the decline was in North America, which represents more than three-fourths of its global market, where volumes were down $187 or 8%. While there was a reported improvement in domestic aftermarket retail sales in 2001, this did not significantly improve our sales, as retailers generally met the higher demand with existing inventory. Divestitures also contributed $44 to the decline. Sales in Europe declined $25 due to $8 in adverse currency effects and a $17 decline in organic sales. Sales in South America were down $2 as a $23 currency decrease was partially offset by local growth of $15 and $6 of acquisition impact. Divestitures accounted for $13 of the $16 sales decline recorded in Asia Pacific.

EFMG experienced a sales decrease of $263 or 11% for 2001 versus last year. Sales for the final quarter of 2001 held even with the third quarter, which had shown a 14% decline from the second quarter of the year. The Fluid Systems business in this group benefited from having content on models that avoided the severe OE production cuts that have affected most of the other SBUs. Sales in North America were down $231 or 14% as the automotive, commercial vehicle and aftermarket sectors all trailed prior year volumes. Sales in Europe were down $31 or 5% with adverse currency effects of $25 playing a significant role. Sales were generally flat in South America as adverse currency effects of $22 were nearly offset by organic growth of $15 and a net acquisition impact of $5.

CVS experienced a year-on-year decline in sales in 2001 of $480 or 30% for the reasons cited relative to the heavy truck market in the discussion of ASG above. The decline in CVS sales included $60 of divestiture impact, $56 of which was in North America. Excluding this effect, sales in North America for the period were 26% below those of 2000. Aggregate sales for the other three regions declined $33 or 36% in a year-on-year comparison with $7 due to divestitures and adverse currency effects.

OHSG finished the year down $165 or 21% in sales versus 2000, with $9 resulting from divestitures, all in North America. Currency impact accounted for $19 of the decline, and organic sales fell $92 in North America, where overall markets were weak, and $49 in Europe, where the construction market softened and the agricultural market remained weak.

Sales in Other decreased $104 or 43% compared to 2000, reflecting the sale of most of the Warner Electric businesses at the end of February 2000.

Revenue from lease financing decreased $28 or 20% in 2001 as DCC realized a decline of $24 on reduced leasing activity, including a $10 decline in income realized on the sale of leased assets, and a $4 decline in its interest income.

In 2001, other income included a $50 gain on the divestitures of our Chelsea power take-off business and of our Glacier industrial bearings businesses. Also included in 2001 was a $35 loss on the sales of our Mr. Gasket subsidiary, our Marion, Ohio forging facility and the assets of our Dallas, Texas and Washington, Missouri Engine and Fluid Management Group operations. Included in the total for 2000 was $179 of gains on the divestitures of the Gresen hydraulics business, certain portions of our constant velocity joint business, most of the global Warner Electric businesses and the Commercial Vehicle Cab Systems Group. In addition, a $10 net charge related to final settlement of the Midland Grau divestiture was recorded in the third quarter of 2000, bringing to $169 the amount of net non-recurring income included in other income.

Gross margin for 2001 was 9.8% versus 13.9% in 2000. Margins in all our SBUs were severely affected as the decline in volume reduced our ability to absorb fixed operating expenses. Cost of sales included charges of $86 in 2001 and $17 in 2000 in connection with our restructuring activities.

Selling, general and administrative (SG&A) expenses decreased $147 during 2001 compared to last year. The net effect of divestitures accounted for $21 of this change, and currency exchange caused another $20 of the decline. The largest changes occurred in Europe, where currency fluctuations caused $7 of the $33 non-divestiture related decrease. Most of the remaining decrease was from the North American region, where our operating units scaled their capacity in reaction to severely reduced customer production schedules in the light truck and commercial vehicle markets.

Operating margin (our gross margin reduced by SG&A expenses) was 0.2% in 2001 compared to 4.8% in 2000 for the above reasons.

Interest expense was $14 lower as a result of lower debt and reduced rates.

Both the effective tax rates and the comparison of the effective tax rates for 2001 and 2000 are impacted by the substantial pre-tax loss reported in 2001. Because of the pre-tax loss in 2001, certain permanent differences between financial accounting rules and tax regulations that increase the tax rate when we report pre-tax income serve to reduce the effective rate.

Equity in earnings of affiliates in 2001 was $22 lower than in 2000. The $39 reduction in equity earnings in Mexico and the $11 decrease in earnings from DCC's equity investments adversely affected this line item. Partially offsetting these items were the earnings related to our investment in GETRAG and the loss reduction that occurred when we acquired the remaining interest in Danaven and began consolidating its results.

We reported a $298 net loss in 2001 versus net income of $334 reported in 2000. Comparisons are made difficult by the unusual charges and one-time gains recorded in both years. In 2001, we recorded after-tax charges of $313 in connection with our restructuring efforts and $10 of gains on divestitures. In 2000, we recorded $43 of restructuring and other unusual charges net of the gains recorded on several divestitures. Excluding these items, earnings would have been $5 in 2001 and $377 in 2000.

Unusual items in 2001 included net after-tax charges of $41 in ASG, $85 in AAG, $108 in EFMG, $12 in CVS and $43 in OHSG; a net charge of $14 was reflected in the Other category. In 2000, unusual charges were $47 in ASG, $39 in AAG and $32 in EFMG, while one-time gains were $27 in CVS, $16 in OHSG and $32 in Other.

Results of Operations (2000 versus 1999)

Our worldwide sales were $12,317 in 2000, a 6% or $842 decline from the $13,159 recorded in 1999. The divestitures completed in the first quarter of 2000 were a significant factor in the decline. Net of the effect of acquisitions, these divestitures accounted for a $410 reduction in sales for the year. Currency fluctuations accounted for an additional $279 decline in sales.

U.S. sales were $8,552, a 9% or $861 decline from the 1999 level, with divestitures net of acquisitions accounting for $408 of the decrease. Exports from the U.S. declined from $939 in 1999 to $832 in 2000.

Sales by region for 1999 and 2000 are presented in the following table.

	1999	2000	% Change	% Change Excluding Acquisitions & Divestitures
North America	$10,308	$9,449	(8)	(4)
Europe	2,051	1,947	(5)	(8)
South America	549	563	3	14
Asia Pacific	251	358	43	43

In 2000, overall sales outside the United States increased $20 despite the $279 adverse impact of further strengthening of the U.S. dollar. Sales for our operations in Canada and Mexico were flat after considering a $4 benefit from currency changes; acquisitions and divestitures were not a factor in those countries. Sales in Europe benefited from a net $65 increase related to acquisitions net of divestitures and organic growth added another $79. These positive effects were more than offset by $247 of adverse currency impact as the U.S. dollar equivalent of sales denominated in euros and pounds declined $207 and $32, respectively, due to weakness in those currencies. In South America, where currency weakness resulted in an $11 sales decline, the effect of divestitures net of acquisitions was a $66 drop in sales. Continuing recovery in the region was evident however in the $90 of organic growth. Organic growth in Asia Pacific sales totaled $133, more than offsetting the $25 of adverse currency effects. Sales due to acquisitions equaled those lost by way of divestitures.

Sales by SBU for 1999 and 2000 are presented in the following table. DCC did not record sales in either year.

	1999	2000	% Change	% Change Excluding Acquisitions & Divestitures
ASG	$4,403	$4,522	3	-
AAG	2,955	2,768	(6)	(5)
EFMG	2,495	2,400	(4)	(4)
CVS	1,904	1,598	(16)	(11)
OHSG	870	786	(10)	1
Other	532	243	(54)	(1)

ASG sales in North America decreased $103 or 3% in 2000 as a result of light vehicle and heavy truck OEM production cuts intended to reduce dealer inventory. Light vehicle production in North America started the year near all-time record levels but declined in the second half of 2000 to end at 17.2 million units. SUVs and light trucks displayed a similar trend line while maintaining their share of overall production. While sales appeared flat in South America, internal growth in Brazil across all the ASG product lines was slightly more than the combined negative effect of currency ($8) and net divestitures ($55). Sales in Europe benefited from our acquisition of the GKN driveshaft business early in the year, which added sales of $142, but gave back $75 to currency effects. ASG's internal growth of nearly $40 resulted from improvement in both driveshaft and axle sales. The acquisition of the automotive axle manufacturing and stamping business of Invensys plc added $34 of sales in Asia Pacific, more than offsetting the $22 adverse currency effect and complementing the $141 of organic growth resulting mainly from new modular systems business.

AAG ended 2000 with a $187 decrease in sales, of which nearly $44 related to the late 1999 divestiture of Sierra. Inefficiencies in consolidating parts of its warehousing operations and softness in the North American automotive aftermarket were key factors in the $85 sales decline at AAG's operating units in this region. Sales in Europe were marginally higher than in 1999 but the region lost $40 to currency movements. Modest sales improvement in South America was offset by decreases in Asia Pacific. There were no acquisitions or divestitures in either region and currency effects were minimal.

Sales in EFMG declined $95 in 2000 as North America lost $42 in its ongoing operations and another $6 due to a divestiture. Operations in Europe incurred currency losses of $78 to account for their $52 sales decline after $27 of organic growth. Sales in South America were up slightly due to modest internal growth.

CVS continued its success of 1999 during the first half of 2000, growing sales 4% after excluding the effects of two divestitures in the first quarter of 2000. However, early in the second half of the year, heavy truck manufacturers sharply reduced production in response to falling demand and excess inventory. CVS sales fell by one-third in the second half and finished the full year $306 below 1999 results. The divestiture impact for the full year was $106 and currency losses pared another $9, leaving $190 of organic sales reductions.

OHSG sales fell $84 overall in 2000 as the divestiture of the Gresen Hydraulics business in January 2000 resulted in a $99 decline in sales and adverse currency impacts accounted for another $44. Organic growth was flat. North American sales declined $96 with $86 attributable to the Gresen divestiture. In Europe, sales were $14 higher as much of the $58 added through acquisitions was offset by a $44 adverse effect from weakness in the euro. South American sales were down $3 as $8 of organic growth was negated by $11 lost through the Gresen divestiture.

Revenue from lease financing increased $32 or 29% in 2000 on a $15 increase in direct finance lease income and a $17 increase in interest income and income from property rentals recognized by DCC.

Other income increased $148 in 2000, primarily the result of a $156 increase in gains on divestitures that was partially offset by a $9 decrease in interest income exclusive of the DCC interest income which is included in lease financing revenue.

Gross margin in 2000 was 13.9%, well below the 16.7% reported in 1999. Results in all regions reflected lower gross margins, but the declines were most severe in North America and Asia Pacific. In North America, ASG and CVS were both affected by producing above optimum capacity in the first half of the year. In the second half, these units were impacted by erratic demand from their major customers and generally fell well below efficient production levels. AAG margins were impacted by softness in the automotive aftermarket. In Asia Pacific, ASG margins were affected by startup costs related to our new modular business in Australia. We incurred $17 in 2000 in connection with discontinuing certain lines of business and $57 in 1999 related to impairment and other rationalization adjustments and charged these amounts to cost of sales. Gross margins excluding these items would have been 14.1% in 2000 and 17.1% in 1999.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Dollars in millions

Selling, general and administrative expenses (SG&A) decreased $60 in 2000, slightly exceeding the $56 attributed to the net effect of divestitures and acquisitions. DCC increased its general and administrative expenses by $9 with higher depreciation on leased assets and expenses related to a real estate investment being the largest components. SG&A as a percentage of sales was 9.2% in 2000 and 9.1% in 1999.

Interest expense rose $44 or nearly 16% in 2000 as overall debt increased by almost 11%. Average short-term borrowings rose $452 to $1,614 and the average interest rate increased from 5.4% to 6.6%.

Our effective tax rate was 36.8% in 2000. We continue to benefit from tax credits generated by our leasing operations and from relatively low state and local tax rates.

Minority interest was unchanged in 2000. The minority interest in the gain recognized by Albarus S.A. on the sale of its interest in one of its affiliates was generally offset by the absence of the minority interest's participation in operating earnings.

We recorded $54 of equity in the earnings of our affiliates in 2000. Increased earnings at our affiliate in Mexico and expansion of the portion of leasing revenue earned on DCC's equity investments more than offset the $27 loss recorded in the fourth quarter at our 49%-owned affiliate in Venezuela.

Net income was $334 in 2000 versus $513 reported in 1999. Comparisons are made difficult by restructuring and other unusual items recorded in both years. In 1999 we recorded $165 of such charges net of the gain recorded in the AAG on the sale of Sierra. In 2000, we recorded $43 of restructuring and other unusual charges net of the gains recorded on several divestitures. Excluding these items, earnings would have been $377 in 2000 and $678 in 1999.

Unusual items in 2000 included net charges of $47 in ASG, $39 in AAG, $32 in EFMG and net credits of $27 in CVS and $16 in OHSG; a net gain of $32 was reflected in the Other category. In 1999, unusual charges were $59 in ASG, $40 in AAG, $3 in CVS, $34 in EFMG, $1 in OHSG and $28 in Other.

Market Trends

The light vehicle market in North America is difficult to project as we pass the midpoint in the first quarter of 2002. One uncertainty is the impact that the record incentives offered in the fourth quarter of 2001 will have on future retail sales volume. Absent broader economic recovery, demand may weaken in the first half of 2002. We remain conservative in projecting light vehicle production of 14.5 million units in North America in 2002. No improvement is anticipated in the light vehicular markets outside North America in 2002.

The automotive aftermarket continues to demonstrate strength at the retail level. As our customers resolve their consolidation and inventory reduction issues, which adversely affected our AAG sales inthe second half of 2001, we expect increased demand for our products in 2002. Combined with the effect of price increases implemented in recent months and others planned for this year, we expect the increase in demand to result in modest growth in our automotive aftermarket business during 2002.

Inventory levels in the heavy truck market declined by nearly 50% in 2001, while production for the year was down more than 40%. The inventory reduction was a prerequisite for the leveling out expected in this market. Although preliminary orders for heavy trucks reported for January 2002 were at their highest level in nearly two years, they represent relatively modest improvement on an historic scale. The new EPA standards governing diesel engine emissions that become effective in October 2002 could impact the timing of 2002 production if customers rush to buy units in advance of the new standards. This possibility may make it difficult for us to interpret the monthly volume of orders and production, but we expect North American heavy truck volume to approximate 130,000 units for the year.

We expect to benefit from net new business estimated at $405 for 2002 and approximately $6,000 through 2006, based on our review of the production projections of our OE customers. New business wins in 2001 included innovative products for Ford and General Motors, as well as for non-U.S.-based manufacturers, including BMW, Isuzu, Nissan, Toyota and Volkswagen. In the heavy truck market, key wins in 2001 included business with International and PACCAR.

Forward-Looking Information

Forward-looking statements in this report are indicated by words such as "anticipates," "expects," "believes," "intends," "plans," "estimates," "projects" and similar expressions. These statements represent our expectations based on current information and assumptions. Forward-looking statements are inherently subject to risks and uncertainties. Our actual results could differ materially from those which are anticipated or projected due to a number of factors, including national and international economic conditions (including additional adverse effects from terrorism or hostilities); the strength of the euro and other currencies relative to the U.S. dollar; the cyclical nature of the global vehicular industry; the performance of the global aftermarket sector; changes in business relationships with our major customers and in the timing, size and continuation of our customers' programs; the ability of our customers and suppliers to achieve their projected sales and production levels; competitive pressures on our sales and pricing; increases in production or material costs that cannot be recouped in product pricing; our ability to complete the sale of DCC's businesses and other divestitures as contemplated; and the success of our restructuring, cost reduction and cash management programs and of our long-term transformation strategy for the company.

Additional Information – Statement of Income

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	Year Ended December 31		
	1999	2000	**2001**
Net sales	$13,159	$12,317	**$10,271**
Other income	58	190	**43**
	13,217	12,507	**10,314**
Costs and expenses			
Cost of sales	11,016	10,662	**9,335**
Selling, general and administrative expenses	1,074	1,007	**895**
Restructuring and integration charges	181	173	**390**
Interest expense	208	218	**205**
	12,479	12,060	**10,825**
Income (loss) before income taxes	738	447	**(511)**
Estimated taxes on income	273	168	**(167)**
Income (loss) before minority interest and equity in earnings of affiliates	465	279	**(344)**
Minority interest in net income of consolidated subsidiaries	(13)	(13)	**(8)**
Equity in earnings of affiliates	61	68	**54**
Net income (loss)	$ 513	$ 334	**$ (298)**

Additional Information – Balance Sheet

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	December 31	
	2000	**2001**
Assets		
Current assets		
Cash and marketable securities	$ 149	**$ 182**
Accounts receivable		
Trade, less allowance for doubtful accounts of		
$42 - 2000 and $45 - 2001	1,505	**1,371**
Other	318	**253**
Inventories	1,564	**1,299**
Other current assets	535	**518**
Total current assets	4,071	**3,623**
Investments and other assets		
Investments at equity	636	**628**
Goodwill	969	**841**
Other	212	**246**
Total investments and other assets	1,817	**1,715**
Deferred income tax benefits	209	**449**
Property, plant and equipment, net	3,069	**2,778**
Total assets	$9,166	**$8,565**
Liabilities and Shareholders' Equity		
Current liabilities		
Notes payable	$1,307	**$ 617**
Accounts payable	1,014	**1,042**
Accrued payroll and employee benefits	395	**315**
Other accrued liabilities	809	**826**
Taxes on income	165	**142**
Total current liabilities	3,690	**2,942**
Deferred employee benefits and other noncurrent liabilities	1,155	**1,400**
Long-term debt	1,574	**2,155**
Minority interest in consolidated subsidiaries	119	**110**
Shareholders' equity	2,628	**1,958**
Total liabilities and shareholders' equity	$9,166	**$8,565**

Additional Information – Statement of Cash Flows

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	Year Ended December 31		
	1999	2000	**2001**
Net cash flows from operating activities	$ 464	$ 850	**$475**
Cash flows from investing activities:			
Purchases of property, plant and equipment	(547)	(434)	**(317)**
Acquisitions	(18)	(511)	**(21)**
Divestitures	36	571	**236**
Additions to investments and other assets	(26)	(1)	**(24)**
Other	29	16	**33**
Net cash flows - investing activities	(526)	(359)	**(93)**
Cash flows from financing activities:			
Net change in short-term debt	(555)	424	**(599)**
Issuance of long-term debt	1,017	9	**776**
Payments on long-term debt	(220)	(313)	**(370)**
Dividends paid	(206)	(187)	**(140)**
Shares repurchased	(100)	(381)	
Other		5	**(16)**
Net cash flows - financing activities	(64)	(443)	**(349)**
Net increase (decrease) in cash and cash equivalents	(126)	48	**33**
Cash and cash equivalents - beginning of year	227	101	**149**
Cash and cash equivalents - end of year	$ 101	$ 149	**$182**
Reconciliation of net income (loss) to net cash flows from operating activities:			
Net income (loss)	$ 513	$ 334	**$(298)**
Depreciation and amortization	429	427	**447**
Deferred income taxes	9	(60)	**(244)**
Minority interest	6	8	**4**
Asset impairment	62	27	**206**
Net change in receivables, inventory and payables	(568)	357	**366**
Other assets and accruals	107	(65)	**48**
Unremitted earnings of affiliates	(45)	(68)	**(17)**
Gains on divestitures	(5)	(106)	**(10)**
Other	(44)	(4)	**(27)**
Net cash flows from operating activities	$ 464	$ 850	**$475**

Additional Information

In millions except per share amounts

Shareholders' Investment

The following table shows the range of market prices of our common stock on the New York Stock Exchange and the cash dividends declared and paid for each quarter during 2000 and 2001. At December 31, 2001, the closing price of Dana common stock was $13.88.

	Stock Price						Cash Dividends Declared and Paid	
	2000			2001			2000	2001
Quarter Ended	High	Low	Close	High	Low	Close		
March 31	$ 33.25	$ 20.31	$ 28.19	$ 20.40	$ 15.63	$ 17.18	$ .31	$ .31
June 30	31.81	20.88	21.19	23.50	16.25	23.34	.31	.31
September 30	27.69	20.63	21.50	26.90	13.07	15.60	.31	.31
December 31	24.00	12.81	15.31	15.73	10.25	13.88	.31	.01

Unaudited Quarterly Financial Information

Quarter Ended	Net Sales	Gross Profit	Net Income (Loss)	Net Income (Loss) Per Share Basic	Net Income (Loss) Per Share Diluted
For the year ended December 31, 2000					
March 31	$ 3,468	$ 566	$ 245	$ 1.55	$ 1.54
June 30	3,296	518	144	.95	.95
September 30	2,865	384	29	.19	.19
December 31	2,688	250	(84)	(.57)	(.57)
For the year ended December 31, 2001					
March 31	**$ 2,731**	**$ 288**	**$ (27)**	**$ (0.18)**	**$ (0.18)**
June 30	**2,768**	**354**	**14**	**0.10**	**0.10**
September 30	**2,399**	**250**	**13**	**0.08**	**0.08**
December 31	**2,373**	**111**	**(298)**	**(2.01)**	**(2.01)**

In the first quarter of 2000, we recognized approximately $85 (53 cents per share) of non-recurring income representing gains on divestitures, net of $12 of integration expenses. In the second quarter, we recorded $10 (7 cents per share) of integration charges incurred in connection with consolidating our Engine Management warehouse operations. In the third quarter, we recorded a charge of $32 (21 cents per share) related to the closing of our Reading, Pa., structures facility.

In the fourth quarter of 2000, we recorded $86 million of unusual charges (58 cents per share), including restructuring expenses related to closing several facilities ($34), integration expenses incurred primarily in the Engine Management Division and in relocating operations of closed facilities ($21), equity losses related to our 49%-owned affiliate in Venezuela ($20) and costs associated with exiting several lines of business ($11).

In the first quarter of 2001, we recorded an after-tax loss of $12 on the sale of Mr. Gasket, a wholly owned subsidiary. We also recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. Total unusual charges for the quarter totaled $28 (19 cents per share).

In the second quarter of 2001, we divested our Marion, Ohio, forging facility and the assets of EFMG facilities in Dallas, Texas, and Washington, Mo. A net after-tax loss of $8 (5 cents per share) resulted from these transactions. Charges related to our ongoing efforts to downsize various operations adversely affected net income by $4 (3 cents per share) in the second quarter.

We completed the sale of our Chelsea power take-off business to Parker Hannifin Corporation in July. The sale of our Glacier industrial polymer bearings businesses to Goodrich Corporation was completed the following month. After-tax gains totaling $30 were recorded on these transactions. We announced additional facility closings in the third quarter. We accrued additional restructuring charges of $12 in connection with these announcements, which affected earnings by $7 net of tax benefits. Net nonrecurring income for the quarter was $21 (14 cents per share).

In October, we announced plans to reduce our global workforce by more than 15 percent and initiated a review of more than 30 facilities for possible consolidation or closure. During the fourth quarter, we announced the closing of 21 of these facilities and reduced our workforce by more than 7%. Charges for these and related actions totaled $440, including $155 for employee terminations, $196 for asset impairments and $189 for exit and other costs. Net earnings were impacted by $284 ($1.92 per share).

Eleven-Year History†

In millions except per share amounts

Financial Highlights

For the Years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	**2001**
Net Sales	$6,084	$6,655	$7,404	$8,843	$10,472	$10,979	$11,911	$12,464	$13,159	$12,317	**$10,271**
Net Income (Loss)	55	(318)	174	352	443	451	320	534	513	334	**(298)**
Net Income (Loss) per											
Common Share											
Basic	.41	(2.27)	1.18	2.29	2.81	2.83	1.97	3.24	3.10	2.20	**(2.01)**
Diluted	.41	(2.26)	1.17	2.28	2.80	2.81	1.94	3.20	3.08	2.18	**(2.01)**
Cash Dividends per											
Common Share	.80	.80	.80	.83	.90	.98	1.04	1.14	1.24	1.24	**.94**
Total Assets	5,371	5,584	5,895	6,701	7,814	8,522	9,511	10,138	11,123	11,236	**10,207**
Long-Term Debt	1,684	1,608	1,341	1,381	1,325	1,887	1,790	1,718	2,732	2,649	**3,008**

Dana Corporation

(including Dana Credit Corporation on an equity basis)

For the Years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	**2001**
Summary of Operations											
NET SALES	$6,071	$6,646	$7,401	$8,836	$10,472	$10,979	$11,911	$12,464	$13,159	$12,317	**$10,271**
Cost of Sales	5,074	5,569	6,066	7,202	8,702	9,183	10,099	10,485	11,016	10,662	**9,335**
Income (loss) before											
Income Taxes	37	142	362	558	723	669	569	697	738	447	**(511)**
Tax Rate	60.7%	39.8%	36.9%	38.0%	35.8%	33.9%	50.3%	39.8%	37.0%	37.7%	**32.7%**
NET INCOME (LOSS) *	55	120	223	349	443	451	320	534	513	334	**(298)**
Percentage Pre-tax Profit											
on Sales	.6%	2.1%	4.9%	6.3%	6.9%	6.1%	4.8%	5.6%	5.6%	3.6%	**(5.0)%**
Capital Expenditures	204	159	218	352	442	397	518	552	547	434	**317**
Financial Position											
Current Assets	$2,107	$2,282	$2,518	$2,902	$3,345	$3,591	$3,886	$4,174	$4,637	$4,071	**$3,623**
Current Liabilities	1,315	1,363	1,590	2,036	2,819	2,792	3,231	3,630	3,320	3,690	**2,942**
Current Ratio	1.6-1	1.7-1	1.6-1	1.4-1	1.2-1	1.3-1	1.2-1	1.1-1	1.4 - 1	1.1 - 1	**1.2 - 1**
Working Capital	792	919	928	866	526	799	655	544	1,317	381	**681**
Long-Term Debt	929	828	630	531	544	830	1,036	1,147	1,862	1,574	**2,155**
Total Shareholders' Equity	1,638	1,401	1,515	1,739	2,063	2,435	2,602	2,940	2,957	2,628	**1,958**
Return on Average											
Shareholders' Equity	3.3%	7.9%	15.2%	21.5%	23.3%	20.1%	12.7%	19.3%	17.4%	12.0%	**(13.0)%**
Common Stock Data											
Average Number of Shares											
Outstanding–Basic	134	140	147	154	157	159	163	165	165	152	**148**
Book Value per Share	$12.19	$9.71	$9.88	$11.29	$12.97	$15.12	$15.89	$17.74	$18.12	$17.77	**$13.18**
Earnings (loss) per Share *											
Basic	.41	.86	1.51	2.29	2.81	2.83	1.97	3.24	3.10	2.20	**(2.01)**
Diluted	.41	.86	1.51	2.28	2.80	2.81	1.94	3.20	3.08	2.18	**(2.01)**
Stock Price High	18.25	24.13	30.13	30.69	32.63	35.50	54.38	61.50	54.06	33.25	**26.90**
Low	12.31	13.38	22.00	19.63	21.38	27.25	30.63	31.31	26.00	12.81	**10.25**
Close	13.88	23.50	29.94	23.50	29.25	32.63	47.50	40.88	29.94	15.31	**13.88**
P/E Ratios High	45	28	21	13	12	13	28	19	18	15	**
Low	30	16	15	9	8	10	16	10	8	6	**

† The information for years prior to 1998 has been restated to reflect the Echlin merger, which has been accounted for as a pooling of interests. Echlin amounts included for years prior to 1995 are for fiscal years ended August 31.

* Excludes one-time SFAS No. 106 charge of $438 ($3.12 per share) in 1992, SFAS No. 112 charge of $49 (33 cents per share) in 1993 and SFAS No. 109 increase in net income of $3 in 1994.

** Not meaningful in 2001 due to the reported net loss.

Investor Information

Stock Exchanges
Dana common stock (ticker symbol: DCN) is listed on the New York Stock Exchange and the Pacific Exchange.

www.dana.com
Dana's website provides a host of information about the company, including:
- An order form to obtain current financial and shareholder-related information;
- Stock price information;
- E-mail access to Dana;
- Recent press releases;
- Dana's products, services, and markets;
- Dana's global operations; and
- Dana's history, philosophy, and policies; *Transformation 2005* strategy; and recent speeches and presentations by Dana people.

Dial-for-Dana
Dial (800) 537-8823 anywhere in the U.S. and Canada. In Ohio, call (800) 472-8810. Through this 24-hour, toll-free, voice-interactive phone service, callers may:
- Request annual and quarterly shareholder reports, as well as Forms 10-K and 10-Q;
- Learn whom to contact for answers to specific shareholder-related questions, and participant inquiries about the Dana Employees' Stock Purchase Plan;
- Listen to recordings of quarterly conference calls with analysts; and
- Submit requests for a Dana representative to respond directly to the caller.

Dana Information and Inquiries
Requests for information may be addressed to Greg Smietanski, Director, Investor Relations, Dana Corporation, P.O. Box 1000, Toledo, Ohio 43697.

Shareholder Services
Mellon Investor Services is the company's principal transfer agent and registrar. Please contact Mellon directly with all inquiries and requests to:
- Transfer stock;
- Change a name or address;
- Replace lost stock certificates or dividend checks;
- Consolidate duplicate accounts;
- Obtain statements of holdings;
- Obtain copies of Form 1099-DIV; and
- Obtain information about dividend reinvestment or direct deposit of dividends.

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DANA

OVERVIEW

History

Introduction

People familiar with Dana know we're not the kind of company to sit by the fire and trade feel-good stories when there's work to be done (and there's always work to be done). So maybe it'll strike them as odd that we're celebrating our heritage. But we're doing more than that. This bool is not simply a monument to the Dana family's remarkable history. It's a concrete reminder that our history, our collective experience, is something we can draw strength and wisdom from, something that can help us in the future.

We date our history from 1904, the year Clarence Spicer set up his universal joint manufacturin company in the corner of the Potter Printing Press. But our heritage is much broader and richer than that one company. It embraces all the history of all the companies that have joined the Dar family since then. Those companies are not simply members of the Dana family -- they are the family. And that family is still growing, and moving forward.

And the great distance we've already come is not the exclusive accomplishment of Clarence Spicer, or even of our other founding fathers. Their imagination and determination were essenti but Dana's progress over the years has come from dedicated teamwork as much as individual initiative. If I may use the automobile as an analogy for the Dana journey, our founding fathers built the engine and cranked the starting handle, but it's Dana people who have been driving ev since, and they've brought us a tremendous way.

By that, I mean all Dana people, not just the leaders. We've had some pretty powerful character behind the wheel over the years, but it's the unique character of our company that's given space and opportunity to those people, not the other way round. And that unique character comes fron the Dana people who have contributed more than their time and energy and skill; people who have given their hearts and minds too. Dana people have enabled our company to prosper, and so this book is a tribute to their achievement.

As a multi-billion-dollar global corporation, it's easy to underestimate just what an extraordinary accomplishment Dana is. But consider this: between 1900 and 1920, over 2,000 separate, independent companies built one or more cars. Each of those companies had hopes, plans and ambitions. Each believed it had something unique to offer. Yet today, only 23 fairly large car manufacturers exist. To survive is an achievement. To flourish is remarkable.

Why did Dana succeed while others failed? I believe it's because most of those early companie were unprepared for change, or lacked the heart needed for continued leadership. They design and developed a new product, then sold it, and for a while they prospered. But when they pause a moment to admire their work, the relentless tide of technology swept past them, and they foundered.

I've looked at the patent records held by some of the most influential figures in our history, and they tell the story; Clarence Spicer had some 40 patents issued to him. Albert Weatherhead hac 75. A.P. Warner 100. Alexander Brown an incredible 300. They knew it wasn't enough to rely or single product. They knew they had to keep moving. They knew they had to keep ahead.

We can learn from this, and that's another reason for this book, maybe the most important. Hist

is the reservoir for one of Dana's greatest strengths -- its experience. Because we believe in an invest in our people, they like to stay with us. As a result, Dana has a richer reservoir of experience than any company I know. That experience creates wisdom and judgment. It provide for caution in the good times, and optimism in the bad. It is extraordinarily valuable. After all, nothing in this world stands still for long. Everything changes.

Experience prepares us for change. It teaches us to keep moving forward, looking for opportunities, wary of pitfalls. Change can sometimes be intimidating, because it's uncertain -- b it's also vital to our continued growth. After all, if it wasn't for change, we'd still be making universal joints in the corner of a printing plant, not enjoying our stature as a Fortune-100, multi-product, global corporation.

Change has been good to us. Change has made us strong.

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People Finding A Better Way®

History

SECTION 1: Laying the Foundation

SCENE SETTER

We're at the brink of a new millennium, and looking into the future can be disorienting. So much has changed in just this century; what changes will the future bring? In the last few decades alone, advances in information technology have revolutionized work, just as eighty years ago Henry Ford revolutionized manufacturing. These advances have created a global economy, whi has transformed the way that we look at our markets and loosened the once-rigid hierarchies of business and social convention.

But if you think we're in the middle of extraordinary and unprecedented change now, think back the cusp of the twentieth century, when the internal combustion engine was just one of the man ways that the accepted practices of life were being turned upside down.

Communication was being transformed by improvements to the telephone and the wireless. Sound could be captured by the phonograph, and memories saved by Kodak's first hand camer The first public motion picture was shown in Paris in 1895, the same year as the first safety razc was produced, revolutionizing the world's grooming habits.

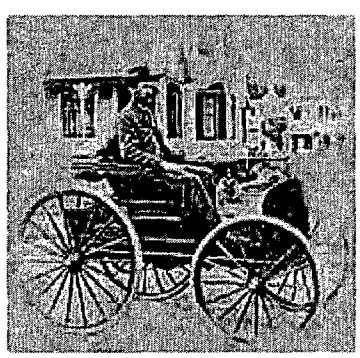
And that was not all.

A.P. Warner, founder of Warner Electrics and one of the founders of Dana, liked to tell the story a lecture he once attended. The lecturer, a learned Harvard mathematician, proved conclusively on his blackboard, through a combination of diagrams and equations, that flight in a heavier-tha air machine was a mathematical impossibility.

Shortly afterwards, Warner became only the sixth American to fly such a machine. The unimaginable can become the everyday, almost overnight, and we have to be ready for it, as ou founders were.

1st vignette

The motor car and power transmission



In 1902, at Cornell University's Sibley College, a young stude of Mechanical Engineering named Clarence Winfred Spicer w assigned a project that had intrigued some of the finest scientific minds in history -- to design a self-propelled carriage or automobile. Plans for such a vehicle had been drawn by bc Leonardo da Vinci and Isaac Newton, while the first road test steam vehicle was built by Louis Cugnot in the 1760s.

But it was in 1886 that the modern automobile was born, as Gottleib Daimler developed a practical internal-combustion engine, and his German contemporary Karl Benz integrated a

engine with a chassis. Their advances took time to cross the Atlantic, and it was not until 1893 that Frank and Charles Duryea built and road-tested the motorized carriage which is recognized as the first American automobile.

The automobile was a remarkable, world-changing breakthrough, and because it was so revolutionary, it created an extraordinary number of opportunities for people with bright ideas. Power transmission, for example, had been pretty straightforward with horse-drawn carriages. The horse pulled, and the wheels turned.

With the internal combustion engine, however, power transmission became a complex engineering problem. Early cars used sprockets and chains to turn the rear axle, but these were unsightly and noisy at high speeds. Worse, they were difficult to lubricate and broke frequently.

At the turn of the century, several French designers experimented with a propeller shaft, and in 1901 the Autocar company built the Type VIII, the first American propeller-shaft-driven car. In each of these designs, though, the propeller shaft was fixed in place with crude joints that seize up, and shattered easily. They offered little or no improvement over sprockets and chains.

Clarence Spicer

Clarence Spicer had been fascinated by mechanics since the day his dairy-farmer father had bought cooling machinery for the farm creamery and told Clarence to look after it. Clarence Spicer's lifelong competitiveness and dedication to quality was also instilled early. One year his father won an award for the highest-quality butter at a World's Fair. The next year he was beaten into second place in another butter competition -- by Clarence.

Clarence Spicer left the Illinois farm to study at Alfred University, then in 1899 entered Cornell's Sibley College to study engineering. There, under the tutelage of Dean Thurston, he worked on his design for an automobile and became increasingly with the issue of power transmission. Dissatisfied with sprockets and chains, Spicer determined to use a propeller shaft, which he attached to the engine and rear axle with specially designed "universal" joints. Spicer's universal joints were a major engineering breakthrough. They were n just easy on the eye and ear -- they were proof against dust and dirt, and were easy to lubricate

When Spicer showed his drawings to Dean Thurston, Thurston recognized the originality and commercial viability of the universal joint design, and advised his pupil to file for a patent, grante in May 1903. The design was duly published in a patent journal, where it caught the admiring attention of several automobile manufacturers. These people contacted Spicer and asked him t supply the joints, or license their manufacture.

With this firm assurance of the potential of his brainchild, Spicer left Cornell in the Spring of 190 and went to Plainfield, New Jersey, to begin manufacture of his universal joint. Within two years he had a lengthy list of prestigious clients, including Buick, Wayne, Mack, Olds, Stevens-Duryea American Motor Car, Diamond T and E.R. Thomas.

The new universal joints were so good that soon they soon became the industry standard for power transmission. Spicer was rightfully proud that his joints were used at both ends of the market. The best and most expensive American cars regularly used his joints, as did the good low-priced cars, demonstrating that Spicer joints were the best money could buy, yet were still competitively priced.

Plainfield, and the Seventh Day Baptists.

As a dedicated Seventh Day Baptist, Clarence Spicer determined to set up his business in an environment where people shared his conviction that Saturday should be a day of rest. Plainfiel New Jersey, was therefore an obvious choice. It was a stronghold of Seventh Day Baptists, and

was situated near the heart of the early automotive industry. Besides, Spicer already had relativ in Plainfield, connected with the Potter Printing Press Company.

At first, he contracted Potter to manufacture his universal joints, until Potter received a huge ord for printing presses and could no longer help. Spicer then rented a corner of their plant, hired three employees, and began manufacturing the joints himself. In 1905, as orders kept coming ir he incorporated the Spicer Universal Joint Manufacturing Company.

The history of the universal joint

Jerome Cardan, an Italian mathematician born in 1501, is credited with discovering the principle the universal joint, a coupling that allows angular motion in all directions, and the transmission o rotary motion. The first practical application of his idea, however, was made by Robert Hooke, a seventeenth-century English experimental philosopher. Hooke's design was so efficient and reliable that Clarence Spicer remained faithful to its essential principles when he designed his o joint more than two hundred years later.

In its earliest days, the joint had limited use. In 1675, Isaac Newton contrived a universal joint o which to mount his telescope. Other early applications included compass and gun mountings, d spindles and some agricultural machinery. However, it was not until the advent of the internal combustion engine, the growth of the motor car industry, and Spicer's patent that the universal joint truly came of age.

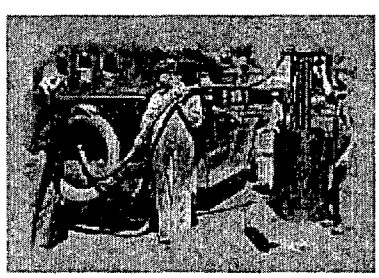
The World War I Liberty Truck

The advances in mechanized transport that had been achieved by the first World War meant th armies could be supplied and moved more quickly than ever before. Yet the variety of trucks being used created a logistical nightmare. Staff had to stock every conceivable size of bolt, nut and screw, and be familiar with the workings of all the different engines.

In 1917, Clarence Spicer was one of a group of engineers and industry leaders summoned to Washington to solve the problem by designing the best possible standardized truck. At first the group was reticent. The engineers were accustomed to being rivals, and were reluctant to share their secrets with each other; but they soon got into the spirit, and competed to see who could contribute the most. The result was the Liberty Truck, rugged, easy to maintain and equipped w interchangeable parts.

2nd Vignette

The early transport industry



That Clarence Spicer's universal joint was in demand before was even manufactured testified to both the quality of its design and the healthy state of the automotive industry in 1904. After their slow start, American automobile manufacturers had caught up with and even passed their European counterparts. The car proved perfect for the Unite States; Americans loved new technology, and they loved to travel. As a growing, thriving country, mobility was a way of life, not a luxury. Also, the oil fields discovered at Spindleto Texas, in 1901, provided an enormous source of cheap fuel.

Maybe the greatest difference between Europe and America, however, was the attitude of car makers to their work and their customers. In Europe, motoring was not viewed as a means of mass transport so much as an expensive hobby. Cars were custom-built; there were few economies of scale and costs were high. Because cars were expensive, the market for them remained small.

By contrast, American manufacturers were systematic, specialized and eager to improve their

product. They did not make their components in-house, but contracted out business to parts suppliers, from whom they demanded the highest standards. Henry Leland of Cadillac was quality's standard-bearer. He demanded identical, interchangeable parts from his suppliers, whose tolerances were measured to the hundred-thousandth of an inch. But Leland's creed did not stop there. Each employee checked every component as it was received to ensure it was defect free, creating the first quality-assurance program in the automotive industry.

Second, American manufacturers perceived their market differently from Europeans. Because their market was potentially huge, they reckoned that cars could be sold cheaply, and profit mac on volume. In 1900, Ransom E. Olds commissioned his Jefferson Avenue staff to produce a runabout car (the first Oldsmobile) that he sold for $625, making his return by mass production.

Later, Henry Ford introduced the moving assembly line at Highfield Road, slashing car productic time, and enabling him to offer a high class car at unprecedentedly low cost. Interchangeable parts, mass production and the assembly line would allow America to dominate world automobil production for decades to come.

Perfect Circle

Established by Charles Teetor in Hagerstown, in 1895, as the Railway Cycle Manufacturing Company, Perfect Circle was one of many companies that started serving a non-automotive transport industry before realizing the future was with automobiles. Studebaker, for example, wa a world-renowned builder of horse carriages before it ever designed a car. Olds made steam engines. The Duryea brothers, builders of America's first car, made bicycles, while Henry Lelan made bicycle gears.

Charles Teetor began in similar fashion, designing and manufacturing a pedal-powered vehicle use on railroad tracks. The Teetor cycle was an immediate success, and was soon being export around the world. By 1907, the company was making a wide range of products, including piston cylinders and piston rings.

In 1918, confident of the future of its piston-ring business, the Teetor-Hartley Motor Company sc off all other areas of the company and renamed itself the Indiana Piston Ring Company. In 1921 it introduced the brand name Perfect Circle, and in 1924, it changed its company name once again, this time to Perfect Circle. In 1963, Perfect Circle became part of the Dana family.

Dana Distribution Europe

Dana Distribution Europe was founded in London in 1889 as a cycle dealership called Brown Brothers. The business grew briskly, and soon the company was distributing cycle parts in Grea Britain, Spain, France and Portugal. In 1898, Brown Brothers opened a separate department to supply parts for cars, motorcycles and related equipment. Later it became involved in the aviatic business, supplying parts to pioneer aviator Colonel S.F. Cody and setting up a factory to produ precision aircraft components.

After World War I, Brown Brothers merged with Scottish based James Thomson & Sons, and opened branches in many leading British cities, supplying a wide range of motor, electrical and hardware goods. In 1964, the company determined to focus on its core business, which was no supplying the motor trade, and gradually closed its main branches in favor of smaller, concentrated motor suppliers. In 1973, Dana took an interest in Brown Brothers, and in 1981, Dana acquired all of its outstanding shares.

Spicer Europe

Founded in Wolverhampton, England, in 1902, as Thomas Turner & Co, Spicer Europe began b building bicycles, tricycles and horseless carriages, including the Turner-Meisse Steam Car. In 1907, the company began to design and manufacture petrol-engine vehicles. After World War I, the company established a reputation as a components suppier.

In 1949, Turner began manufacture of an all-purpose diesel-engine tractor, the Yeoman of England which achieved worldwide sales, and led the company to set up manufacturing facilities in many countries around the world. In 1972, Dana took a 30 percent stake in the company. The partnership proved such a success that in 1978 Dana bought the company outright.

3rd vignette

The Founding Fathers

While Leland, Olds and Ford were transforming the way automobiles were made, and Clarence Spicer was redefining power transmission, many future members of the Dana family were also making dramatic contributions to the automotive industry.

It was an era of extraordinary inventiveness. In 1882, when A.P. Warner (founder of Warner Electric and one of the Dana family's most prolific patent-holders) was just 12-years old, he told his grandfather he'd like to be an inventor. "Arthur, you are too late," his grandfather replied. "Everything to be invented is invented, and there is no use your wasting time in trying to make something new."

Rarely can an observation have been so wrong. There was a frenzy of invention at the turn of the twentieth century as new power sources, improved communications technology, better processes and machining all added to the heady mix of progress. Inspired by Thomas Edison, "the Wizard Menlo Park," inventors had become celebrities.

The automobile, at first no more than an engine and chair on wheels, offered great potential to these ingenious minds. Tremendous competition amongst rival inventors meant that everything was up for improvement. The internal combustion engine had not even become the dominant power source. The first recognized land speed record, set in 1898 by an electric car (at 39.24 mph), was beaten over the next eight years by electric, steam and gas engines. And the earliest cars offered little of today's standard equipment – no headlights, ignition, windshield, instrument or even a roof. All these had to be thought of, designed, patented, manufactured and sold.

No one exemplified that spirit of inventiveness better than A.T. Brown, arguably the most prolific and versatile inventor in the Dana family. While working with L.C. Smith, a gun company, Brown designed a safety catch for guns, a breech loading gun, an electric firearm and the double-lock bolt for the Smith Gun. Later, working for the Smith Premier Typewriter Company, he perfected double-keyboard typewriter. In 1892 he invented a pneumatic bicycle tire, and later sold the patents to the English Dunlop brothers.

As well as being a hugely successful inventor, Brown was president of several companies. In 1895, with close friend Charles E. Lipe, (inventor of a milling machine and the first man to perfect an invention for sewing brooms), Brown conceived an idea for a two-speed gear for bicycles. The gear proved too expensive for commercial success, but the Brown-Lipe partnership continued. In 1904 Brown-Lipe sold a progressive type motor car transmission to the H. H. Franklin Company Syracuse. Two years later E.R. Thomas Company bought Brown-Lipe's first selective type auto transmission, while the first Brown-Lipe clutch was shipped to the Grabowsky Power Wagon Company in 1911.

Paying the highest-ever per-share price for a Syracuse business, Spicer acquired Brown-Lipe in 1929, and moved the business to Toledo in 1931.

Victor

John H. Victor, co-founder of Victor Manufacturing and Gasket Company, applied for many patents in his inventive career, including one for an improved golf club and another for a filing cabinet. But it was in establishing the gasket company with his brother Joseph in 1909 that he found his greatest success. Victor's copper-asbestos gaskets provided longer life and better sealing than their competitors, and soon the company became the leading supplier of gaskets to the automotive industry.

In 1966 Victor joined the Dana family of companies, as part of Dana's strategy of diversifying int the aftermarket, and in 1993 merged with German-based gasket manufacturer Reinz to become Victor-Reinz.

Weatherhead

Albert Weatherhead (founder of Weatherhead & Co, holder of 75 patents) once heard the chief engineer for Studebaker say, "If you want to sell the automotive industry, you must develop an article of better quality, at less cost."

The Harvard engineering graduate took the advice to heart. Returning from World War I service France as a combat pilot, he bought a small shop in Cleveland and began designing and manufacturing automotive products. His first design for an automobile-engine priming cup was successful enough. His second, for a radiator drain cock, was a breakthrough that became standard equipment for practically every car made in the United States.

As with all Dana people, quality of product was not enough by itself. Weatherhead insisted on delivering his products on time and in exact quantities to his clients, who included Chevrolet and Ford. This mix of inventiveness and dedication served the company well, and Weatherhead's product line and client list expanded steadily. By the time Weatherhead joined the Dana family in 1977, it had become a major supplier of components used in braking, steering, air conditioning, fuel, cooling and lubricating systems.

4th vignette

New York to Paris Race

On February 12th, 1908, 250,000 New Yorkers crowded into the Times Square district to witness the start of the New York to Paris Race, an unprecedented test of automotive reliability and endurance. The race, co-sponsored by newspapers Le Matin and The New York Times, would take the competing cars across North America to San Francisco, across Alaska, across Japan, and from Vladivostok to Paris. It would also prove that the car had come of age as a means of worldwide transport. There was a sub-plot, as well. As with Cadillac's entry in the Dewar Trophy the same year, the New York-to-Paris race was symbolic of the Transatlantic struggle to lead the automotive industry.

An American car, an Italian car, a German car, and three French cars lined up to fight for the honors. The European entries were built specially for the race, but the American car, a Thomas Flyer, was from regular stock, built with parts provided by no fewer than four members of the Dana family. Salisbury provided wheels, Brown-Lipe the transmission and Parish the frame, while forgings were provided by the General Drop Forge company.

The first leg of the race from New York to San Francisco took the crews through appalling weather conditions. The roads, bad enough at the best of times, were so blanketed in snow, or thick with mud that few believed any of the cars would reach the first checkpoint, let alone Paris. But five of the six contestants did make it to San Francisco. The Thomas Flyer, leading the way, took a boat to Alaska, but the weather conditions there were even more severe, and no progress at all was possible. By the time the American team had returned to San Francisco, the other teams had decided to bypass Alaska and had already shipped ahead to Japan.

The teams started even again in Vladivostok (except for the German Protos, which had been awarded a 30 day penalty for shipping their car by train from Idaho to Seattle). French driver St. Chaffray, told by the Marquis De Dion to retire from the race, was so desperate to complete the course that he cornered the gasoline supply in Vladivostok, and tried to barter fuel for a seat on the Thomas. Rejecting the unfair pressure, the enterprising Thomas crew called on American residents, who provided a sufficient supply from their power launches.

The Germans gained the lead on the road, and kept it all the way to Paris, but because of their

30-day penalty they were 26 days behind the Thomas Flyer, which arrived in Paris on July 30, winner of the race. Dana's integral involvement with the racing industry had begun.

The Perfect Circle band

In 1909, Carl Graham Fisher, a flamboyant entrepreneur and car salesman, opened a 2.5-mile, rectangular track some five miles north of Indianapolis. The first races held there were hampere by accidents and poor attendance, so the track was resurfaced and in 1911 a huge purse was offered for a one-day extravaganza -- which proved to be the first Indianapolis 500 Mile Race.

The Light Inspection Car Company band (later Perfect Circle), consisting of the Teetor family members and company employees, paraded past the grandstand just before the inaugural race Perfect Circle's connection with the event did not end there, as many great drivers enjoyed tremendous success using Perfect Circle piston rings. A.J. Foyt, the first driver to win four Indy 500s, used Perfect Circle rings, as did Al Unser Jr. when he took the checkered flag in 1994, driving for Team Penske.

Leland and the Dewar Trophy

In 1908, Henry Leland and Cadillac demonstrated to Europe that American manufacturing practices had left their European rivals behind. Three Cadillac cars were shipped over to Englar to stake a claim for the Dewar Trophy, an annual RAC award for the greatest achievement in th automotive world.

Cadillac mechanics disassembled the three cars, allowed independent judges to thoroughly mix up the parts, then recreated three cars from the pile. When the cars were reassembled, they we filled with gasoline and oil. To the crowd's astonishment, two of the three started at the first pull. The third took two goes. The three cars were then run full out on an oval track for 500 miles, ea completing the course at an average speed of 34 miles an hour, at 30 miles per gallon, out-racir the Europeans.

Clarence Spicer, himself dedicated to quality control, was a huge admirer of Leland. In a brief history of Spicer Corporation written in 1925, Clarence Spicer refers to him as "Pop" Leland, an singles him out for praise, thanking him in particular for a half-hour-long personalized chat in which Leland "emphasized the importance from a manufacturing standpoint of making every operation and every piece commercially right the first time".

5th Vignette

Charles A. Dana

In 1914, Clarence Spicer learned one of harshest lessons that can be taught in business -- his universal joints had become so popular that his company was pushed to the brink of bankruptcy. Over-hurried expansion had increased the cost of production, sales and delivery, and, because Spicer joints had become the industry standard, many competitors had simply resorted to imitation. Spicer's only defense had been lengthy, expensive and inconclusive law-suits. Near desperation, he traveled to New York to put his case to the investment bank, Spencer Trask & Co.

Spicer's was far from a unique story. Some 1,500 automotive companies had already failed by 1914, and Mr. Trask did not fancy betting his money that Spicer's company wouldn't be the next. He did, however, see enough promise in the company to hand the papers to a young lawyer called Charles Dana. Dana saw enough promise to visit South Plainfield -- where, lore has it, he found Clarence Spicer's desk piled high with papers.

"What are those?" asked Dana.

"New orders," answered Spicer.

"And where are your bills?"

For answer Spicer opened a drawer and showed Dana a bare handful of invoices. The huge pile of orders next to the small stack of bills was all the encouragement Dana needed to become involved in the business.

In exchange for a controlling interest in the company, Charles Dana lent $25,000 to Spicer, ther dedicated himself to leading the company through its hard time. Dana was no engineer, but he was a great salesman. Convinced that Spicer's universal joints were without equal, he proceede to share his opinion with the leaders of the automotive world, with dramatic success.

Dana also knew how to motivate people and win their loyalty. He set up a range of benefits for Spicer people, including a group-insurance plan, an employee-stock-purchase plan, and an in-house publication, The Drive-Shaft. In addition, plant and equipment was invested in, cafeteria facilities were improved, houses were built and sold cheaply to Spicer employees, food was bought in bulk and sold at cost, and a course of seven lectures in Modern Production Methods was offered at no cost to management, foremen and supervisors.

With Charles Dana in charge, and with a surge in demand in the automotive industry because o World War I, Spicer was soon back in the black. In 1916, with the help of Charles Merrill of Merr Lynch, the company was re-organized as the Spicer Manufacturing Corporation. The new corporation boomed and Dana took advantage by acquiring a series of complementary automotive suppliers, including Chadwick Engine Company, Salisbury Axle, Sheldon Axle, Paris Pressed Steel, Snead & Co, Almetal and Brown-Lipe.

In the twenties, Dana also led the company overseas, expanding a licensing agreements and acquiring interests in Hardy Spicer in England, Societe Spicer Glaenzer in France and Hayes Wheel and Forging in Canada.

Lawyer, rancher, soldier

The only son of a successful banker, Charles Dana was an active man, with wide interests. Afte studying liberal arts at Columbia University, Dana entered Columbia Law School, then practiced law in New York. He was deeply interested in politics, running campaigns for Teddy Roosevelt, and himself being elected three times as Republican member to the Assembly of the New York Legislature. By 1908, at the age of 27, Dana was already president of two companies, the New York & New Jersey Water Company and the New Jersey Suburban Water Company.

Dana also served for eleven years as a farrier in the New York National Guard, and was an exp marksman. He made a habit of going each year to the Corralitos Ranch in Chihuahua, Mexico, t work as a cowhand at roundup and branding time.

Driveshaft

The Driveshaft, Spicer's in-house magazine for the South Plainfield workforce, arrived in Januar 1917 with the following explanation of its purpose: "Each month it is planned to issue this sheet keep us informed as to what those in other departments are doing, social doings, the Company' plans, and information that otherwise it would be difficult to pass around, and in general to add t the fellowship, good will, comfort and pleasure of those connected with this Company."

As the company expanded with acquisitions and new plants, the Driveshaft kept Spicer people i the know. The magazine also undertook a campaign to promote safety in the workplace, which paid off handsomely as the number of injuries decreased. The Driveshaft was succeeded by the Drive Line, and then by the Dana Digest. Today more than twenty in-house magazines are published by Dana people.

Clarence Spicer

Even after Charles Dana became Managing Director of the Spicer Corporation, Clarence Spicer remained intimately involved with the company he had founded. Dedicated to quality, he once turned down an offer to leave Dana and join General Motors because he wanted to ensure the leadership of the Spicer name. He kept tabs on the competition by installing their equipment in cars and driving his family thousands of miles across the country, stopping every two hundred miles or so to check how the rival equipment was holding up.

As the company's Chief Engineer, Clarence Spicer also worked on many new products. He invented a machine for balancing propeller shafts, and another for producing welded tubing. He also designed a rail-road generator drive and a safety clutch for a generator drive. He was a member of both the American Society of Mechanical Engineers and the Engineers Society of Detroit, and treasurer and president of the Society of Automotive Engineers.

Clarence Spicer died in Miami in November, 1939. A tribute from the Society of Automotive Engineers acclaimed his life as "a beacon of example and inspiration in the engineering profession."

6th vignette

Expansion, Detroit and Toledo

Despite a slump in demand following the end of World War I, by 1920 it was clear the automobil was going to be bigger than anyone had forecast. In 1909, North American vehicle sales had totaled just 123,990. By 1917, they had rocketed to 1,745,792. And by 1929, the number had nearly reached 4 million. The problem for the Dana family was not in sales, but in producing enough to meet demand.

New plants at Pottstown and Reading were not enough, and Spicer Corporation looked to consolidate its manufacturing operations. At the same time, the company needed to deal with another issue that was becoming more and more pressing. Most Spicer customers were no lon on the East Coast. If Spicer wanted to keep its reputation for responsive service, it needed to move its manufacturing facilities. The harsh truth was, New Jersey no longer meant much in the automotive world

Detroit had taken over.

Why Detroit should have become so dominant in an industry founded in Europe and originally based on the East Coast is not easy to answer. Michigan had abundant raw materials, shipyard and foundries, but it also had the right people at the right time, which was fortunate. Legend has for example, that Henry Leland had originally determined to settle in Chicago, but when he arriv there he was greeted with "pistol shots and flying brickbats," so he bought a ticket on the first tra out -- which just happened to take him to Detroit.

Along with Leland, R.E. Olds and Henry Ford were already established in the Detroit area by 1900. William C. Durant acquired Buick of Flint, Michigan, in 1904, and proceeded to build General Motors. Because of the incredible success of these pioneers, suppliers and associated companies gravitated towards Michigan and Ohio. When Walter Chrysler reorganized Maxwell Motor Company as Chrysler in the 1920s, and built it into one of the Big Three, Detroit's domination of the industry was complete.

It was not surprising then that Spicer Corporation determined to relocate. Toledo was preferred Detroit partly because an overnight train service would allow Charles Dana to continue living on the East Coast and still visit the company on a regular basis. In 1928, therefore, land was acquired on Bennett Road in Toledo, and a new plant was erected. In early 1929 manufacturing equipment was moved from South Plainfield. Within two years Brown-Lipe and Salisbury Axles had also relocated to the Toledo plant.

Relocation was a typically smooth Dana operation. Forty families were taken on a special train over the Pennsylvania railroad. On the train, it was business as usual. Even the mail was distributed to the proper department officials. At Toledo, a fleet of automobiles from the Reuben Realty Company met Spicer people and their families off the train, and took them on a tour of th town, during which many of them selected their new homes

Henry Ford

Between 1910 and 1920, the United States automotive industry was transformed from a thriving cottage industry into a major industrial power. Remarkably, one man was largely responsible fo this achievement.

With a determination to bring the automobile within the reach of every hard-working American, Henry Ford used the moving assembly line to accelerate production and reduce costs. His methods, and the phenomenal success of the Model T, speak for themselves. In 1908, when th Model T was introduced, Ford's sales were 10,202. By 1916, they had risen to 734,811.

Henry Ford also had an enormously beneficial impact on American industrial workers, when in 1914 when he offered to pay an unprecedented $5 for a day's labor (a little over double the minimum wage). The offer created such havoc outside Ford's factories that water canons were used to turn away the crowds.

Ideas - What are they worth

Realizing that "incentive was a good stimulus to constructive thinking," in 1924 Dana assured in house inventors they would receive a proper reward for any commercially valuable innovations. addition, Dana offered potential inventors the services of the Engineering and Experimental Department, and promised to cover all of their associated expenses.

"It is ideas that control markets, not bricks, mortar, machinery or even money," read an editorial the Driveshaft. "It is ideas that are going to insure the future of this Company and those who depend upon it for their livelihood, therefore the Management invites you to think with them for c mutual benefit, to the end that our advancement in the Universal Joint art may keep well ahead any other manufacturer in the same line."

Looking after number one

When Spicer moved in 1928 from South Plainfield to its new offices in Toledo, Gladys Kummer was their first new employee -- a stenographer for the temporary offices in the Secor Hotel. She was given Workcard Number 1. "The man at the employment agency which recommended me t the job warned me for the job warned that Spicer was just a little outfit," she said, "but I took the job anyway."

The first office was erected on the company's Bennett Road site, and rest-room facilities were rented from a neighbor. As the company grew, it hired a local woman to arrange food, setting up planks on sawhorses on her home for dining tables. "Those meals were unforgettable," said Mrs Kummer. "I can remember the huge platters of pork chops, potatoes, and bowls of gravy she served us for 35 cents a person. It was wonderful."

Spicer production facilities started its move from New Jersey in 1929 and completed its arrival t Toledo in 1931. Remarkably, throughout the Depression, the plant was never closed down. As f Gladys Kummer, she stayed with the company for the next 40 years, until she retired. By the tim she retired workcard No. 1, the company had grown into a multinational organization, boasting annual sales of more than $500 million.

7th vignette

Sales, promotions and advertising

From the automotive industry's earliest days, sales were split into two broad categories -- Origin Equipment Manufacture (OEM) and the replacement sales market, or aftermarket. Many early accessories, like shock absorbers, spring mounted bumpers and rear view mirrors would soon become standard, but before they did, they needed to be sold to a discriminating public. Good marketing and advertising was essential.

The Indiana Piston Ring Company quickly recognized the benefits of advertising. Its Perfect Cir piston ring was so successful that in 1924 the company re-christened itself Perfect Circle. It advertised in the Saturday Evening Post, and published The Regulator, a quarterly tabloid for th automotive trade through which it notified the dealers of its new products. Finally, it sponsored a nationally broadcast radio musical show, and eventually advertised on television.

Victor Gasket recognized the value of endorsements to advertising. In 1927, the company ran a impressive campaign, highlighting some of the successes the company had enjoyed that year. Charles Lindbergh crossed the Atlantic in a Ryan monoplane equipped with a Wright Whirlwind engine and Victor gaskets. Three Victor equipped Stutz cars finished first, second and third in a 150 mile Stock Car race at the Atlantic City Speedway, establishing a feast of new records. As i that were not enough, three Victor equipped Studebakers set endurance, speed and distance marks of more than a mile a minute for 16 days and nights.

The award for the Dana family's most imaginative publicity campaign, though, would surely go t A.P. Warner. Warner, a long-time advocate of advertising, invented a device called a "cut-meter for measuring the speed of industrial machinery. He soon realized that it could easily be adapte to the automobile, and his new "speedometer" proved enormously popular among car-owners anxious to record their exploits, or perhaps to stay within the limits of the law.

Resolving to sell directly to the public, he went to A.D. Lasker, the famed president of Lord and Thomas. Lasker (who, proving that advertising pays, built a $75 million fortune from his agency) and Warner got along from the start. The two men often visited automobile manufacturers together. Warner attributed much of his company's success to Lasker's advertising, and also remarked that Lasker spent money with both hands but that it was returned multiplied many tim

But it was Warner himself who devised the most colorful promotion of his speedometer. He built giant, gold-plated speedometer, mounted it on the rear of a car, then sent it on a tour of the country. Teddy Roosevelt was so enchanted with the car that he got in with the driver and rode around outside the White House. Warner's speedometer even got the law changed. At the time, New York had a 10-mph speed limit that was completely ignored. So, Warner contacted the pre and then got himself arrested by driving past the police at 15 mph -- while he was being overtak by trucks and cars going twice his speed. All the state's newspapers carried the story, and spee limits were soon raised.

NAPA

The National Automotive Parts Association (NAPA), is far and away America's leading replacement parts organization. It is also one of Dana's foremost customers. Remarkably, the Dana family played a major role in NAPA's foundation.

As the motor industry flourished in the 1910s, leading companies like Ford, Buick, Chevrolet, Willys and Maxwell recognized that their customers deserved fast, quality service when their ca broke down. They therefore established networks of dealers around the country, and distributed their parts to them.

For companies like Spicer, this arrangement was unsatisfactory. Spicer was supplying all these leading companies, so their parts were often available through several dealerships in the same city. Yet no single dealer held a full stock of Spicer parts, and some independent shops didn't carry Spicer parts at all.

In 1919, engine manufacturer Continental addressed this problem by forming their own network dealers, appointing one distributor in each large distribution center. Spicer, Brown-Lipe and

Timken Detroit all recognized the merit of Continental's scheme, and promptly appointed the same agents, known as "parts stations." By 1924, there were parts stations in 31 cities, and the manufacturers recognized they needed an organization to oversee the national distribution of parts, and NAPA was consequently formed on April 17, 1925.

Reinz

Founded by Hugo Reinz in Berlin in 1920, Reinz's greatest breakthrough came in 1928 when th company patented a new cylinder head gasket. Called the Reinz Special, it consisted of a wove metal core surrounded by asbestos fibers, and was so advanced that in the 1930s nearly all European manufacturers used it, even the great car racing companies, Audi Union and Mercede

Even though the Reinz Special was in production for sixty years, Reinz did not rest on its laurels In 1942, when material supplies were squeezed by the war, Reinz developed an asbestos-free gasket, Deuma. After the war, Reinz moved headquarters to Neu-Ulm, where the company continued to grow, and in 1993 Reinz joined the Dana family. Merged with Victor, Victor-Reinz was the largest manufacturer of flat gaskets in the world.

8th vignette

Dana's People

In 1929, the United States produced 4.5 million cars. In 193 production slumped to 1.1 million. After the boom years of t 1920s, the Wall Street Crash and the Depression devastate industry. By the time the Depression bottomed out in 1932, huge numbers of workers had been laid off, and wages in tl automotive industry had dropped by 35%. The workers wer hurting, and in an effort to protect themselves they formed unions that quickly grew powerful.

In place of the friendly relations established at Spicer during the boom years, there grew an atmosphere of confrontation. The workers had lost faith in their management, and Charles Dana, while he loved working with people one-to-one, mistrusted the new adversarial organizations.

On the morning of Friday, February 23, 1934, matters came to head in Toledo. After delays in recognizing an United Auto Workers (UAW) contract, 4,000 workers went on strike from Spicer, Logan, Bingham and Electric Auto-lite factories. Over 2,000 Spicer workers participated in the walk-out, and, despite the sub-zero temperatures, they set up a picket line outside the plant. Charles Dana was at the plant early, chatting to the pickets, sending out coffee and carrying out buckets of coal to keep their fires going.

On Sunday, Dana held conferences with business leaders and bankers, then gathered the principal management and union members together at the Commodore Perry Hotel, where they laid out the basis for agreement. That night, Dana took a train to Washington, where he conferre with NRA leaders and officials from the American Federation of Labor, before returning to Toled on Tuesday for more conferences. When negotiations seemed headed for stalemate, Dana insisted on another conference on Wednesday, and they finally reached a settlement.

The terms were laid before the workers that evening, and the union's business agent, Thomas Ramsey, urged the workers to accept the pact. They did, almost unanimously, by a standing vot The workers, having grown fond of "Charley" Dana, called for him to speak. "I felt it was a privilege to work to provide jobs for you," he said. "There is only one thing really worth while abc an organization and that is its men and women. Stone and mortar, bricks and machinery can be duplicated, but the workers cannot."

At the end of his speech, Charles Dana was cheered. But the strike left an indelible mark on hin

History

SECTION 2: Coming of Age

SCENE SETTER

Dana is famous for the Dana Style, and for good reason. But sometimes when our company get talked about, too much attention gets paid to how we do things and not enough to what we achieve. The bottom line of the Dana Style is that it works, and it works because it's not a doctri but an attitude -- a flexible, progressive way of empowering people to get things done.

Although the Dana Style wasn't fully articulated until the 1970s, it owes a considerable debt to th leadership of Charles Dana. Hating paperwork, Dana was committed to education, employee benefits and idea-sharing. He liked keeping plants to a workable size, and locating them near customers. He also prized growth and success -- of which the company enjoyed so much under his leadership, it was renamed Dana Corporation in his honor in 1946.

But although aspects of the modern Dana style were already present, much of the substance of today's company still had to be integrated. Dana was relatively small, with annual sales of $108 million, and relied too heavily on a single segment of the automotive industry -- original equipme for passenger cars.

1st vignette

A new era

For fifteen long years of depression and war, the civilian car market had been lifeless. Yet millio of cars had fallen apart during this time, and millions more were held together only by ingenuity prayer. Demand was ready to explode.

It did not happen immediately. For two years, while veterans demobbed into civilian life, people hung on to their money. Automobile companies used the lull well. They retooled their factories a designed a generation of stylish, aerodynamic and powerful vehicles.

As these came onto the market, confidence soared. There was talk of jet cars, even atomic cars Customers began to demand automatic transmission, power steering, power brakes and other accessories. Tail fins and bubble tops grew popular, as imagination seemed the only boundary progress. The 1949 Nash even had a folding bed in the back seat.

Cars were fun again, and fun was big business.

At the same time, the pioneers and long-time leaders of the automotive world were retiring, and new generation was coming to the fore. At Dana, this shift began in 1949 when Charles Dana w appointed Chairman of the Board, and R.E. Carpenter succeeded him as President. Then, in 1952, Jack Martin was recruited from Firestone, and in 1954 he was appointed President.

From the start, Martin recognized that Dana needed to prepare leaders for the future. He recruit a series of young, talented people, then encouraged them to form "discussion groups" to study

Dana's management style and plan for the future.

Dana had much to be proud of. The company's products were first class, their quality was high and their people were dedicated. But Dana also had some problems, a legacy of its centralized structure. Too much power and information was concentrated in the hands of a few company leaders. Communications between people were poor, and the decision-making process had become creakingly slow.

Little effort was put into building relationships with investment banks or the financial press. Advertising and corporate identity programs were undervalued. Purse-strings were tight, and growth opportunities were being missed, both in the United States and abroad.

Most alarmingly, Dana relied too heavily on original equipment for the North American car mark a high-volume, low-margin series of non-proprietary products that anyone could make. That wa fine in the boom that followed the Korean War, because there was plenty of work for everyone.

But the question was, what would happen in a downturn?

From Spicer to Dana

The acquisition of Auburn Clutch in 1946 created a formidable line-up for Spicer. Formidable, bu confusing. Because Spicer, Salisbury, Parish, Brown-Lipe, Sheldon and Auburn were all trade-names owned by the Spicer Corporation, the distinction between Spicer the brand and Spicer th corporation was becoming blurred. The company therefore decided to rename itself, and in recognition of his 32 years of service, Charles Dana's family name was chosen.

The Spicer name did not disappear. It remained where Clarence Spicer would have wanted it -- on the products that he had designed and made famous, still manufactured to the quality he hac insisted on.

Jack Martin

John E. (Jack) Martin was appointed Executive Vice President of the Dana Corporation on Marc 27, 1952. Formerly President of the Firestone Steel Products Company of Akron Ohio, Martin w a charismatic and confident figure who saw huge potential in the Dana Corporation. In 1954 he succeeded R.E. Carpenter as Dana President, and as Chairman of the Board Charles Dana visited Toledo less and less often over the years, Martin became the effective leader of the Dan Corporation.

Martin recognized the need for future management, hiring young people and giving them room t grow. He was also dedicated to developing new, proprietary products that offered customers a material advantage, then making the most out of those products. Under his stewardship, Dana grew into a world leading company with interests in distribution, in non-automotive markets, and overseas. Martin was appointed Dana Chairman in 1967, a position he held until his retirement i 1972.

The "modern" corporation

In 1923, Alfred Sloan was appointed President of a sprawling General Motors. Where William C Durant had given GM its diversity and size, Sloan proceeded to give it shape and purpose. He divisionalized operations, then decentralized power. Armed with his creeds "a car for every purs and purpose" and "give a man a clearcut job and let him do it," he built General Motors into the world's leading car company -- and in the process created the template for the "modern" corporation.

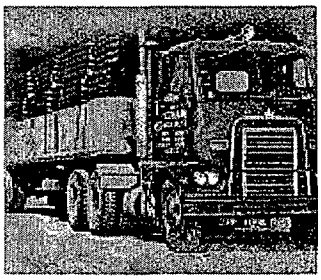
Even as General Motors flourished, Ford seemed headed for ruin. In the early 1940s, Ford was overtaken in sales by Chrysler, and was losing millions of dollars a month. All power was concentrated in Henry Ford's hands; all decision making went through his office. Only one set o figures existed for the entire operation, making serious cost control impossible. Worse, as Henr

Ford's health was failing, his son Edsel Ford tragically died of stomach cancer in 1943.

Henry Ford II, grandson of the founder, was released by the Navy to manage the company. He was 27 years old, had no real business experience and faced a company that was losing million of dollars every month. Using General Motors as a model, he divisionalized his company, decentralized decision-making and appointed a generation of managers from General Motors ai the Defense Department. This group, known as the "Ford Whiz Kids," applied their procurement and cost control skills to Ford with immediate results. By the end of the decade, Ford had taken second place back from Chrysler, and returned to profitability.

2nd vignette

Diversification



Detroit, in the 1950s, and the new breed of financially smart managers were examining ways to cut their costs and increase business. The Big Three had traditionally concentrated on design and assembly, but now they could see no reason why they shouldn't start manufacturing more of their car parts as well, particularly where technology was available, process was straightforward and volume was high. They expanded their in-house capacity, and used their traditional suppliers like Dana to meet extra demand while the times were good.

But in 1957 and 1958, the American economy suffered a recession. Demand for passenger cars plummeted and Dana's sales fell by over a quarter. It could have been a critical blow to morale a Dana. Instead, it became a springboard to even greater success.

First item on the agenda was to reduce Dana's reliance on original equipment for passenger cai which, before the downturn, accounted for 65 percent of sales. A strategy of controlled expansic was developed, through which Dana diversified its product range, customers and markets, while not stepping outside its areas of expertise.

Dana people strengthened their relationships with companies like GMC, Ford Truck, Kaiser, Mack, International Harvester and Paccar -- manufacturers of trucks and other heavy duty vehicles, who appreciated Dana's rugged, high-technology product.

At the same time, Dana dedicated greater resources to new product development. Heavy investment in engineering and chemical-testing facilities enabled Dana people to make major technological breakthroughs, such as Constant Velocity joints and Powr-Lok axles. Dana people talked with client engineers to find out their concerns and ambitions, then joined forces to find solutions. Dana people also began looking outside the automotive original-equipment industry -- establishing a presence in the replacement part market, and making and selling consumer products such as boat trailers and golf carts.

There was one other area of major growth. In 1957, Dana had acquired an interest in Albarus of Brazil. Dana was going overseas.

History of trucking

At the same time as pioneers in the car industry were changing the way people got places, trucking companies like longtime Dana clients Mack and Diamond T were transforming the way trade was done.

The earliest trucks were open wagons that offered no protection from the elements, poor reliability, and solid rubber tires that bumped and banged over pot-holed roads. But as design, technology and roads improved, so the industry progressed. In 1908, there were just 4,000 trucl in the United States. By 1914, there were 300,000. And in 1918, as veterans wise to the benefit of trucking returned from Europe, the number reached 1,000,000.

Developments were swift. Efficient loading and unloading was enabled by the growing popularit of full-trailers from 1915, and semi-trailers from 1920. In 1917 both pneumatic tires and tandem axle suspenders were introduced, improving comfort and load capacity. Safety was greatly enhanced when power brakes were developed during the 1920s. And in 1935, the first cab-over truck was built, cutting the tractor's length and allowing greater payloads.

However, the industry was still chaotic and unregulated, until the American Trucking Associatior were formed in the 1930s, establishing minimum wages and maximum labor hours. After World War II, the interstate highways improved on an already efficient road system, and the trucking industry, long since integral to trade, became absolutely vital.

The pond behind the shed

Like every progressive company, Dana had its new-product disasters. Launched with a big splash, these seemingly brilliant ideas just didn't float, and were finally thrown away out of sight, rusting in the pond behind the shed.

Dana's effort to expand into consumer products was a simple concept -- Dana was already manufacturing a significant proportion of the containers, golf carts and boat trailers that were being sold under other company names. All Dana needed to do was put its name on its product and sell directly to the consumer. What could go wrong?

Plenty.

First, Dana went in so whole-heartedly that their products were over-engineered. Secondly, consumer products required sophisticated marketing and distribution skills, which Dana lacked. Finally, Dana's customers protested that if Dana became a competitor, they would no longer buy their supplies from it. Chastened, Dana returned to the business it knew best.

Navistar

Navistar (formerly International Harvester) was established in 1901 as a conglomeration of agricultural equipment companies. In 1907, Navistar expanded into truck production with the "Auto-Wagon," and in November 1914, Navistar submitted its first order for Spicer Universal Joints.

A Fort Wayne plant was opened in 1923 for the production of heavy duty trucks, and an Indianapolis plant was erected a few years later for the production of truck engines. In 1928, it began to produce a 4-cylinder heavy truck, and by 1937 it was the top medium and heavy truck producer in the United States. In 1986, International Harvester renamed itself Navistar. And in 1989, working closely with Dana, Navistar developed a 9-speed heavy truck transmission.

3rd vignette

The multinational company

Dana legend has it that once, when Winston Churchill was touring America, raising funds for wa bonds, he met Charles Dana while staying at the Toledo Club. The story goes that the two leade met and stayed up all night, arguing passionately about the future of Great Britain, which Charle Dana believed was fated to an irreversible political and economic demise.

In 1954 Dana ended thirty years of direct transatlantic association by selling his shares of the British company Hardy Spicer. Ironically, when America had been isolationist, Dana had expanded overseas; and now that America was expanding overseas, Dana decided to retrench.

The decision proved ill-timed.

In 1950, the United States produced some 80 percent of the world's trucks, cars and buses. Ov

the following two decades, that share slipped to 35 percent. Dana needed to go abroad, or lose out.

The automotive industry that was emerging around the world owed much to the trade restriction of World War II, which had starved people in regions like South America of the replacement par they needed for their cars. Local entrepreneurs, like Esteban Daneri in Argentina, and Ricardo Albarus in Brazil, began manufacturing the parts themselves, but technology was limited, and quality needed to be improved.

In the 1950s, piston ring manufacturer E. Daneri and U-joint kit maker Albarus wanted to expan into the original equipment market, but it did not prove easy. Their technology was limited and their quality was not sufficient for people like Ford, General Motors and Kaiser who were shippir in parts from the United States and assembling them locally.

Then new trade laws were passed, encouraging the use of local parts. Albarus and E. Daneri recognized that to take advantage of the opportunity they needed access to new equipment anc well-known brand name. While E. Daneri forged an alliance with Perfect Circle, Albarus was introduced to Dana by Ford. In 1954, Dana granted Albarus a Technical Assistance License, an in 1957 Dana traded manufacturing equipment for a 30 percent stake in the Brazilian company.

Instead of trying to run the business from Toledo, Dana trusted their new partner to know about their way around Brazilian business. Autonomous decision making was encouraged, local financing was used for expansion, and costs were kept to a minimum.

This hands-off policy worked well, and both Albarus and E. Daneri expanded rapidly and profitably. Dana started other ventures like Danargen, then moved to Venezuela and Columbia. Soon Dana produced almost their entire range of products in South America. Meanwhile, Dana looked to establish a presence in the world's other major markets. In 1972, Dana established up Spicer drive-shaft plant in Korea, and later in the 1970s Dana took an interest in two English companies, Turner Transmission and Brown Brothers.

Turner was a manufacturing company that contributed to Dana's traditional markets, but Brown Brothers was something new. Brown Brothers was in distribution, and the aftermarket.

The VW Beetle, and Reinz

In 1939, due to recession and war, the number of foreign cars imported into the United States w just 298. By 1959, that number had swelled to 614,131. Led by the Volkswagon Beetle, Europe manufacturers were building dealer networks and customer goodwill across America. They were also earning a reputation for engineering quality and dedicated service.

Reinz, a supplier to Volkswagon and the other leading European car companies, symbolized the European attitude. Demonstrating a tremendous willingness to work with customers, Reinz established an application engineering department to ensure that their products exactly fitted ea customer's needs. Aware of the global nature of the automotive industry, Reinz established facilities in India, Japan, and the United States. Yet costs were kept low, and Reinz's product quality and dedication to service remained high.

Dana Industrial

In 1969, a subtle shift in Dana's stated goal acknowledged the opportunities being created by Dana's engineering and manufacturing know-how. Instead of being a purely automotive compar Dana would expand its horizons to include: "The worldwide design and manufacture of systems for the transmission and control of power."

At first most industrial sales were of equipment evolved through Dana's traditional operations, b soon Dana Industrial was designing equipment specially for aviation, marine, mining, explorati and agriculture customers.

C.V. Joints

In 1959 Dana acquired Rzeppa, a manufacturer of constant velocity (C-V) joints to the off-highw market. Two years later, while working with Ford on a small car (the Cardinal), Dana people designed and patented a C-V joint suitable for small cars. But this was before the time of the oil crisis, and small cars were small business in the United States. Ford abandoned the project, an Dana stopped development of their C-V Joint.

But small cars grew hugely fashionable in Europe and South America, and the C.V. joint industr integral to small car technology, just grew and grew. Although too late to make a significant imp in Europe, Dana established a South American C.V. manufacturing joint venture with GKN. The partnership proved enormously successful, and became one of Dana South America's most profitable operations.

Divisionalization and the aftermarket

When Spicer had moved to Toledo in 1928, annual sales had been $10 million. Charles Dana, i a fit of optimism, said that he could see sales reaching as high as $12 or 13 million a year. In fa in 1964, he saw company sales top $364 million.

Dana was growing big.

It was not all good news. Sheer size threatened Dana's ability to provide the top quality service prided itself upon, while Dana people were being stifled by the unwieldy, increasingly bureaucra corporate structure. On January 1, 1964, Dana reorganized into seven separately managed divisions.

Each division was responsible for engineering, manufacturing and selling their own product line Five of the seven divisions represented Dana's traditional original equipment manufacturing bas -- but there were also an International Division and the Perfect Circle Corporation.

Dana's acquisitions of Perfect Circle in 1963 and Victor Gaskets in 1966 demonstrated Dana's strategy of diversification within the industry Dana knew best. Both Perfect Circle and Victor wer well known distributors of replacement parts to the aftermarket, and both had extensive oversea operations.

The two companies also immediately gave Dana access to the $4.5 billion replacement parts market, where Dana had traditionally lacked the distribution skills and network necessary to mal a real impact. In November 1964, Dana amalgamated its distribution businesses into the Dana Parts Company. Main lines included Monmouth clutches, Triplex pistons, Perfect Circle piston rings, Perfect Circle engine and chassis parts, Allied engine and chassis parts, and Spicer products (such as transmissions, transfer cases, PTOs and propeller shafts).

With more than 100 salespeople in the field, the Dana Parts Company used marketing and sale programs to promote its products, with considerable success. By 1967, the aftermarket already accounted for 18 percent of Dana's sales.

The divisions

The 1964 divisionalization split Dana into seven parallel operations. Along with the International Division and Perfect Circle Corporation, five manufacturing divisions were created -- Spicer, Salisbury, Parish, Atlas and T&G.

Spicer was responsible for truck transmissions, transfer cases, propeller shafts, Power Take Off and C-V and universal joints. Salisbury made clutches, gear boxes, slip differentials, and front a rear axles. Parish was the world's largest producer of heat-treated heavy-duty frames. Atlas ma forgings, connecting rods, cam shafts and other automotive parts. T&G (Transmission & Gear), acquired by Dana in 1961, designed and manufactured automatic and mechanical transmission

Dana Distribution Europe

In 1964, Brown Brothers was experimenting with a new sales strategy. Most its fifty five outlets were still Main Branches, situated in prestigious town center sites, these flagship retail outlets offered everything from supplies to the motor trade to radio and electrical goods.

But twenty-one Brown Brother's branches were now Specialized Service Branches (SSB's), out-of-town depots concentrating on service to the motor trade alone. To Brown Brother's surprise, profitability at the SSB's was far superior to the main branches.

In 1977, in a move symbolic of the shift from town center to out-of-town locations, Brown Brothe left its Central London headquarters for Harlow. With a Distribution Center established at Milton Keynes, Brown Brother's era of specialized distribution had truly begun.

Hayes Dana

In 1960, morale at Hayes Steel, Dana's majority-owned Canadian affiliate, was at an all time low. Over-staffed, over-diversified and wi six years of successive losses, Hayes Steel was such a drain on Dana resources that Dana CEO Jack Martin decided to give it one last chance to get its act together, or close down.

Martin knew it was a tough task -- which made it an ideal posting to test out the new generation of Dana people. He duly sent up a your manager named Ren McPherson, who had done exciting things at Auburn Clutch, and gave him two years to turn Hayes Steel around

McPherson arrived in Canada enthusiastic to revitalize the business, but at first, people at Haye Dana were unimpressed with McPherson's bold ideas. He was just a kid who didn't understand how things were done in Canada. Sure, things were bad, but they had been bad before and Hayes Steel had always pulled through.

A glance at the history of the company showed that.

Founded in St. Catherines in 1922 by C.B. Hayes as Hayes Wheel Company of Canada Ltd., Hayes produced wheels for Durant, Essex, Willys and Grey-Dort, Chrysler and Chevrolet. Desp early success, the company faced financial trouble in 1927. Charles Dana acquired a small stak in the company, whose name was changed to Hayes Wheel & Forgings Ltd. Hayes launched a drive for new products and markets, and it started to manufacture Spicer universal joints, drill bi grinding balls and other mining products.

In 1936, the Depression forced a second reorganization. Re-christened Hayes Steel Products, t company revived and played its role in the Allied war effort, supplying parts for airplanes, tanks and other military hardware. Then, after good times in the early fifties, the company had fallen ir another downturn. Business was cyclical, Hayes Steel people figured, and there was nothing to but shrug and wait it out.

But McPherson had other ideas. Determined to try out some of the Discussion Group ideas fron nearly a decade before, he told his new colleagues about their two-year deadline and suggeste that if they wanted to be around after that, they start solving their problems at once. Hearing grumbles that he was too new to know his job, McPherson moved his top twenty people into ne jobs, so that they were all learning together. Forty-two percent of jobs were cut. Non-automotive operations were sold or closed, causing total sales to plummet. Broken machines were chucked out, and the equipment was reorganized with the help and suggestions of the people who worke them. People took to meeting Saturday afternoons in a local restaurant, Lorenzo's Spaghetti House, to trade ideas and discuss improvements that were put into practice with a tremendous impact on costs and quality.

As the Canadian economy began to boom, work shifts at Hayes started to compete with each

other to see who could produce the best and the most. Salespeople got back on the road, enthusiastic about their product. Demand surged and profits returned, as the sluggish everyday grind was transformed into an exciting chance to achieve.

In 1963, Gerry Mitchell took over as Hayes Steel president and completed the remarkable comeback. By 1966, Dana acquired complete control of Hayes Steel, and rechristened it Hayes Dana. It was the beginning of the new Dana Style.

Ren McPherson

Ren McPherson, Harvard MBA and World War II bomber pilot, joined Dana in 1952 as a sales engineer for Auburn Clutch. Always enthusiastic about Dana's future, he was a key member of t discussion groups. Appointed to Hayes Steel in 1960, he returned to Toledo in 1963, became President of Dana in 1968 and Chairman and CEO in 1972.

"The single most unused asset in our country today," McPherson believed, "is the ability, the knowledge, and the ideas we have but don't use or haven't tapped because of the walls we buil between people." He took this message on the road, visiting Dana plants around the world. Realizing that the "expert in any job is the person performing it," he asked Dana people what th thought, listened intently to their answers -- then acted upon them.

McPherson was committed to profit sharing and stock purchase plans, and took every opportun to encourage Dana people to participate fully in the life of their company. Retiring as Dana CEO 1979, McPherson pursued his passion for education as Dean of Stanford University.

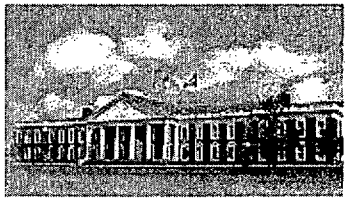
The Scanlon Plan

Conceived in 1938 by Joseph Scanlon, union president at a small Ohio company, the Scanlon plan differed from most incentive schemes in that it rewarded everyone for productivity improvements, whoever was responsible for them. Designed to foster a sense of teamwork and enthusiasm, the plan certainly worked for Scanlon, helping save his company from bankruptcy.

Dana became the first major U.S. corporation to encourage the plan, and in 1969, Perfect Circle plant at St. Thomas, Ontario became the first Dana company to try it. Voted in by more than six out of every seven people working at plant, the experiment worked well, and the plan was re-adopted a year later by an even greater majority.

As more and more Dana plants voted in the Scanlon Plan, so it was refined and adapted to suit Dana's belief that the achievement of common goals is best achieved through the participation o all.

Dorr Street



By 1967, Dana was barely recognizable as the compact company that had come to Toledo nearly forty years earlier. Yet although Dana had become a world class corporation with seven autonomous divisions and annual sales of over $500 million, Dana's worldwide operations were still headquartered alongside Spicer manufacturing operations in the increasingly cramped and inappropriate Bennett Road offices.

While most people agreed that Dana needed a new flagship headquarters to reflect Dana's size diversity and prosperity, there was still some debate about where it should be located. In the en Dana decided not to build a standard town center high rise, but to take the opportunity to build a world headquarters that would suit the emerging Dana style -- a building that all Dana people could look to with pride, as equal partners.

Dana therefore acquired eighty four acres of suburban, greenfield land on Dorr Street, opposite Toledo's famous Inverness Country Club, and began to design the new headquarters.

The 84 acres of undeveloped land at Dorr Street was an empty sheet of paper that offered Dana people an opportunity to address a growing problem. Despite the divisionalization, Dana simply had too many people at corporate level. Instead of improving the decision-making process, over staffing meant that responsibilities had became blurred.

With the move to Dorr Street, then, layers of corporate management were cut out, and people a Dana plants were encouraged to supervise themselves. Twenty inches of Dana policy and procedure manuals were dumped in the trash can and replaced with a single sheet of paper tha articulated Dana's ambitions, attitudes, ideas and philosophy.

A closed-circuit information system was developed and installed in the new headquarters. Inste of having a stack of unreadable, out of date reports on their desks, decision-makers now had a screen from which they could view up-to-the-minute production and financial figures. More detailed information was available behind the doors of the company's "War Room."

As part of the campaign to give Dana people more autonomy and responsibility, a new management reporting system was introduced. Discussion and approval of budgets for all Dana operations was condensed into one week, when emphasis was placed on trends rather than numbers. It was an opportunity for managers to report the results of the previous year, and present their plans and forecasts for the future. Managers were told not to prepare reams of paper, but simply to be prepared to answer any questions. The climax of Hell Week was a mass meeting held in "The Pit," a multi-tiered auditorium modeled after a lecture room at Harvard Business School. Known as the Ottawa meeting, it was an opportunity for Dana leaders to address their managers, reward outstanding performance, encourage internal competition and build team spirit.

Along with the Pit, Dorr Street was built with one other feature not found at too many corporate headquarters. A University.

Stock purchase plans

In the early 1960s, Dana people were encouraged for the first time to buy Dana stock. And as their responses increased, the program was intensified. Owning Dana stock made Dana people concerned with Dana's progress, and showed their interest in the Dana's future.

In 1969, the first corporate-wide Employee Stock Purchase Plan was announced, through which 28 percent of Dana people signed up for a payroll-deduction purchase of Dana stock. Dana assumed all brokerage and administration costs, and plant managers handed out stock certificates in person twice a year. When the program started, two percent of Dana people owne stock. By 1980, 80 percent of Dana people owned Dana stock.

Inverness, and 1979 US Open advertising.

The Inverness Club of Toledo, site of the 1920 US Open, was chosen as the site of the 1979 US Open. Frank Voss, Dana's Director of Communications, was appointed General Chairman of the event, and Dana marked the historic occasion by launching a series of print and television corporate advertisements.

These advertisements were the first time Dana had shown the public the Dana Style. Using Dan adages like "Talk Back To The Boss" and "The Only Dumb Questions Are The Ones You Don't Ask," the campaign attracted attention throughout the tournament (which, incidentally, was won Hale Irwin).

Dana University

The Dana Style gave Dana people the power, desire, tools, and opportunity to contribute to the success of their company.

Power was coming from the new autonomous operating style, which acknowledged Dana peopl as the experts at what they did. Desire was being built through schemes like the Stock Purchas Plan and the Scanlon Plan, which encouraged Dana people to own a piece of their rock. Tools were being provided through investment in new products, plant and equipment. Opportunity wa being created through a commitment to promote from within.

One element was still required -- the training and education that would give Dana people the ski to maximize their contribution to their company.

Education was nothing new at Dana. In the 1920s, Charles Dana introduced management seminars, and many of the resources of the Foundation he founded were dedicated to educatio In 1948, Dana training programs were organized, and an Industrial Supervision Institute was established with the University of Toledo to educate Dana people for prospective supervisory positions.

But Dana's education program was transformed in 1966, when Dana worked closely with faculty members at the Harvard Graduate School, Hillsdale College and Earlham College. Together the established a range of programs specifically designed to help Dana people achieve their corporate goals.

In 1969, Dana University was founded, offering courses in management, sales, cost control and other subjects. Taught by both professional educators and qualified Dana people, courses often ran 12 to 14 hours a day for a week. "Dana U" met with great success. Programs were expande and curriculums were adapted according to demand. Like all Dana operations, Dana U was self financing. Tuition and travel costs were paid for by the divisions for which the students worked, and students were expected to return from their courses with skills that would improve their wor

In 1978, the Dana U Technical School facility was completed at Ottawa Lake, Michigan. Design to increase Dana people's understanding of and control over the physical processes of manufacturing, the Technical Center included a 1.75-mile, three-lane test track and 3.5 miles of off-highway surface.

The Dana Foundation

Charles Dana was a substantial benefactor of education as early as 1950, when he established 1950 the Dana Foundation to help those "who accept and discharge responsibility for a better future." Concentrating on education, health, welfare and religion, the Dana Foundation philosop was to provide substantial funds for organizations with plans for growth. The Dana Foundation contributions would then act as a stimulus to challenge other donors. Early gifts helped build a Law Library at Stetson University, accommodations at Berry College and a science building at Indiana Technical College. In 1957, the Dana Foundation presented a gift to the Engineering Science Development Fund at the University of Toledo.

Later, Dana Corporation established its own foundation. Using a matching gift program, the Dar Corporation Foundation continued Dana's tradition of supporting education. The program was designed "to encourage individual financial support of educational institutions," by matching any donations made by Dana people.

Hillsdale College

Hillsdale College, Michigan, was an ideal partner in developing Dana's management skills. Conveniently located in the heart of motor country, Hillsdale made it a policy never to accept government subsidies, and to finance itself entirely from private funds. As a consequence of this Hillsdale people understood the pressures and dynamics of business, and recognized that any education programs would have to provide Dana people with a tangible benefit.

Called the Dana-Hillsdale Management development Program, each course was open to 16 or Dana people. In place of lectures, everyone engaged in managed discussions. Leadership skills were learned by participation and practice, not by discourse. Communication, perception,

management philosophy, delegation and motivation were all covered, as were the conduct of meetings, public speaking, problem analysis and decision making. Headed by Hillsdale Preside J. Donald Phillips and Mike Kolivosky, the program had a dramatic impact on many Dana peopl

Beating the cycle

In 1979, the economy was booming, the automotive market was growing, and Dana was outperforming both. Dana's investments in education, communication and diversification were paying off. New plants were being opened worldwide, and Dana employed 30,000 people in the United States alone. Total sales were at $2.8 billion, an all-time high. The only problem was producing enough to meet demand.

Then the bottom fell out of the automotive industry. Demand for Dana's core product lines fell b half. Dana people fought for all the business they could get, becoming market-oriented rather th product-oriented. Productivity and quality at many Dana plants rose. When European manufacturers made deeper inroads into the North American heavy truck market, Dana responded by designing clutch models for Renault, Volvo and Hino trucks.

But still, plants were closed and jobs lost. Dana did what it could to relocate its people to other divisions, while helping others through outplacement programs. Dana also took opportunities fo growth whenever possible, acquiring Boston Industrial Products and Gresen in 1981.

New CEO Gerry Mitchell and President Stan Gustafson undertook a furious schedule of visiting Dana plants. Docking bays were transformed into conference halls, equipped with chairs for all Dana people, so that they could ask questions and be kept informed. Times were tough, but Da people proved their mettle. Through the recession, while many American automotive companie reported staggering losses, Dana stayed in the black.

The economy began to revive in 1983, and Dana determined to make itself less vulnerable to future recessions by becoming invaluable to customers. That meant designing proprietary products with a distinct advantage, then delivering them with unmatched service.

A capital spending initiative was launched in 1984, with a record investment of $200 million. In t same year, Project 90 was introduced, as Dana people committed to become leaders in technology, quality and low production costs. Patent applications reached an all-time high. Total Quality programs set ambitious goals for Dana people, while Dana placed greater emphasis on education and training than ever before.

The thrust to diversify continued. Acquisitions were made overseas and in the aftermarket, whil the Venture Group took Dana into leasing, real estate, building systems, insurance and savings loans. Meanwhile, Dana continued to run lean. In place of the twelve layers of management tha had been standard in 1970, there were now just five or six. And the number of supervisory positions was constantly being pared.

In place of the large, centralized manufacturing facilities, Dana kept plants small, flexible and technically advanced, and located them near customers. Excellence in Manufacturing and Excellence in Distribution objectives were introduced, emphasizing continuous improvement in quality and productivity. Just In Time delivery schedules were introduced, so that Dana custome wouldn't need to warehouse expensive inventory.

The results of these programs spoke from themselves, as Dana sales rose from $2.5 billion in 1980 to $4.85 billion in 1989.

Gerry Mitchell

Gerald B. Mitchell would be the perfect example of the American dream -- if he weren't Canadia After joining Hayes as a machine operator in 1944, his infectious enthusiasm marked him out fo rapid advancement. Appointed President of Hayes Steel in 1963, he moved to Toledo in 1972, a an executive Vice President.

Appointed CEO of Dana in 1979, Mitchell's energy helped Dana through the recession, and his vision enabled Dana to make the most of the subsequent boom. His dedication to competitive products, quality control and customer service encouraged Dana to keep its plant sizes small, a adopt Just in Time policies long before they became popular.

Mitchell was dedicated to the belief that people were Dana's most important asset. He visited some 50 Dana plants every year, and once spent 36 hours talking to every single one of 1,800 employees at a North Carolina plant.

Nothing Venture, Nothing Lose

The General Ohio Savings & Loan Corporation (renamed Diamond Savings & Loan) was acquir by Dana in 1981 as an extension of the Venture Group, Dana's shelter & security division. The Venture Group offered services to Dana operations, but most of its business, which included insurance, reinsurance, leasing and personal finance, was done outside of Dana.

The troubles of the whole savings & loan industry became more and more apparant through the 1980s, finally provoking a national crisis. Biting the bullet in typical fashion, Dana made provisio against reserves and sold Diamond Savings & Loan's assets, as well as its mortgage banking business.

Gresen

Founded in St. Paul, Minnesota, in 1945 by Gordon Jensen and Leo Grzesowski, Gresen's first major order was for 2,000 pump-and-valve combinations for Sears, Roebuck front-end loaders. 1947, the company introduced the Model C Power Pack, which both improved the pump-valve combinations and represented the start of Gresen's hydraulic business. The Model C was later adapted into the Model KJ, a three-gear hydraulic pump designed for power take-off application The KJ also concentrated on separate hydraulic components, leaving pump-valve combinations the competition.

In 1948, Gresen extended its services to include bronze agricultural spraying pumps. And as business expanded, so did the company's need for space. In 1957, it built a new facility. But tho weren't the only transformations the company experienced. In 1963, Gresen was bought by Tor Corporation, and in 1981 it was acquired by Dana.

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People Finding A Better Way®

History

SECTION 3: Moving into the Future

SCENE SETTER

The key to continuing prosperity is to move with the times. History is littered with the bones of those who tried to prevent progress, and failed. As the world leader in steam propulsion during t 1860s, for example, Britain might have expected to pioneer many of the automotive advances th in fact were made on continental Europe and in America over the following decades. But British railroad and stage-coach companies recognized that the automobile was a threat to their future, and lobbied for the notorious red flag laws. These prohibitive laws, which insisted every self-propelled vehicle be preceded by a pedestrian waving a red flag, were on the statute books for : years. By the time they were repealed, Britain had missed a huge opportunity.

In America, on the other hand, threatened transport companies became automobile companies, adapting their existing know-how to the challenges of the new industry. As a result, the America automotive industry boomed.

The world's going to change, whatever we do. The key is to be prepared for that change, whenever and however it comes. The electric car, for example, has been debated and promotec for more than a hundred years. But never before has a government insisted on zero emissions, California's has. Similarly, the greatest market in the world within the next thirty years may well prove to be in the Asia-Pacific rim, rather than in North America. We have to be ready for these and other changes. We have to embrace them, and work with them, before others do.

Companies that don't progress, that simply watch their products or service mentalities become obsolete, will themselves soon become obsolete. That won't happen at Dana. We're not invincit but we're strong. I say this with confidence, because strength comes from people, and Dana people are the best.

Fall and rise

In the 1960s and 1970s, when the Dana Style first emerged, some skeptics believed that giving people responsibility and power was fine in theory, but that it couldn't actually work for the botto line. Now barely a week passes without some self-appointed management guru"discovering" wt Dana has been proving for decades.

It's people that count. Numbers are just there to be counted.

The incontrovertible truth of this was finally brought home to the leaders of the American automotive industry by the heavy losses they incurred through the recession of the early 1990s. For too many years, the Big Three had been competing against each other, focusing on annual model changes and horsepower, while ignoring the trend toward small cars.

At the same time the dollar was growing too strong against the German mark and Japanese yer Imports were consequently getting cheaper and cheaper, until finally they were out-performing domestic cars on quality, design and cost. Things got so bad in the United States that sales wer

being made on habit and loyalty, not merit.

Forgetting that quality controls had been introduced by Cadillac, Big Three managers shrugged their problems away. Instead of trying to improve their own processes, they simply muttered tha the strict company ethic and dedication to quality they saw in Japan and Germany could not be imposed on their work-force.

Then Honda and Toyota opened up transplant facilities in the United States. Using American labor, they still they out-performed the Big Three. It was time to think again.

When Detroit began to study its Japanese competition, it got a surprise. Instead of unthinking, soulless hierarchies, it found groups of enthusiasts motivated by a desire to do well -- people proud of their company and their product, and excited by the opportunity to contribute.

Detroit had been imposing its ideas from the top down. Now, it gave its front-line people power and responsibility, decentralizing decision-making and making its people want to achieve. Detro boomed, producing exciting, reliable automobiles that sold at competitive prices and earned the Big Three the quality reputation they had let slide. Confidence rose again, and sales and profits soared.

The irony was that Detroit hadn't needed to look to Japan for the secret of lean production. It wa on display at Dana, all the while.

The Chrysler big dipper

In July 1993, Robert Eaton, Chairman and CEO of Chrysler, gathered together 500 of his top people and announced that the company had just posted the best quarter-results in a decade. H read out loud extracts from newspaper articles, praising the remarkable turnaround at Chrysler. Eaton then informed his people that each of the articles was about past comebacks. They had appeared in 1956, 1965, 1976 and 1983.

Death-bed recovery was becoming a habit at Chrysler, and Eaton was determined to break it."I got a better idea," he told his people."Let's stop getting sick."

Dana Credit Corporation

With the building of new, dedicated offices at the Dorr Street campus, Dana demonstrated its lo term commitment to the Dana Credit Corporation (DCC). The only part of the Venture Group to make an outstanding contribution to Dana, DCC celebrated 1994 by finally selling all discontinu Venture Group assets and winning an unprecedented ninth Dana Gold Star for performance.

By 1995 DCC had become one of the largest leasing companies in the United States. Including operations in Canada and England, DCC had over $1 billion in assets and 450 people. Its prima business was large ticket transactions, whereby DCC bought properties such as Bell Atlantic's H or a KLM 747, and leased them back to their operators. DCC also engaged in joint ventures, sm ticket lease financing, off-lease equipment disposal, asset management and real estate service

Dana, 1990s Style

The recession that hit the automotive world so hard in the early 1990s was inevitably felt by Dar even though Dana was better prepared than most for a downturn. Dana's overseas and aftermarket sales helped buffer the drop in demand for original equipment, as did Dana's dedication to continuous improvement, lean production, inventory control, just-in-time delivery, idea sharing and total quality assurance.

Southwood J. Morcott, named CEO in August 1989, led a new team of Dana people into the 1990s. One of the teams first acts was to devise and publish a ten-year mission strategy titled Dana 2000, which set out five clear targets for Dana people to hit by the end of the millennium. Along with Dana 2000, a fresh continuous improvement scheme was implemented, asking each

Dana's people to come up with two ideas a month to improve the way Dana did business.

As a result of these initiatives and the endeavors of Dana people, Dana reported operating profi each year of the downturn (although a change in pension accounting procedure led to a reporte loss in 1992). Dana put its financial stability to good effect, continuing to acquire companies worldwide, develop new products, and invest in process and service technology, preparing for better times.

In recognition of Dana people's achievements, and in keeping with Dana's philosophy, Dana adopted a new corporate slogan, which articulated the central principle of the Dana Style. It stated, simply:

People Finding A Better Way.

In 1992, the North American original equipment automotive market bottomed out and began to recover. A surge in the popularity of Sport Utility Vehicles, the growth of modular systems and a string of acquisitions (made in accordance with Dana 2000 strategies) enabled Dana to post a series of impressive results. In 1993 sales rose by almost $600 million. In 1994, sales rose by a astonishing $1.1 billion -- an increase greater than Dana's total 1974 sales. Profits rose even faster. From $56 million in 1992, they rose to $129 million in 1993 and $228 million in 1994.

As in previous booms, the problem was how to meet demand by improving new plants and productivity. Dana built green field facilities and invested heavily in equipment and recruitment. Dana made an equal investment in its people through training and education.

But Dana was not only growing larger, it was also growing complex. As the largest independent supplier of vehicular components in North America and the third largest in the world, Dana's hac more than forty proprietary brand names supplying drive-train, engine, chassis, fluid power, industrial components, parts distribution and leasing. Dana had some brands that many customers didn't realize belonged to Dana. As a result, opportunities to leverage and enhance Dana's reputation were being missed.

In 1995, therefore, Dana cut the number of proprietary brand names and standardized the use c the Dana name and Dana Diamond. Only the core brand names, responsible for 90 percent of Dana sales, remained untouched.

New product development

New products are like babies. At times it seems they're nothing but trouble, taking up all our tim keeping us up at night and requiring unbelievable amounts of cash. Life would be a lot easier without them. So why do we bother?

Because they're the future, and we love them.

The Automate-2 and Spicer Solo were two new Dana products that made 1994 a particularly fruitful year. The Automate-2 was an award-winning electronic transmission that shifted automatically between the heavily used top two gears. Reducing strain on driver and drive-train alike, the Automate-2 was named the"Most Significant Product" of 1994 by the Truck Writers of North America.

Dana also proved its sensitivity to consumer needs. Following a survey of 2,500 fleet managers and drivers, Dana developed the break-through Spicer Solo clutch that automatically readjusted prevent slippage, cutting replacement and labor costs.

Dana 2000

- The Dana Style Will Be Fully Implemented.
- Dana Will Be a World Leader in Quality, Service and Technology for Each of Our Products.

- Dana Will Obtain 50 Percent of Our Total Sales from Distribution Markets.
- Dana Will Obtain 50 Percent of Our Total Sales Outside the United States.
- Dana's Financial Performance Will Consistently Exceed the Standard and Poor's 500.

Two ideas a month

The 1990s showed Dana more committed than ever to the concept of continuous improvement through people involvement. Asking for two ideas a months from every Dana person, Dana sou to implement a minimum of 80 percent of all suggestions. The accumulated improvements gave Dana a tremendous competitive boost.

Idea sharing is not new to Dana. This verse appeared in Spicer's Driveshaft magazine, in 1923:

You have a dollar.
I have a dollar.
We swap.
Now you have my dollar.
And I have yours.
We are no better off.
***
You have an idea.
I have an idea.
We swap.
Now you have two ideas.
And I have two ideas.
***
That's the difference

Global Dana

With 40,000 people working in 445 facilities around the world Dana had, by 1995, established itself as a true competitor in the global automotive industry. Which is the way it had to be, becau for a company the size, strength and ambition of Dana, being global was not a luxury -- it was a necessity.

The world market had changed a lot since Clarence Spicer first set up his stall in Plainfield, New Jersey. In place of a multitude of small manufacturing operations in America and Europe, a sele number of independent car giants operated around the globe. Vehicles were so sophisticated, manufacturers could no longer buy standard components. They forged closer and closer relationships with their suppliers, pooling their engineering expertise to develop breakthrough products. Supply had become a team effort, and if Dana hadn't been global, Dana wouldn't have been on the team.

As an added benefit, relationships developed in one market paid back in another market, allowi Dana to grow with its customers. One example was Japan, where Dana first established a presence in 1970. As Japanese car manufacturers prospered worldwide, so Dana's contacts wi them grew more important. For example, in 1994, Dana was contracted to produce frames and shafts for Toyota light trucks in Argentina.

An American company producing components for a Japanese company, in South America. Tha was the nature of the global market.

At the same time as the automotive business was turning global, there was a worldwide trend tc free-trading blocks. In Europe, Asia-Pacific and South America, the growth of these regional markets boosted trade, and consequently improved local productivity, pay-packets and purchas power. Companies that aimed to be world class needed to supply not just nations, but whole continents.

As automotive companies expanded geographically, they needed to simplify their structure and

focus on their core business. In-house manufacture was out. Out-sourcing was in. Car compani keen to reduce the thousands of small suppliers they dealt with directly, appointed a series of"First Tier Suppliers," responsible for supplying whole, pre-assembled systems.

Dana's size, experience and commitment made it ideally suited to become a First Tier supplier, and in 1995 the Spicer Modular System Group was formed to maximize Dana's ability to provide customers with this service.

Finally, there was one other excellent reason for Dana to become global. By 1995 Dana was already the largest supplier of automotive components in the United States. Yet it was only the fourth largest worldwide. Put simply, if Dana wanted to be number one in the world, the world w where Dana had to go.

Asia Pacific

Dana's presence in the Asia Pacific dates back to 1972, when a joint venture agreement was signed with the South Korean Shinjin Group. Korea Spicer started as a relatively small operation while a 50,000-square-foot state-of-the-art facility was being built. Early axle and Driveshaft customers like GM Korea and KIA were soon added to as Korea Spicer gradually extended its product line and began to export. Further expansion in the region over the following few years included acquisitions in Taiwan, Japan, Thailand, Australia and Indonesia.

With half the world's population and half the world's output, Asia Pacific quickly became an integral part of Dana's global market. The future of the region may be even more dynamic. In 1995, five of the region's nations -- China, Indonesia, South Korea, Thailand and Taiwan -- were forecast as likely to become top-ten world economic powers by 2020.

Sport utility vehicles

Market surveys have been done to rationalize it. Anthropologists have been commissioned to explain it. But the recent boom of rugged, four-wheel drive Sport Utility Vehicles like the Jeep Grand Cherokee or Ford Explorer, has not taken place in the countryside, but in America's cities and suburbs. The predominant use of these tough four-by-fours is not off-road bumping and climbing but commuting.

And, according to the experts, America's love affair with Sport Utility Vehicles will continue. Wor leading companies such as Mercedes-Benz, Toyota and Isuzu built a significant presence in the market, convinced that"Sport Utes" would thrive in North America as long as fuel prices remaine low. The market was also expected to grow in South America and Asia Pacific, where the rugge terrain and low fuel costs provided an ideal environment. Which was all good news for Dana people, who have been involved with the Sport Utility Vehicle from its inception.

Dana Distribution

As with its drive to global expansion, Dana's incentive to build a presence in replacement sales owed much to its desire to protect earnings from the violent cycles of original equipment market And as with global expansion, the Dana Style soon proved itself ideally suited to distribution.

The key to the replacement sales market was efficient distribution, and the key to distribution wa people -- people well trained in the latest technologies, able to provide specialized engineering support and willing to travel the extra mile to serve their customers.

In short, Dana people.

At first, after the acquisitions of Perfect Circle and Victor in the 1960s, Dana Distribution had delivered a wide range of Dana's proprietary replacement parts to retail outlets in the North American aftermarket. But with the communication and delivery network that Dana Distribution built worldwide, Dana became a sophisticated, independent global distributor, serving other part manufacturers as well as Dana.

The breadth and ambition of Dana's global distribution operations were well demonstrated by th progress of Dana Distribution Europe. Before the emergence of the single European market, the different community countries were separated by language, legislation, trade names and border customs. Parts distribution was necessarily a national business.

But as soon as a single, unrestricted market emerged, a European network became both possit and desirable. Dana was the first company to recognize the opportunity, and assembled a distribution network that covered the United Kingdom, and much of Holland, Portugal and Franc supplying the automotive and truck aftermarkets with paint, parts, accessories, tools and equipment.

The wide range of goods and the geographic scope of the operations demanded exemplary inventory control. Dana therefore invested in a sophisticated satellite communications system a a state-of-the-art Distribution Center. Customers were linked on-line with Dana so that their re-ordering became automatic.

By 1994, the Dana Distribution Center at Milton Keynes, England, was delivering daily to 110 owned Branch outlets, and more than 600 independent customers.

Distribution Technology

Technology is essential to supplying customers and responsively serving them. Dana Distributic Europe shows how committed Dana is to upgrading communications equipment, as new technology becomes proven and available. In 1981, a real time on-line computer system was installed across Dana's branch network. The system controlled inventory, ran point-of-sale transactions, and re-ordered products automatically. In 1989, Counterpart was first sold, offering independent jobbers a computer system that linked them to the Distribution Center.

In 1991, the year that Dana became the UK's largest independent distributor, an EDI program w introduced to improve productivity and speed up the ordering process. By 1994, satellite facilitie had been introduced, giving Dana Distribution Europe an even greater competitive advantage.

FleetTuf

FleetTuf, a new generation of aftermarket chassis parts, was developed in response to custome desire for ball-joints, tie-rod end and idler arms that could withstand an off-road battering in a ful loaded truck. FleetTuf parts, which in standard tests proved twice as durable as the next best brand, were engineered by Dana's Aftermarket Products Division and distributed through Dana's Automotive Distribution Sales and Parts Craft Divisions.

People Finding A Better Way

And the future?

That the future will bring change is certain. But some things at Dana may prove just as certain.

The Dana Style is not something dreamed up out of nowhere by a Policy Committee, and imposed upon Dana People. Companies have personalities, just as surely as people do. The Dana Style has come from Dana people, and its aspects have been visible at Dana for upwards seventy years.

Education, communication, idea sharing, and a hatred for too much management and paper ha been part of the way Dana has done business since 1920. In engineering and manufacturing, tc the Dana Style has been around for generations. From the outset, Dana people were committec to the highest quality products, processes and service.

They were also dedicated to"continuous processes of refinement," that were equivalent to today continuous improvement. They prided themselves at working with the customer, ensuring there

was the "constant cooperation" between Dana and automotive engineers that has ensured Dana products have been market leaders for decades.

So maybe the future won't be so unlike the past.

In 1925, when Dana Corporation was twenty-one years old, Clarence Spicer wrote a brief history about Dana's coming of age. Called"Our Majority," the story had as an appendix the names of a Spicer people with ten years service or more. Their years of service were also detailed.

The dedication remains as appropriate today as it was some seventy years ago.

"The present success would have been entirely impossible except for the loyal, whole-hearted support of my helpers within the Spicer Organization. These have toiled incessantly, often nights as well as days, to make Spicer Universal Joints what it is today both within and without the organization."

Whatever changes the future may bring, there's one phrase that will clearly remain timeless -- a accurate observation of the qualities that make Dana the company it is.

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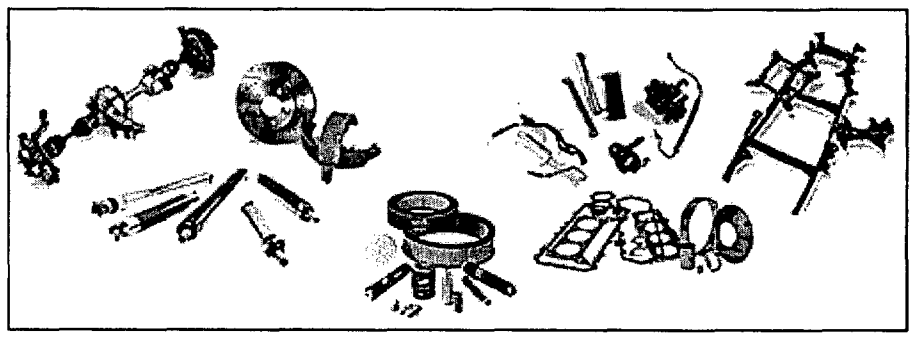
People Finding A Better Way®

Dana's 9 Core Products

Dana's nine core products center on the development, design, and manufacture of axles, drives structures, brake and chassis products, fluid systems, filtration products, and bearings and seal products. Each has a strong market position; provides value-added manufacturing; and is techr advanced, possessing features that are both unique and patented.

These foundation businesses serve the production and service sectors of Dana's three basic m automotive, commercial vehicle, and off-highway; and the components they produce can be co form a wide array of complete modules and systems.



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People Finding A Better Way®

News Release

Contact: Gary Corrigan
419-535-4813

Dana Corporation Completes Sale of Non-Core Businesses

Toledo, Ohio -- Nov 18, 2002 --

Dana Corporation (NYSE: DCN) announced today that it has completed the sale of several non-core businesses to The Riverside Company, a leveraged buyout firm.

Proceeds from the sale were approximately $33 million, and the transaction was not material to the company's results of operations. Terms of the transaction were not disclosed.

The businesses involved in the transaction are:

- Tekonsha Engineering Company, located in Tekonsha, Mich.,

a manufacturer of aftermarket electric brake controls and related products for the recreation, agricultural, and trailer markets. This transaction included Dana's SurePull Products facility in Sheridan, Ark., which produces hitches and towing accessories;

- Theodore Bargman Company, located in Albion, Ind.,

a manufacturer of exterior illumination products, electrical accessories, and locks and latches; and

- American Electronic Components, Inc., located in Elkhart, Ind., a manufacturer of sensors, switches and relays.

The combined operations employ nearly 700 people and had total

sales of $81 million in 2001.

Dana Corporation is one of the world's largest suppliers of components, modules, and complete systems to global vehicle manufacturers and their related aftermarkets. Founded in 1904 and based in Toledo, Ohio, the company operates some 300 major facilities in 34 countries and employs approximately 70,000 people. The company reported sales of $10.3 billion in 2001. Dana's Internet address is www.dana.com.

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People Finding A Better Way

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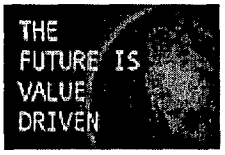
ASG News Room



Core Values

Modules & Systems
Design for Environment
Alternative Fuel Vehicles
Speed to Market
Weight, Strength & Durability
Noise, Vibration & Harshness

Product Groups

Modules & Systems Integration
Axle Products
Brake & Clutch Actuation
Driveshaft Products
Steering & Suspension Products
Structural Solutions

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News

11/05/02 - Dana Corporation to Supply Advanced Traction Technologies for Exciting New MG Sports Car

10/21/02 - Dana Corporation Wins Fourth IndustryWeek 10 Best Plants Award

10/09/02 - Dana Corporation Celebrates Groundbreaking for Automotive Systems Group Technology Center

10/08/02 - Dana Corporation to Supply Driveshafts, Rear Axles for Nissan Frontier and Xterra in Brazil

09/12/02 - Automotive Hall of Fame Names 2002 Young Leadership and Excellence Award Winners

08/29/02 - Dana Corporation Venezuela earns ISO 14001 Certification

08/29/02 - Dana Corporation Acquires European Driveshaft Operation

08/27/02 - Dana Venezuela's Traction Technologies Facility received a recommendation to be certified as ISO-14001

08/09/02 - Dana Executive Advocates Combination of Lean Practices and New Technologies to Move Closer to

08/08/02 - Dana, GKN Win European Hydroforming Business for Land Rover

07/30/02 - Environmental Recognition Award for Structural Solutions Facility

06/19/02 - Dana Corporation Realigns Automotive Systems Businesses

06/17/02 - Dana Corporation to Supply Torque Management, Traction Technologies for Lincoln Aviator

06/10/02 - Dana Corporation to Supply Axles, Driveshafts, & Full Frames for new Generation of GMC Savana, Chevy Express Vans

05/20/02 - Dana Corporation to Supply Independent Rear Suspension Systems for Ford Falcon in Australia

05/20/02 - Dana Europe Facility Obtains QS-9000 Certification

05/10/02 - Dana Begins Providing Technologically Advanced Hydroformed Structural Systems for the 2003 Ford Expedition and Lincoln Navigator

04/30/02 - DANA CORPORATION'S TORQUE MANAGEMENT FACILITY EARNS CCME POLLUTION PREVENTION AWARD

04/19/02 - DANA CORPORATION INTEGRATES LIGHT AXLE, DRIVESHAFT BUSINESSES AS PART OF CUSTOMER-FOCUSED REALIGNMENT

03/28/02 - DANA'S FORT WAYNE FACILITY EARNS ISO 14001 CERTIFICATION

03/18/02 - DANA TO SUPPLY TRACTION AND TORQUE MANAGEMENT TECHNOLOGIES FOR TWO NEW JEEP® MODELS

02/14/02 - DANA CORPORATION'S ADVANCED TRACTION TECHNOLOGIES SAVE SPACE, IMPROVE HANDLING FOR 2002 RANGE ROVER

01/22/02 - DANA TRACTION TECHNOLOGIES GROUP IMPLEMENTS ADVANCED REAL-TIME QUALITY TRACKING SYSTEM TO DOMESTIC AND GLOBAL SUPPLIERS

01/08/02 - DANA CORPORATION TO SUPPORT 2003 DODGE VIPER WITH HIGH-PERFORMANCE, ADVANCED TRACTION TECHNOLOGIES

12/19/01 - DANA CORPORATION'S DRIVESHAFT PRODUCTS GROUP CHANGES NAME TO REFLECT BROADER RANGE OF TECHNOLOGY

12/18/01 - DANA CORPORATION SELECTED AS 4WD SYSTEM SUPPLIER FOR 2002 FORD ESCAPE IN TAIWAN

12/14/01 - DANA CORPORATION DRIVESHAFT, ENGINE PRODUCT FACILITIES EARN COMMONWEALTH OF KENTUCKY'S TOP QUALITY AWARD

12/13/01 - DANA UNIT RELEASES REAL-TIME QUALITY TRACKING SYSTEM TO SUPPLIERS

12/12/01 - DANA TRACTION TECHNOLOGIES GROUP OBTAINS ISO 14001 CERTIFICATION FOR TEN OF ITS GLOBAL FACILITIES

12/11/01 - DANA CORPORATION SELECTED AS 'BEST OF THE BEST' AMONG AXLE SUPPLIERS IN INDUSTRY SURVEY

People Finding A Better Way

News

11/18/02 - Dana Corporation Completes Sale of Non-Core Businesses

11/12/02 - Do you have what it takes to manage a super NASCAR team? You'll get your chance in 2003!

11/11/02 - Dana Brake and Chassis Named 2002 Silver Progress Towards Excellence Award Recipient

10/25/02 - Wix Filter Drag Racing Update

10/07/02 - Raybestos® Brand Brakes Receive 2002 Parts Plus "Partner of the Year" Award

09/18/02 - Could Someone You Know be the 2003 Victor Reinz Machinist of the Year?

08/23/02 - Three More Years!

08/22/02 - Greatly Enhanced Late Model Coverage in New Clevite 2002 Master Engine Parts Catalog

08/19/02 - Wix Filters Drag Racing Update

07/23/02 - BWD Awards Scholarship to Woman in Ford/AAA National Auto Repair Championship

07/12/02 - Clevite Engine Builder Showdown to air Sunday on Fox Sports Net

07/01/02 - Borg-Warner Brand Backed With "No Comeback Guarantee" For High Tech Replacement Products

07/01/02 - BWD Automotive Seeking Applicants for Legacy Scholarships

06/21/02 - Wix Awards Scholarships and Funding to FFA Chapters

06/17/02 - Wix Filters Earns Top Supplier Award From Aftermarket Auto Parts Alliance

06/13/02 - Dana Brake Parts Canada, Inc. Honored with 2002 Guelph Environmental Award for Excellence in Waste Management

05/31/02 - Wix Enters Product Sponsorship Agreement with Hendrick Motorsports

05/30/02 - Wix Filtration Products wins the CARQUEST Order Fill Award

05/24/02 - Raybestos® Brand Brakes Signs Indy Driver Sarah Fisher

05/23/02 - Victor Reinz has been named the 2001 CARQUEST Vendor of the Year

05/22/02 - Josh Starcher Advances to Semi-finals at IHRA Summer Nationals

05/08/02 - Wix Filters Drag Racing Update

05/06/02 - DANA BRAKE AND CHASSIS NAMED FEDERATED OUTSTANDING VENDOR OF THE YEAR

05/06/02 - BWD AUTOMOTIVE AND PERFECTION HY-TEST CLUTCH ANNOUNCE NEW ALLIANCE FOR BORG WARNER BRANDED CLUTCHES

05/06/02 - WIX OFFERS DRIVERS A BREATH OF FRESH AIR WITH EXPANDED LINE OF CABIN AIR FILTERS

04/30/02 - FEDERATED AUTO PARTS AWARDS BWD AUTOMOTIVE AS VENDOR OF THE YEAR HONORABLE MENTION

04/15/02 - NAPA BRAKE AND CHASSIS IS UNPRECEDENTED SIX-TIME WINNER OF SPIRIT AWARD

04/05/02 - ROUND 4 OF CLEVITE ENGINE BUILDER SHOWDOWN USHERS IN NEW CHAMPION AND NEW ENGINE BUILD RECORD

04/03/02 - Dana Engine Management Division Receives ISO-14001 Registration

03/21/02 - ROUND 2 RESULTS OF CLEVITE ENGINE BUILDER SHOWDOWN 2002

03/07/02 - Dana ANCOM Receives Best Supplier Award from General Motors

03/05/02 - TOM O'BRIEN NAMED VICE PRESIDENT OF MARKETING FOR DANA BRAKE AND CHASSIS

03/04/02 - WIX BRAND WEB SITE WINS MERIT AWARD FROM ASSOCIATION FOR WOMEN IN COMMUNICATIONS

02/26/02 - RAYBESTOS® BRAND BRAKES PRESENTED WITH THE 2001 PARTS PLUS PARTNER OF THE YEAR AWARD

02/21/02 - RAYBESTOS® BRAND BRAKES AND MIKE DITKA TEAM UP FOR BRAKE PROMOTION

02/20/02 - CLEVITE NAMED PREFERRED PARTNER BY JASPER ENGINES & TRANSMISSIONS

02/20/02 - WIX FILTERS EARNS VENDOR OF THE YEAR AWARD FROM O'REILLY AUTO PARTS

02/19/02 - GENTLEMEN, BUILD YOUR ENGINES!

02/12/02 - DANA ENGINE MANAGEMENT LEARNING CENTER RECEIVES RE-CERTIFICATION

02/06/02 - BECK/ARNLEY WORLDPARTS EARNS MAGAZINE'S READERS' CHOICE AWARD

02/04/02 - WIX FILTERS DRIVES RACE FANS INTO AUTO PARTS STORES WITH INNOVATIVE NASCAR PROMOTION

01/25/02 - Borg-Warner Brand's New Ignition and Electrical Engine Management Catalog for Late Model Vehicles is Here

01/17/02 - WIX FILTRATION PRODUCTS EARNS ISO 14001 REGISTRATION FOR ALLEN AND OKLAHOMA CITY PLANTS

01/16/02 - CLEVITE ENGINE PARTS AWARDS THE RACE WEEKEND TO END ALL RACE WEEKENDS

01/11/02 - WIX FILTERS EARNS TOP SUPPLIER AWARD FROM AFTERMARKET AUTO PARTS ALLIANCE

01/04/02 - BWD Automotive Revs Up the Holidays for Needy Children

01/03/02 - COULD SOMEONE YOU KNOW BE THE NEXT VICTOR REINZ MACHINIST OF THE YEAR?

12/20/01 - RAYBESTOS® BRAND BRAKES ANNOUNCES PROMOTIONAL CAMPAIGN FOR 100-YEAR ANNIVERSARY IN 2002

12/07/01 - DANA BRAKE AND CHASSIS PRESIDENT TELLS INDUSTRY GROUP THAT AUTOMOTIVE AFTERMARKET IS EXCITING AND DYNAMIC INDUSTRY

12/05/01 - "CEEK" AND YE SHALL FIND CLEVITE ENGINE PARTS BRINGS ENGINE KIT CATALOGING ONLINE

12/03/01 - WIX FILTERS EARNS COUNTERMAN MAGAZINE'S READERS' CHOICE AWARD

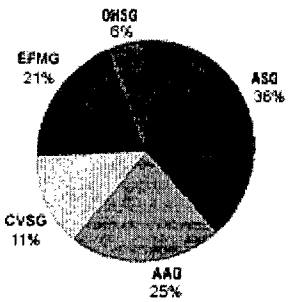
01/01/00 - NAPA Echlin Backed By Worry-Free Warranty

Key Financial Data

.	12/31/00	12/31/01
Sales	$12,317	$10,271
Income before non-recurring items	$377	$5
Net income (loss)	$334	$(298)
Earnings per share before non-recurring items (diluted)	$2.46	$0.04
Earnings per share (diluted)	$2.18	$(2.01)
Average common shares outstanding (diluted)	153 million	148 million
Dividends paid per share	$ 1.24	$0.94
Dividend yield	8.1%	6.8%
Total assets	$11,236	$10,207
People at year end	79,288	69,758
Principal facilities	313	300
Countries	35	34

Sales by Foundation Business - full year 2001

Financial Snapshot



Snapshot by SBU

- Automotive Systems
- Automotive Aftermarket
- Engine & Fluid Management Systems
- Commercial Vehicle Systems
- Off-Highway Systems
- Leasing

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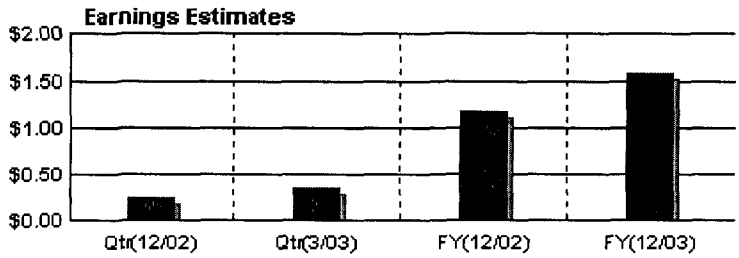
People Finding A Better Way®

Dana Corporation: Earnings Estimates

Earnings Estimates
Earnings Surprise
Consensus EPS Trend
Earnings Growth Rates



Earnings Estimates	Qtr(12/02)	Qtr(3/03)	FY(12/02)	FY(12/03)
Average Estimate	0.24	0.36	1.17	1.57
Number of Analysts	10	3	14	14
High Estimate	0.32	0.44	1.25	2.20
Low Estimate	0.21	0.23	1.10	1.00
Year Ago EPS	-0.09	0.18	0.04	1.17
Growth Rate	367.78%	98.15%	2,828.57%	34.27%

Zacks Industry: AUTO/TRUCK-ORI

Zacks data updated daily.

Analyst Recommendations data provided by Zacks Investment Research.

Quotes supplied by Standard & Poor's ComStock, Inc. and are delayed at least 20 minutes.

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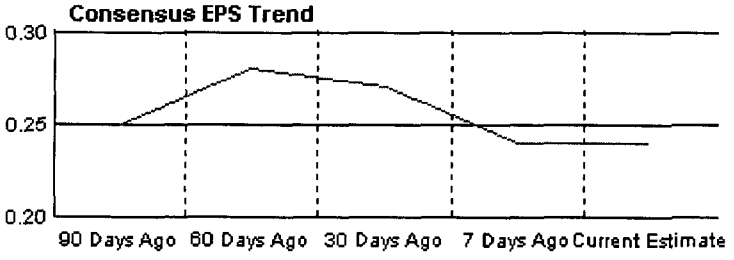
Dana Corporation: Consensus EPS Trend

Earnings Estimates
Earnings Surprise
▸ Consensus EPS Trend
Earnings Growth Rates



Consensus EPS Trend	Qtr(12/02)	Qtr(3/03)	FY(12/02)	FY(12/03)
Current Estimate	0.24	0.36	1.17	1.57
7 Days Ago	0.24	0.38	1.17	1.58
30 Days Ago	0.27	0.40	1.17	1.63
60 Days Ago	0.28	0.40	0.97	1.71
90 Days Ago	0.25	0.40	1.12	1.70

Zacks Industry: AUTO/TRUCK-ORI

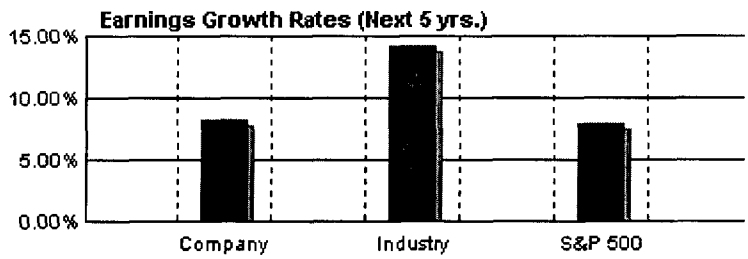
Zacks data updated daily.

Analyst Recommendations data provided by Zacks Investment Research.

Quotes supplied by Standard & Poor's ComStock, Inc. and are delayed at least 20 minutes.

Dana Corporation: Earnings Growth Rates

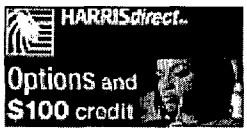
Earnings Estimates
Earnings Surprise
Consensus EPS Trend
Earnings Growth Rates



Earnings Growth Rates	Last 5 yrs.	FY 2002	FY 2003	Next 5 yrs.	02 P/E
Company	-65.80%	NA	32.40%	8.30%	10.20
Industry	-4.00%	37.00%	16.00%	14.20%	12.10
S&P 500	-1.10%	22.70%	13.10%	8.00%	19.10

Zacks Industry: AUTO/TRUCK-ORI

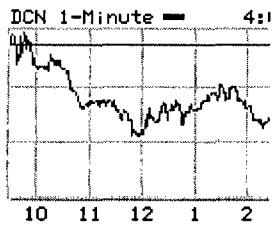
Zacks data updated daily.



Dana Corporation (NYSE) Profile News Chart Analyst Insider Financials Msgs SE(

DCN Last: **11.50** Change: **-0.43** **-3.60%** Volume: **622,800** 4:00pm 11/18/2002 Choos

Open:	**11.96**	Yield:	**0.35**	Shares Out:	**148.56M**	DCN 1-Minute	4:1
High:	**11.99**	P/E Ratio:	**13.69**	Market Cap:	**1.71B**		
Low:	**11.32**	EPS:	**0.84**	52wk High: 5/17/2002	**23.22**		
Bid:	n/a	Ex Date:	**11/26/2002**	52wk Low: 10/9/2002	**9.28**		
Ask:	n/a	Dividend:	**0.01**	Avg Volume:	**1.02M**		



Add to Alerts | Add to My Portfolio **Create DCN Alert at:** $9 $10 $13 $14 ... Chart: 1dy 1mo 3mo 1

News for Dana Corporation **Alert me for news on DCN**

9:58am 11/18/02	Dana Corp completes sale of $33 mln in assets - *CBS MarketWatch.com*
2:15pm 11/14/02	The Ratings Game: J.P. Morgan cautious on auto industry - *Susan Lerner*
10:36am 11/14/02	J.P. Morgan cuts Q1 2003 auto sector earns ests. - *Tomi Kilgore*
6:33am 11/14/02	Wall St seen mixed as Dell looms, Household soars - *Reuters U.S. Company News*
5:00pm 11/11/02	U.S. suppliers tap foreign automakers for growth - *Reuters U.S. Company News*
4:46pm 11/10/02	The Social Graces as a Business Tool - *[at NY Times]*
10:19am 11/01/02	Eaton closes on buy of Dana's hose/fitting operations - *CBS MarketWatch.com*

More...

Press Releases about Dana Corporation

9:52am 11/18/02	Dana Corporation Completes Sale of Several Non-Core Businesses - *PR Newswire*
12:40pm 11/05/02	Dana Corporation Streamlines Sales Analysis With Executive Viewer - *Internet Wire*
12:10pm 11/05/02	Dana Corporation Streamlines Sales Analysis With Executive Viewer - *Internet Wire*

More...

Market Advisers for Dana Corporation

$ Free Stock Analysis of Dana Corporation (DCN) - *Zacks.com*

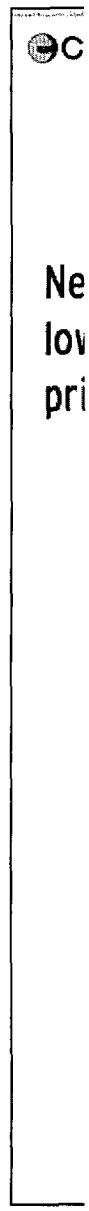
$ New Stock Rating for Dana Corporation FREE! - *StockPickReport.com*

$ DCN: D&B Business/Credit Reports - *Dun & Bradstreet*

$ The Automobile Parts Industry: A Group Study - *Dow Theory Forecasts*

$ Morningstar Stock Research Report - *Morningstar.com*

More...



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Profile:

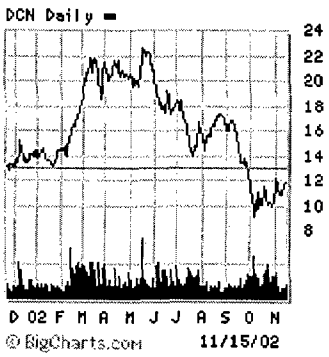
Change Symbol:

Dana Corporation (NYSE)

Chart Financial Analyst Insider Msg News Option SE

DCN 11.50 -0.43 -3.60% Vol: 622,800 4:00pm 11/18/02

Price and Volume



Create DCN Alert at: $10 $13 other

Price Average 50-day:	$ 12.15
Price Average 200-day:	$ 16.93
Vol Average 50-day:	1,024,800
Vol Average 200-day:	1,102,900
52-wk high (5/17/2002):	$ 23.22
52-wk low(10/9/2002):	$ 9.28
Bid:	n/a
Ask:	n/a

Analyst Information | Historical Quote

Share related items

Market cap:	$ 1.71B
Shares out:	148.56M

Company Information

Dana Corporation
4500 Dorr Street
Toledo OHIO 43615

Website Annual Repor
Phone: +1 419 535-45(
Fax: +1 419 535-46

Dana Corporation. The Group's principal activity is t supply components, modules and systems to global vehicle manufacturers and related aftermarkets. Th Group operates through five segments: Automotive systems group (ASG), Automotive aftermarket grou (AAG), Engine and fluid management group (EFMG Commercial vehicle systems (CVS) and Off-highwa systems group (OHSG). The Group supplies axles, driveshaft, brake, fluid systems, structural, bearings and sealing, filtration and other engine products through its segments. The Group provides leasing and financing services. The products are marketed North America, Europe, South America & Asia Pacific. The customers of the Group include Genera Motors, Ford, Daimler Chrysler, Volvo/Renault and Navistar International. Vehicular products accounte for 99% of 2001 revenues and leasing and financing services, 1%.

Company at a Glance

Industry:	Auto Parts	Employees:	70,00(
		Fiscal Year-End:	12/31/200

Latest Insider Transactions

Marilyn R. Marks, Director	8	Exercise of Stock Options	09/30/20(
James P. Kelly, Director	2,000	Open Market Purchase	04/25/20(

Per share data

Earnings (1 year):	**-1.69**
Current P/E Ratio:	**13.69**
Cash Flow:	**$ 0.99**
Cash (last quarter):	**$ 447.00M**
Annual Dividend:	**$ 0.04**
Book Value:	**$ 13.43**
EBITDA:	**$ 189.00M**

Management effectiveness

Return on Equity (1 year):	**-11.48%**
Return on assets (1 year):	**-2.74%**
Return on Investment (1 year):	**n/a**

Valuation ratios

Price/Earnings (1 year):	**-7.06**
Price/Book (1 year):	**0.89**
Price/Cash Flow (1 year):	**10.10**

Profitability

Gross Margin (1 year):	**11.63%**
Operating Margin (1 year):	**2.49%**
Profit Margin (1 year):	**-2.20%**

M = Millions B=Billions

Charles W. Hinde Chief Financial Officer	**400**	**Award of Stock**	04/18/20C
Michael L. Debacker Officer	**4,000**	**Award of Stock**	04/16/20C
Ismael J. Melgar Officer	**9,310**	**Award of Stock**	03/28/20C

More Insiders

News for DCN

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10:19am 11/01/02	Dana Corp. to record $18 mln gain in Q4 on disposal - *CBS MarketWatch.com*
5:08pm 10/29/02	Dana Sells 3 Cos. in Restructuring - *AP Online*
1:44pm 10/29/02	Dana Corp top sell three non-core businesses - *Reuters U.S Company News*

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WorldScope data provided by Thomson Financial

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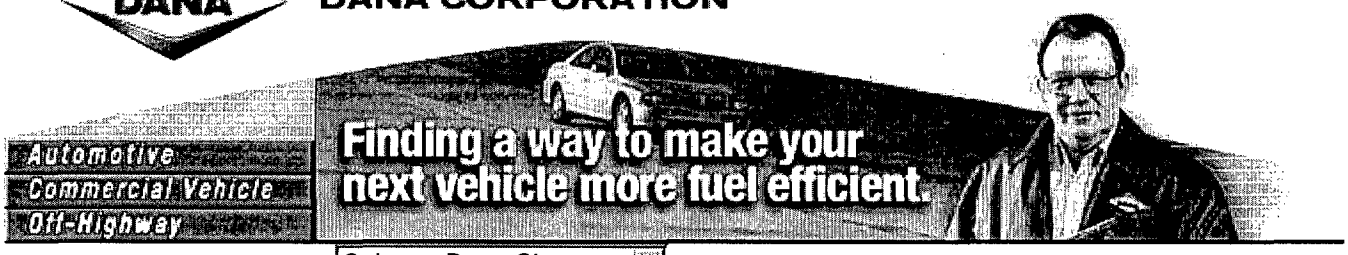
DANA CORPORATION



Select a Dana Site

Search Here Go

- CEO and CFO Statements
- Transfer Agent and Registrar Information
- Dana Corporation 3rd Quarter Slides & Audio are available now...
- Form 10-Q for Quarterly Period Ended Sept. 30, 2002

At A Glance:

Dana Corporation is a global leader in the design, engineering, and manufacture of value-added products and systems for automotive, commercial, and off-highway vehicle manufacturers and their related aftermarkets. The company employs approximately 70,000 people worldwide - all dedicated to achieving innovation through close collaboration with customers. Founded in 1904 and headquartered in Toledo, Ohio, Dana operates hundreds of technology, manufacturing, and customer service facilities in 34 countries. The company reported sales of $10.3 billion in 2001.

Current News:

- Dana Corporation Completes Sale of Non-Core Businesses
- Dana Corporation to Supply Advanced Traction Technologies for Exciting New MC Sports Car
- Dana Corporation's Hose and Tubing Products Facility
- Dana Corporation Completes Sale of Industrial Hose and Fitting Operations to Eaton Corporation

More News

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People Finding A Better Way®

OVERVIEW

FOUNDATION BUSINESSES: FOCUSED EXCELLENCE

Dana's foundation businesses are: axles, driveshafts, structures, brake and chassis products, fl systems, filtration products, and bearings and sealing products. These products hold strong market positions – number one or two in the markets they serve. They provide value-added manufacturing, are technologically advanced, and each has features that are unique and patented. These foundation businesses serve the production and service sectors of Dana's thre basic markets: automotive, commercial vehicle, and off-highway; and the components they produce can be combined to form a wide array of complete modules and systems.

People Finding A Better Way®

NEWS ROOM

Search Here Go

Search News Go

- Identity Standards

Press Releases

Dana Corporation releases to the media covering the past year; includes links to market-focused releases from Dana's business units.

Information & Brochures

Annual reports, corporate fact sheet, international pamphlets (multiple languages) and brochures on Dana business conduct, philosophy and policies, strategy and style.

Resources

Quarterly Reports and Investor Relations information, Toledo area information, Dana history, links to trade publications, industry organizations and manufacturers.

Images

Selected photos, including facilities, personnel and products, available for download as high, medium or low-resolution files.

Contacts

Name, title and email address information for Dana's corporate media contacts.

Identity Standards

Guidelines on image and identity elements with detailed specifications on use of colors, fonts, logos and signatures, and trademark and copyright requirements; includes examples of correct usage and a glossary.

News Room Search

Search function confined to the content of the News Room section of the Web site.

Top of Page

People Finding A Better Way®

Press Releases

Click on the links below to read Dana press releases. The links in the left side bar will take you press releases about particular Dana markets.

We believe that the information contained in each of these press releases was accurate when the release was issued. We have not undertaken to update this information, however, and you should not assume that the contents of any release are accurate as of any date other than the date of the release. Archived releases can be found on the "PR Newswire" link.

11/18/02 - Dana Corporation Completes Sale of Non-Core Businesses

11/12/02 - Do you have what it takes to manage a super NASCAR team? You'll get your chance in 2003!

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10/29/02 - Dana Corporation Announces Agreements To Sell Non-Core Businesses

10/25/02 - DANA CORPORATION REPORTS THIRD-QUARTER EARNINGS

10/25/02 - Wix Filter Drag Racing Update

10/22/02 - Dana E-Steering Technology Brings Fuel Economy Benefits To Existing Vehicle Designs

10/22/02 - Dana's Intelligent Cooling System Uses Real-Time Data To Improve Engine

Performance, Fuel Economy

10/22/02 - Dana Corporation Declares Dividend

10/22/02 - Dana Uses Its Thermal Management Expertise To Protect Under-Hood Electronics in High Temperature Environments

10/22/02 - Dana's Intelligent Lubrication System Electronically Manages Oil Flow, Improvin Durability, Fuel Efficiency, and Emissions

10/21/02 - Dana Corporation Wins Fourth IndustryWeek 10 Best Plants Award

10/21/02 - Emerson, Dana Corporation Pursue Joint Development of Advanced Vehicle Technology

10/09/02 - Dana Corporation Introduces New Brake Application Guidelines

10/09/02 - Dana Corporation Celebrates Groundbreaking for Automotive Systems Group Technology Center

10/08/02 - Dana Corporation to Supply Driveshafts, Rear Axles for Nissan Frontier and Xterra in Brazil

10/07/02 - Raybestos® Brand Brakes Receive 2002 Parts Plus "Partner of the Year" Awarc

10/07/02 - Dana Corporation Receives Corporation of the Year Award from Michigan Minority Business Development Council

10/01/02 - Dana Spicer Off-Highway Dedicates New Technology Center

10/01/02 - Dana Corporation Announces Agreement to Sell Industrial Hose and Fitting Operations to Eaton

09/19/02 - Dana Corporation Earns Canadian Quality Award for Excellence

09/18/02 - Could Someone You Know be the 2003 Victor Reinz Machinist of the Year?

09/12/02 - Automotive Hall of Fame Names 2002 Young Leadership and Excellence Awarc Winners

09/12/02 - Dana to Provide Recyclable Cam Covers Modules to Jaguar

09/10/02 - Dana Corporation Announces New European Light-Truck Drive Axles Series

09/10/02 - Dana Spicer Speciality Axle Division Has Expanded Range of NDS Axles

09/09/02 - Dana Venezuela's Tube Mills facility (Tuboauto) received recommendation to be Certified as ISO-14001

09/03/02 - Dana Completes Sale of DCC Real Estate Services Group

08/29/02 - Dana Corporation Venezuela earns ISO 14001 Certification

08/29/02 - Dana Corporation Acquires European Driveshaft Operation

08/28/02 - Dana Corporation Announces New Class 4/5 Single Drive Axle

08/27/02 - Dana Venezuela's Traction Technologies Facility received a recommendation to be certified as ISO-14001

08/23/02 - Three More Years!

08/22/02 - Greatly Enhanced Late Model Coverage in New Clevite 2002 Master Engine Parts Catalog

08/19/02 - Wix Filters Drag Racing Update

08/15/02 - Angola Hose and Tubing Plant Achieves ISO 14001

08/14/02 - Dana Corporation Announces Filing of CEO, CFO Statements with SEC

08/13/02 - Dana Corporation Awarded Masters of Quality by Freightliner

08/09/02 - Dana Executive Advocates Combination of Lean Practices and New Technologies to Move Closer to

08/09/02 - Perfect Circle Piston Facility in Valencia Receives Environmental Recognition Award

08/09/02 - Dana Corporation Announces Plans to Sell Light-Duty Cylider Liner Business

08/08/02 - Dana, GKN Win European Hydroforming Business for Land Rover

07/31/02 - Dana Selected as 'Best of the Best' in Four Product Categories

07/30/02 - Dana Offers Improved Mechanical Transaxle for Riding Mowers and Lawn Tractors

07/30/02 - Dana's New Low-Cost Hydrostatic Transmission Provides Smoother Acceleratic

07/30/02 - Dana's Outdoor Power Equipment Components Division to Consolidate Operati for More Efficient Customer Service

07/30/02 - Environmental Recognition Award for Structural Solutions Facility

07/23/02 - BWD Awards Scholarship to Woman in Ford/AAA National Auto Repair Championship

07/17/02 - Dana Corporation Reports Second-Quarter Earnings

07/16/02 - Dana Corporation Declares Dividend

07/12/02 - Clevite Engine Builder Showdown to air Sunday on Fox Sports Net

07/12/02 - Spicer Off-Highway Product Division in Gravatai, Brazil Achieves ISO 9001 Certification

07/09/02 - New Victor Reinz 2002 Master Catalog Now Available with Over 3,500 New Applications Listings

07/01/02 - Borg-Warner Brand Backed With "No Comeback Guarantee" For High Tech Replacement Products

07/01/02 - BWD Automotive Seeking Applicants for Legacy Scholarships

06/27/02 - Dana Corporation Completes Sale of Selected DCC Subsidiaries

06/21/02 - Wix Awards Scholarships and Funding to FFA Chapters

06/19/02 - Dana Corporation Realigns Automotive Systems Businesses

06/17/02 - Wix Filters Earns Top Supplier Award From Aftermarket Auto Parts Alliance

06/17/02 - Borg-Warner Brand Offers Cool 6-Packs for Summer

06/17/02 - Dana Corporation to Supply Torque Management, Traction Technologies for Lincoln Aviator

06/13/02 - Dana Corporation Raises Second-Quarter Expectations

06/13/02 - Dana Brake Parts Canada, Inc. Honored with 2002 Guelph Environmental Awar for Excellence in Waste Management

06/12/02 - Dana Corporation Announces Expiration of Supply Agreements with Mack Trucks, Inc.

06/11/02 - Dana to Provide Support Modules for Newly Announced Isuzu Pick-up Truck

06/10/02 - Dana Corporation to Supply Axles, Driveshafts, & Full Frames for new Generati of GMC Savana, Chevy Express Vans

06/05/02 - Dana ANCOM Facilities Receive Recommendation for ISO-14001 Certification

05/31/02 - Wix Enters Product Sponsorship Agreement with Hendrick Motorsports

05/30/02 - Wix Filtration Products wins the CARQUEST Order Fill Award

05/24/02 - Raybestos® Brand Brakes Signs Indy Driver Sarah Fisher

05/23/02 - Victor Reinz has been named the 2001 CARQUEST Vendor of the Year

05/22/02 - Josh Starcher Advances to Semi-finals at IHRA Summer Nationals

05/20/02 - Dana Corporation to Supply Independent Rear Suspension Systems for Ford Falcon in Australia

05/20/02 - Dana Europe Facility Obtains QS-9000 Certification

05/15/02 - Dana Corporation Raises Second-quarter Expectations

05/10/02 - Dana Begins Providing Technologically Advanced Hydroformed Structural Systems for the 2003 Ford Expedition and Lincoln Navigator

05/10/02 - Dana Receives receives "Best Project Award" by Partners In Education of Tolec

05/08/02 - Wix Filters Drag Racing Update

05/07/02 - DANA CORPORATION ANNOUNCES FORMATION OF HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP

05/06/02 - Dana Corporation's Hose & Tubing Products Group Consolidates Rubber and Plastic Extrusion Operations

05/06/02 - DANA BRAKE AND CHASSIS NAMED FEDERATED OUTSTANDING VENDOI OF THE YEAR

05/06/02 - BWD AUTOMOTIVE AND PERFECTION HY-TEST CLUTCH ANNOUNCE NEV ALLIANCE FOR BORG WARNER BRANDED CLUTCHES

05/06/02 - WIX OFFERS DRIVERS A BREATH OF FRESH AIR WITH EXPANDED LINE OF CABIN AIR FILTERS

04/30/02 - DANA CORPORATION'S TORQUE MANAGEMENT FACILITY EARNS CCME POLLUTION PREVENTION AWARD

04/30/02 - FEDERATED AUTO PARTS AWARDS BWD AUTOMOTIVE AS VENDOR OF THE YEAR HONORABLE MENTION

04/26/02 - Dana Venezuela Facilities Earn ISO 14001 Certification

04/19/02 - DANA CORPORATION INTEGRATES LIGHT AXLE, DRIVESHAFT BUSINESSES AS PART OF CUSTOMER-FOCUSED REALIGNMENT

04/17/02 - DANA CORPORATION ANNOUNCES FIRST-QUARTER RESULTS

04/16/02 - DANA CORPORATION DECLARES DIVIDEND

04/16/02 - DANA CORPORATION INTRODUCES NEW AXLES AND BRAKES CONDENSED SPECIFICATIONS GUIDE

04/15/02 - NAPA BRAKE AND CHASSIS IS UNPRECEDENTED SIX-TIME WINNER OF SPIRIT AWARD

04/05/02 - ROUND 4 OF CLEVITE ENGINE BUILDER SHOWDOWN USHERS IN NEW CHAMPION AND NEW ENGINE BUILD RECORD

04/03/02 - Dana Engine Management Division Receives ISO-14001 Registration

04/03/02 - DANA CORPORATION ELECTS RETIRED UNITED PARCEL SERVICE CHAIRMAN & CEO JAMES P. KELLY TO BOARD OF DIRECTORS

03/28/02 - DANA'S FORT WAYNE FACILITY EARNS ISO 14001 CERTIFICATION

03/26/02 - DANA CORPORATION INTRODUCES VOCATIONAL STEER AXLE FAMILY

03/26/02 - DANA CORPORATION INTRODUCES NEW CLASS 7 AND 8 AIR DISC BRAK SYSTEM

03/26/02 - DANA CORPORATION RAISES FIRST-QUARTER EXPECTATIONS

03/25/02 - DANA CORPORATION'S SPICER® WING BEARING DRIVESHAFTACCOMMODATES WIDER VARIETY OF APPLICATIONS

03/25/02 - DANA'S NEW MODEL 44 AXLE HYDROSTATIC ADAPTER SAVES SPACE, REDUCES COST

03/25/02 - DANA SPICER SPECIALTY AXLE DIVISION IMPROVES STEER DRIVE AXLE

03/25/02 - DANA CORPORATION OFFERS NEW POWERSHUTTLE TRANSMISSION

03/25/02 - DANA ANNOUNCES ADVANCED DATA MANAGEMENT PLATFORM FOR ASSET AND FLEET MANAGEMENT

03/21/02 - DANA FACILITY OBTAINS ISO 14001 REGISTRATION

03/21/02 - ROUND 2 RESULTS OF CLEVITE ENGINE BUILDER SHOWDOWN 2002

03/18/02 - DANA TO SUPPLY TRACTION AND TORQUE MANAGEMENT TECHNOLOGIES FOR TWO NEW JEEP® MODELS

03/11/02 - DANA CORPORATION COMPLETES NOTES PLACEMENT

03/07/02 - Dana ANCOM Receives Best Supplier Award from General Motors

03/05/02 - TOM O'BRIEN NAMED VICE PRESIDENT OF MARKETING FOR DANA BRAK AND CHASSIS

03/05/02 - DANA CORPORATION FACILITY RECEIVES ISO-14001 REGISTRATION

03/04/02 - WIX BRAND WEB SITE WINS MERIT AWARD FROM ASSOCIATION FOR WOMEN IN COMMUNICATIONS

02/27/02 - DANA CORPORATION FACILITY RECEIVES ISO-14001 REGISTRATION

02/26/02 - RAYBESTOS® BRAND BRAKES PRESENTED WITH THE 2001 PARTS PLUS PARTNER OF THE YEAR AWARD

02/25/02 - DANA CORPORATION PLANS TO SELL NOTES

02/21/02 - RAYBESTOS® BRAND BRAKES AND MIKE DITKA TEAM UP FOR BRAKE PROMOTION

02/20/02 - CLEVITE NAMED PREFERRED PARTNER BY JASPER ENGINES & TRANSMISSIONS

02/20/02 - WIX FILTERS EARNS VENDOR OF THE YEAR AWARD FROM O'REILLY AUTO PARTS

02/19/02 - GENTLEMEN, BUILD YOUR ENGINES!

02/19/02 - DANA CORPORATION COLLABORATES WITH FORD ON DESIGN OF NEW 2002 HARLEY-DAVIDSON™ F-150 SUPERCREW PICK-UP

02/14/02 - DANA CORPORATION'S ADVANCED TRACTION TECHNOLOGIES SAVE SPACE, IMPROVE HANDLING FOR 2002 RANGE ROVER

02/13/02 - DANA CORPORATION'S ARCO FACILITY EARNS INTERNATIONAL BEST FACTORY AWARD

02/13/02 - DANA CORPORATION ANNOUNCES YEAR-END RESULTS AND PROGRES ON RESTRUCTURING ACTIONS

02/13/02 - DANA CORPORATION INTRODUCES 8,000-LB. STEER AXLES

02/12/02 - DANA CORPORATION DECLARES DIVIDEND

02/12/02 - DANA FACILITY OBTAINS ISO 14001 REGISTRATION

02/12/02 - DANA ENGINE MANAGEMENT LEARNING CENTER RECEIVES RE-CERTIFICATION

02/06/02 - BECK/ARNLEY WORLDPARTS EARNS MAGAZINE'S READERS' CHOICE AWARD

02/04/02 - WIX FILTERS DRIVES RACE FANS INTO AUTO PARTS STORES WITH INNOVATIVE NASCAR PROMOTION

02/04/02 - DANA CORPORATION OFFERS NEW POWERSHUTTLE TRANSMISSION

02/04/02 - DANA SPICER OFF-HIGHWAY AXLE DIVISION RECEIVES QS-9000 CERTIFICATION

01/28/02 - PLUMLEY'S FULTON PLANT ACHIEVES ISO-14001 REGISTRATION

01/28/02 - DANA CHAIRMAN & CEO JOE MAGLIOCHETTI EARNS AUTOMOTIVE HALL OF FAME DISTINGUISHED SERVICE CITATION

01/25/02 - Borg-Warner Brand's New Ignition and Electrical Engine Management Catalog f Late Model Vehicles is Here

01/22/02 - DANA TRACTION TECHNOLOGIES GROUP IMPLEMENTS ADVANCED REA TIME QUALITY TRACKING SYSTEM TO DOMESTIC AND GLOBAL SUPPLIERS

01/17/02 - WIX FILTRATION PRODUCTS EARNS ISO 14001 REGISTRATION FOR ALLEN AND OKLAHOMA CITY PLANTS

01/16/02 - CLEVITE ENGINE PARTS AWARDS THE RACE WEEKEND TO END ALL RACE WEEKENDS

01/11/02 - WIX FILTERS EARNS TOP SUPPLIER AWARD FROM AFTERMARKET AUTC PARTS ALLIANCE

01/08/02 - DANA CORPORATION TO SUPPORT 2003 DODGE VIPER WITH HIGH-PERFORMANCE, ADVANCED TRACTION TECHNOLOGIES

01/04/02 - BWD Automotive Revs Up the Holidays for Needy Children

01/03/02 - COULD SOMEONE YOU KNOW BE THE NEXT VICTOR REINZ MACHINIST OF THE YEAR?

12/20/01 - RAYBESTOS® BRAND BRAKES ANNOUNCES PROMOTIONAL CAMPAIGN FOR 100-YEAR ANNIVERSARY IN 2002

12/19/01 - DANA CORPORATION'S DRIVESHAFT PRODUCTS GROUP CHANGES NAME TO REFLECT BROADER RANGE OF TECHNOLOGY

12/18/01 - DANA CORPORATION SELECTED AS 4WD SYSTEM SUPPLIER FOR 2002

FORD ESCAPE IN TAIWAN

12/14/01 - DANA CORPORATION DRIVESHAFT, ENGINE PRODUCT FACILITIES EARN COMMONWEALTH OF KENTUCKY'S TOP QUALITY AWARD

12/13/01 - DANA UNIT RELEASES REAL-TIME QUALITY TRACKING SYSTEM TO SUPPLIERS

12/12/01 - DANA TRACTION TECHNOLOGIES GROUP OBTAINS ISO 14001 CERTIFICATION FOR TEN OF ITS GLOBAL FACILITIES

12/11/01 - DANA CORPORATION SELECTED AS 'BEST OF THE BEST' AMONG AXLE SUPPLIERS IN INDUSTRY SURVEY

12/07/01 - DANA BRAKE AND CHASSIS PRESIDENT TELLS INDUSTRY GROUP THAT AUTOMOTIVE AFTERMARKET IS EXCITING AND DYNAMIC INDUSTRY

12/05/01 - "CEEK" AND YE SHALL FIND CLEVITE ENGINE PARTS BRINGS ENGINE KI CATALOGING ONLINE

12/03/01 - DANA CORPORATION ANNOUNCES ORGANIZATIONAL CHANGES, APPOINTS TECHNOLOGY OFFICER, AND PROVIDES ADDITIONAL DETAIL ON RESTRUCTURING PLANS

01/01/00 - NAPA Echlin Backed By Worry-Free Warranty

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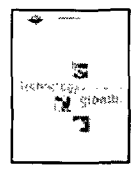
Information & Brochures

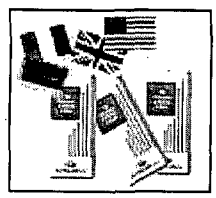
Note: to order printed information, please contact Jackie Heber (of Heck's Printing) at 419-661-6021, or via email at: orders@hecksprinting.com

2001 Annual Report

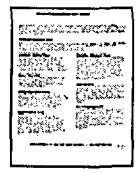
2000 Annual Report



PDF Versions of the Dana Pamphlets *14 languages including English*



Dana Fact Sheet



Transformation 2005 (PDF)

The Dana Style (PDF)

The Philosophy & Policies of Dana (PDF)

Standards of Business Conduct (PDF)

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People Finding A Better Way®

Resources

Resources to help you learn more about Dana Corporation:

Quarterly Reports:

2nd Quarter - 2002 Fact Sheet

Dana's Investor Relations Page

Visit Toledo.com:

Toledo.com is a great site to find out about Toledo-area businesses, what to do in the glass city this weekend, where to eat and shop, as well as many other great links - it's the Glass City at yc finger tips!

Dana History

Dana History Book

Additional Industry Resources:
When you click on any of the following hyperlinks, you will leave Dana's web site. We have provided these links for your convenience in learning more about Dana's markets, but none of these linked sites are part of our web site and we do not endorse or accept any responsibility fo the content of these linked sites (or of any other third-party sites linked to them) or for your use such sites.

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AUTOFACTS
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Thomas Register-Manufacturers Of Industrial Products

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Shareholder Services-The Bank of New York
Street.com
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People Finding A Better Way®

DANA

NEWS ROOM

Contacts

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Gary.Corrigan@Dana.com

Jeff Cole, Manager, Marketing Communications
Jeff.Cole@Dana.com

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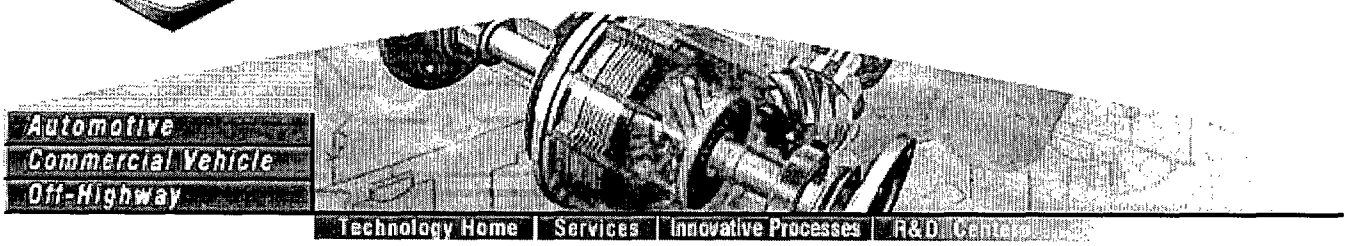
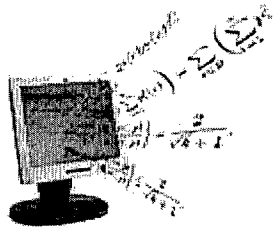
People Finding A Better Way®

DANA

TECHNOLOGY



Innovating New Products, Systems, and Services



- Alternative fuel-powered engines
- Increased energy efficiency of internal combustion engines
- Lighter, stronger, and more durable vehicles
- Reduced emissions and increased recyclability
- Reduced noise, vibration, and harshness
- Improved ride and handling
- Speed and flexibility

With technology partners like Motorola, technology tools like the Dana Virtual Test Rig and Tritium Tracer™ System, and technology-development processes like the Front End and Stage Gate, Dana is accelerating vehicular innovation. The wide array of sustaining and disruptive technologies our engineers and technical experts are developing have the common thread of customer needs.

What you see in this section are advanced technologies. For current products and services, check out the Dana overview page, or, for more detail, the market pages - automotive, commercial vehicle and off-highway.

People Finding A Better Way®

DANA

INVESTORS' CORNER

Search Here Go

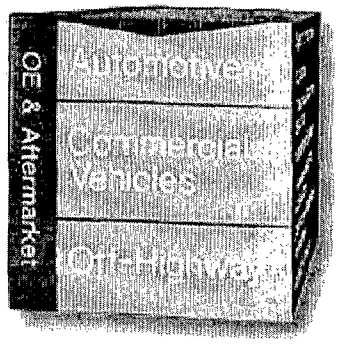
- Key Financial Data
- Current Dana Stock Quote
- CEO and CFO Statements
- Letter to the Shareholders
- Dana's 9 Core Products
- Transfer Agent and Registrar Information
- Dana Corporation 3rd Quarter Slides & Audio are available now...
- Form 10-Q for Quarterly Period Ended Sept. 30, 2002

Today

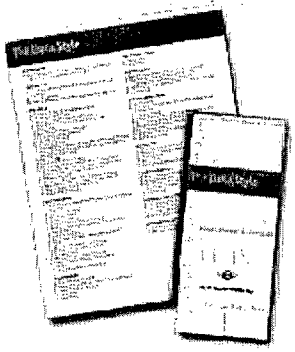
- Scaling Our Business
- Reducing Working Capital
- Optimizing Utilization
- Basic Blocking and Tackling
- Strategic Alignment

Near -Term

"the Cube" Information



Our Future



Roll over our 3D cube to rotate and see its many sides. This cube shows how Dana is aligning its products, markets and services.

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People Finding A Better Way®

COMMERCIAL VEHICLE SOLUTIONS

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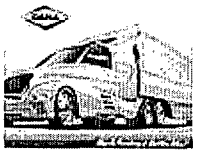
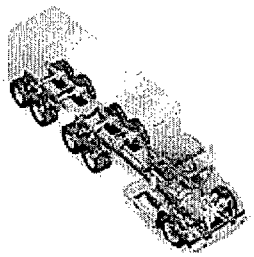
Application Approval Request System



Brake Application Guidelines

Within the medium and heavy-truck segment, Dana provides value-added solutions for original-equipment manufacturers along with service and parts for all customers. Two market-focused business units serve this segment - **Heavy Vehicle Technologies and Systems** and **Engine and Fluid Management**. These two business units focus their resources on the needs of their global customers employing the synergies of the entire corporation.

HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP



Heavy Vehicle Technologies and Systems Group designs, manufacturers, and markets front-steer, rear-drive, trailer, and auxiliary axles; driveshafts; steering shafts; brakes; suspensions; and related systems, modules, and services for the commercial vehicle market.

ENGINE AND FLUID MANAGEMENT GROUP

Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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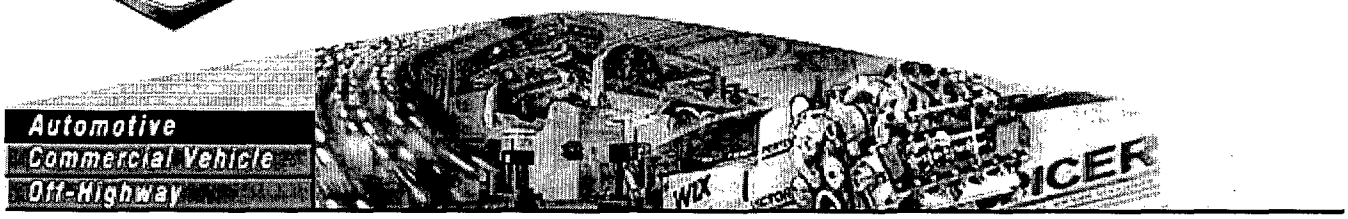
People Finding A Better Way®

AUTOMOTIVE SOLUTIONS



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- GM Tech World

Within the light-vehicle segment, Dana provides value-added solutions for original-equipment ar aftermarket customers - both under the vehicle and under the hood. Serving this segment are three market focused business units - **Automotive Systems**, **Engine and Fluid Management**, and **Automotive Aftermarket**. These three business units focus their resources on the needs o their global customers while utilizing the synergies of the entire corporation.

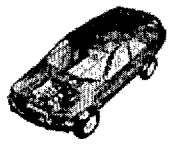
AUTOMOTIVE SYSTEMS GROUP

The Automotive Systems Group is a leading provider of under-the-vehicle integration technologies.

AUTOMOTIVE AFTERMARKET GROUF

The Automotive Aftermarket Group manufactures replacement parts and components for 95% of the world's 650 million vehicles.

ENGINE AND FLUID MANAGEMENT GROUP



Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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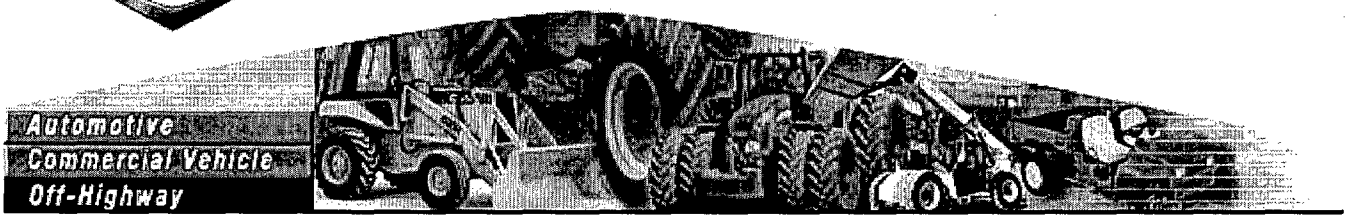
People Finding A Better Way®

DANA

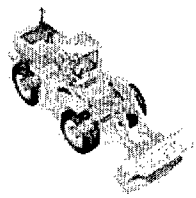
OFF-HIGHWAY SOLUTIONS



Search Here Go

From traditional off-road applications to a range of specialized markets that reach skyward and underground, Dana provides value-added solutions for original-equipment manufacturers. Two market-focused business units - **Heavy Vehicle Technologies and Systems** and **Engine and Fluid Management** - support the needs of their global customers in these markets using the synergies of the entire corporation.

HEAVY VEHICLE TECHNOLOGIES AND SYSTEMS GROUP



Heavy Vehicle Technologies and Systems Group provides drivetrain products, along with global-responsive parts and service, for the construction, agriculture, mining, forestry, material handling, specialty chassis, outdoor power equipment, leisure/utility vehicles, and various industrial markets.

ENGINE AND FLUID MANAGEMENT GROUP

Engine and Fluid Management Group provides expertise in fluid systems, sealing, and engine power cylinder management by developing solutions that help cut emissions, boost fuel economy, improve durability, and reduce noise, vibration, and harshness (NVH).

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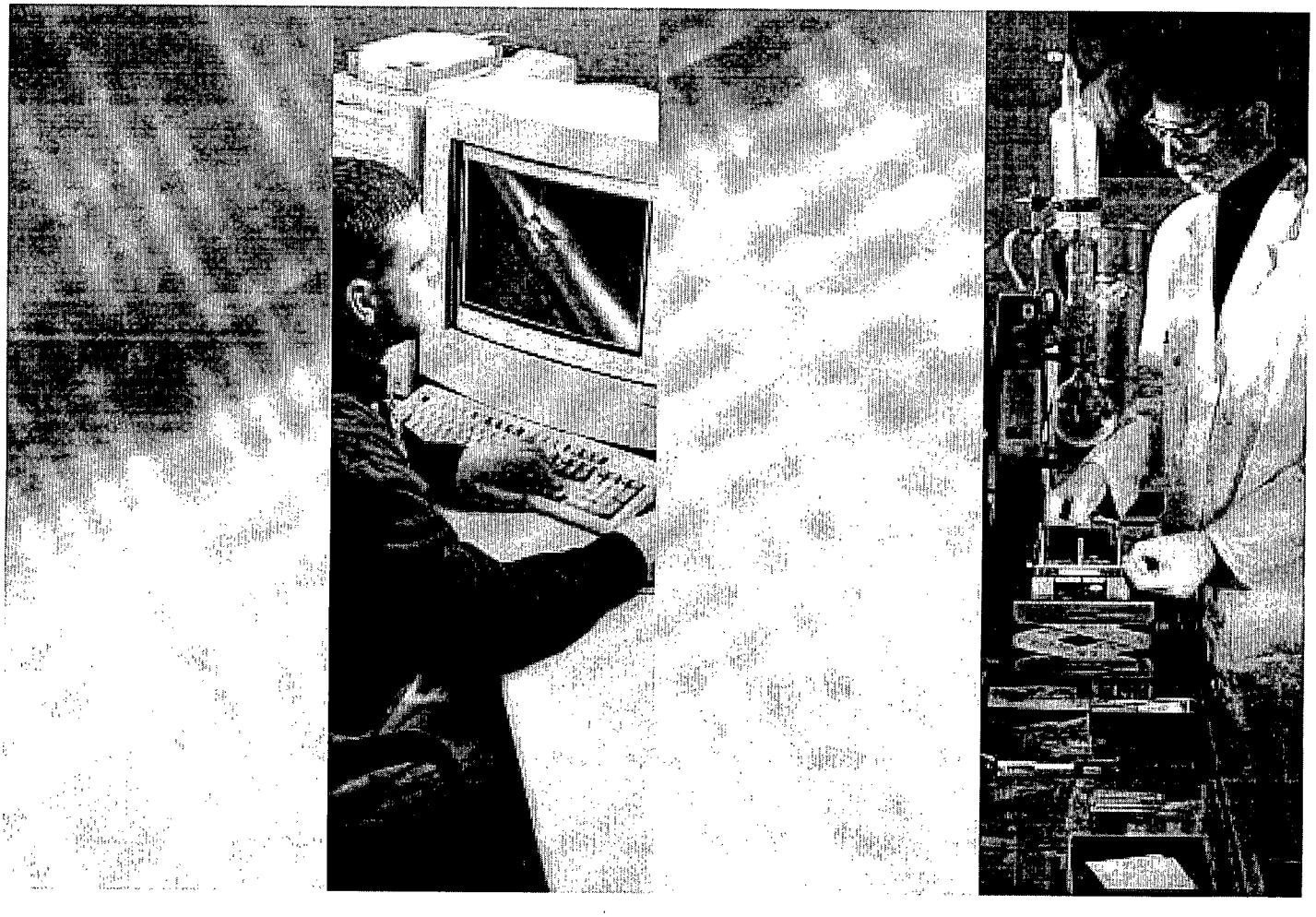
People Finding A Better Way®

Transforming Our Future



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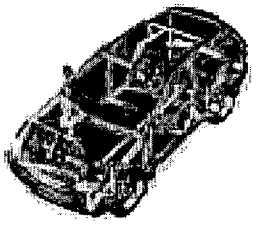
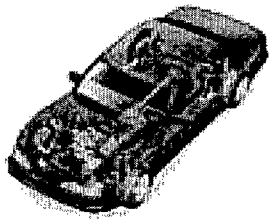
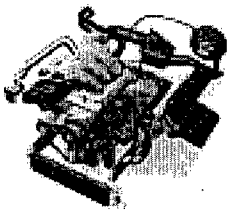
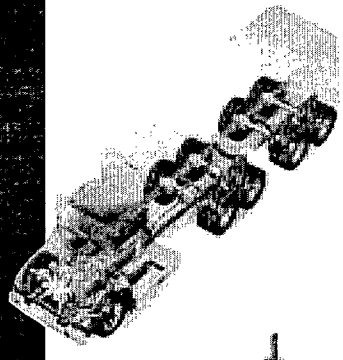
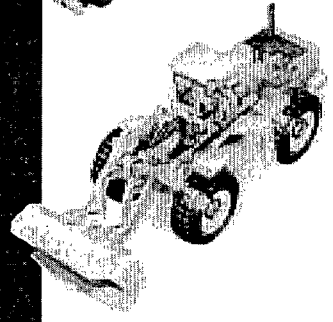
About the Cover

For nearly a century, Dana people have shaped innovations in product and service technology. Drawing strength from this foundation, Dana continues to transform its future through the development of advanced products and customer-focused solutions.

At left, Kevin Frye (11 years of service), an animator with Dana's Advanced Technology Resource Group, generates a photo-realistic rendering of a hydroformed, laser-cut driveshaft currently in development. At right, Mechanical Engineer Bernd Gaugler (one year of service) assembles a fuel-cell test stack at Dana's Neu-Ulm, Germany, Fuel Cell Support Center.

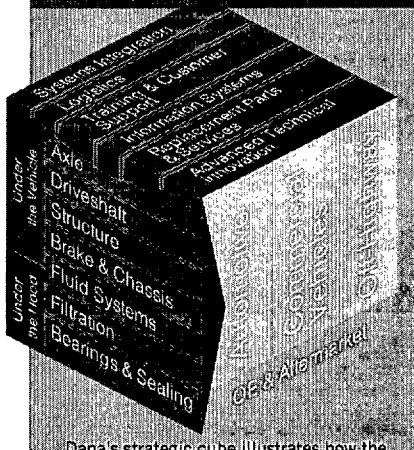
Dana at a Glance

Market-Focused Businesses	Primary Products*	Primary Markets
 **Automotive Systems** 2001 Sales $3.7 Billion Major Facilities 78 Technical Centers 26 People 21,600 Group President Bill Carroll 32 years of service	**Torque and traction technologies (axles, driveshafts, and drivelines), structural and chassis technology solutions (structures** and steering and suspension components), **brake** and clutch systems, and systems integration technology (including advanced modularity concepts and systems).	Personal and light vehicles, including passenger cars and vans, sport utility vehicles, pickup trucks, commercial vans, and motorcycles. Markets encompass two-wheel, four-wheel, and all-wheel-drive vehicles for on- and off-road applications.
 **Automotive Aftermarket** 2001 Sales $2.5 Billion Major Facilities 90 Technical Centers 11 People 19,000 Group President Terry McCormack 28 years of service	**Brakes, filtration products, chassis products,** and engine management products.	Traditional aftermarket, retail, original equipment, original equipment service, and co-manufacturing.
 **Engine and Fluid Management** 2001 Sales $2.1 Billion Major Facilities 99 Technical Centers 15 People 19,400 Group President Mike Laisure 28 years of service	**Gaskets; sealing systems;** thermal acoustical shields; cam covers; powertrain plastics; piston rings; cylinder liners; heavy-duty cams; **engine anti-friction bearings; fuel cell products; and pumping, routing, and thermal management products (vehicular and non-vehicular).**	Automotive, commercial vehicle, off-highway, recreational vehicle, and small engine.
 **Commercial Vehicle Systems** 2001 Sales $1.1 Billion Major Facilities 16 Technical Centers 2 People 4,100 Group President Nick Cole 33 years of service	**Front-steer axles, single- and tandem-drive axles, trailer axles,** chassis and air-ride suspension modules, **brakes,** and **driveshafts.**	Global commercial vehicle market, including medium-duty (Class 5-7) and heavy-duty (Class 8) markets.
 **Off-Highway Systems** 2001 Sales $621 Million Major Facilities 11 Technical Centers 3 People 3,400 Group President Nick Cole 33 years of service	**Single-reduction and planetary axles, brakes (dry disc, hub and drum, and wet disc),** transaxles, transmissions, electronic controls, **driveshafts and end fittings,** and modules and systems.	Construction, agricultural, mining, specialty chassis, forestry, material handling, leisure-utility, outdoor power equipment, and industrial.

*Bold type denotes foundation products

Customer-Focused Solutions	Major Customers	Future Growth Drivers
Solutions based on a solid foundation of core products, bolstered by broad, under-vehicle technologies; strategic collaborative relations (such as GETRAG); demonstrated systems integration success; and global reach. Environmentally focused innovations enhance overall vehicle performance and comfort.	Ford, DaimlerChrysler, General Motors, Toyota, Volkswagen, Isuzu, Nissan, Fiat, BMW, and China Motor.	Customer focus and alignment, focus on innovation and technology, operational excellence, and systems integration technology. Wide array of electronic torque and traction products, magnetic-pulse welding, patented hydroforming process, and space frames. Total systems development and value chain management.
Order-fill rates of 96 percent or higher, 48-hour distribution turnaround, and competitively priced products.	NAPA, CARQUEST, Parts Plus, General Motors, and Pep Boys.	Inventory management system management, 96-percent or higher fill rates, and 48-hour distribution turnaround.
Global collaborative solutions that provide complete engine sealing systems, power cylinder systems, and complete fluid management systems that enhance fuel economy, improve durability, and reduce emissions.	Ford, Visteon, DaimlerChrysler, General Motors, Caterpillar, and PSA.	Technologies for emission reduction, oil consumption reduction, and fuel economy. Vehicular electric systems (42-volt); fuel cells for residential, commercial, and automotive markets; and hybrid/alternative-energy vehicles.
Complete axle and suspension modules, chassis modules, torsionally tuned systems, and enhanced customer service under the Roadranger® banner (through relationship with Eaton Corporation).	PACCAR (Kenworth and Peterbilt), Mack, Navistar, Ford, General Motors, and DaimlerChrysler (Freightliner).	Transportation and logistics business (DTF), intelligent systems, and complete modules and suspensions.
Global drivetrain product and service solutions – from individual products to complete, electronically controlled systems. Intense focus on enhancing customer, distributor, and end-user productivity.	Agco, Case New Holland, Deere & Co., Manitou, and Tamrock.	Local product and service delivery capability in all regions; advanced electronic control, diagnostic, and monitoring collaboration in product design with customers; and major global engineering centers with regional satellite services.

World-Class Products and Services Serving Key Global Markets



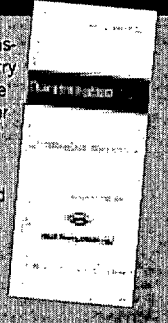
Dana's strategic cube illustrates how the company's foundation businesses (shown on the blue panel) are aligned with its markets (on the gold panel) to serve both original equipment and aftermarket customers. These businesses and markets are supported by the coordinated services located atop the cube.

Foundation Businesses: Focused Excellence

Dana's Foundation Businesses are: axles, driveshafts, structures, brake and chassis products, fluid systems, filtration products, and bearings and sealing products.

These products hold strong market positions – number one or two in the markets they serve. They provide value-added manufacturing, are technically advanced, and each has features that are unique and patented.

Transformation 2005: Technology and Innovation Drive Our Growth



We will lead in the transformation of the industry value chain to generate exceptional benefits for our customers and our shareholders.

Through innovation and technology, we will be the global leader in providing value-added products, systems, and services focused on the vehicular industry.

Financial Summary

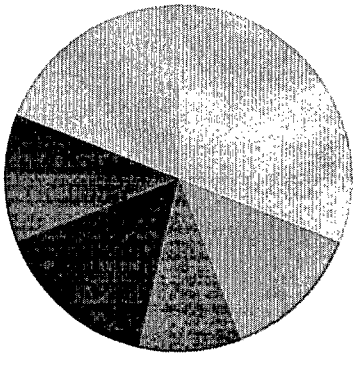
dollars in millions, except per share data

Year Ended	12/31/00	12/31/01
Sales	$12,317	$10,271
Income before non-recurring items	$377	$5
Net income (loss)	$334	$(298)
Return on sales before non-recurring items	3.1%	0.0%
Net return on sales	2.7%	(2.9)%
Earnings per share before non-recurring items (diluted)	$2.46	$0.04
Earnings per share (diluted)	$2.18	$(2.01)
Average common shares outstanding (diluted)	153 million	148 million
Dividends paid per share	$1.24	$0.94
Dividend yield	8.1%	6.8%
Total assets	$11,236	$10,207
Return on beginning equity	11.3%	(11.3)%
Return on average shareholders' equity	12.0%	(13.0)%
People at year end	79,288	69,758
Principal facilities	313	300
Countries	35	34

Sales by Foundation Business – 2001

dollars in millions

Axles	$ 3,188
Brake & Chassis Products	1,344
Driveshafts	982
Fluid Systems	831
Bearings & Sealing Products	743
Structures	667
Filtration Products	573
Other	1,943
Total	$ 10,271



Dear Fellow Shareholders,

The year 2001 is one many of us in the automotive industry might prefer to forget.

We faced broad economic woes, deteriorating markets, and erratic customer production levels. Many of these challenges were particularly frustrating because they were beyond our direct control. And, largely as a result of these conditions, our financial performance was also disappointing.

And yet, I firmly believe we will look back on 2001 as one of the most important years in the transformation of the Dana Corporation.

Within these challenges, we found opportunity. Rather than simply enduring these conditions and hoping to prosper when our markets recovered, we took historic actions to reposition our company:

Joseph M. Magliochetti
Chairman and Chief Executive Officer
(35 years of service)

- We initiated a restructuring of our operations aimed at optimizing our resources, improving our capital efficiency, strengthening our balance sheet, and facilitating sustainable, long-term value for our investors;
- We continued to streamline our organization, sharpening the focus on our core operations by divesting non-strategic assets accounting for more than $235 million in proceeds;
- We announced plans to sell our Dana Commercial Credit operations;
- We introduced a new business model that will enable us to reduce our fixed asset base and lower our break-even point, providing more flexibility to maximize our performance as the industry recovers;
- We secured new business that increased the projected value of our future new business to approximately $6 billion in combined sales from 2002 through 2006; and
- We accelerated our innovation and technology growth with strong patent activity and continued development of customer-focused technologies.

The result of these actions, I believe, will be a stronger, more competitive company better equipped to prevail in difficult times. At the same time, we will be positioned to benefit to an even greater extent from the inevitable upturn in our markets.

In the coming pages, I will review the economic and market-related challenges we have confronted, the aggressive actions we are taking, and the achievements that point to a bright future for Dana.

Disappointing Performance.

Clearly, our financial results were not consistent with our historical performance, or our expectations for the year.

Sales of $10.3 billion, a 17-percent decline from our 2000 results, reflected challenging conditions as customer inventories were reduced and not replenished by

the supplier community. This decline, in combination with the charges associated with our restructuring efforts, resulted in a net loss of $298 million for the year. Before these non-recurring charges, Dana's operating profit totaled $5 million.

Both sales and profitability were severely impacted by a difficult year for the global economy in general, and our key markets in particular.

A Rocky Year for the Economy and Our Markets.

The past year marked the end of the longest economic expansion in U.S. history. But, it wasn't the soft landing most of us had expected. The U.S. economy staggered toward recession, as did markets in many other countries. As *The Wall Street Journal* reported, last year was "arguably the worst for the broad market in nearly 30 years."

Within these challenges, we found opportunity.

The unspeakable attacks of September 11 stunned and saddened us all. Unfortunately, in their aftermath, many existing negative trends were intensified.

Within the automotive sector, it was apparent from the outset of 2001 that nearly a decade of solid growth had drawn to a close. A number of negative factors from the previous year spilled into 2001. Chief among these was the issue of over-capacity. Although light-vehicle sales were relatively strong for much of the past year, there was excess inventory in the supply chain. In other words, the industry had stockpiled far more vehicles than were needed. These bulging inventories led to production cuts that were both severe and erratic.

As an example, during 2001, Dana's major customers eliminated the equivalent of approximately 250 weeks of combined production spanning a variety of programs. These cuts impacted numerous platforms with substantial Dana content.

The delicate balance between sales, inventory, and production was further demonstrated during the fourth quarter, as several manufacturers offered zero-percent financing programs and special terms to stimulate sales. Customer sales surged to record monthly levels, helping to reduce excessive inventories. However, production schedules – which are critical to the supply community – were actually reduced, reflecting a growing concern for our economic malaise.

Compounding the difficulties on the light-vehicle side of our industry, the heavy-truck market experienced a catastrophic drop in volume – resulting in severe over-capacity. Two years after registering a record North American build of more than 330,000 units, heavy-truck production dropped precipitously in 2001 to less than 150,000 units. The drop from the record build of 1999 to our 2002 forecast of a 130,000-unit build rate represents the steepest percentage decline in the history of this sector.

While our issues in the light- and heavy-vehicle marketplaces can be largely attributed to "outside forces," some of our struggles in the automotive aftermarket are still associated with internal issues related to the former Echlin warehouse consolidation project. Nevertheless, an experienced Dana aftermarket team has made solid progress over the past 18 months – fine-tuning its strategic plan, improving order-fill and delivery performance, and scaling the operations to more prudently meet present and future demand.

Looking ahead, we see this market being essentially flat for Dana in 2002. But it's encouraging to note that the aftermarket typically provides greater stability during a recession. Plus, there are a number of signals pointing to recovery in the longer term. Favorable vehicle demographics such as an aging vehicle population, a large number of vehicles entering the prime repair window, and unperformed maintenance estimated to be as much as $70 billion, should yield increased future demand for our related products. In addition, a number of timely and appropriate price increases should enable Dana to realize greater returns from some of our premium aftermarket products.

Dana Takes Action.

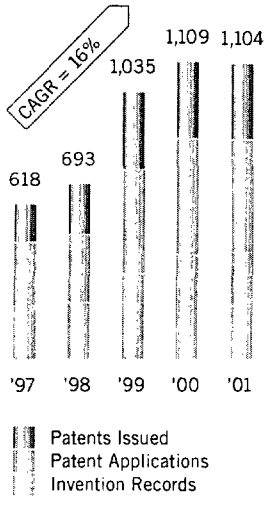
In response to these extraordinary circumstances, Dana initiated a series of major actions in October, including:

- A $445 million (after tax) restructuring of the company's operations involving the closure or consolidation of more than 30 facilities;
- A workforce reduction directly impacting more than 15 percent of our people worldwide;
- A reduction of the fourth-quarter dividend from 31 cents to one cent per share; and
- Plans to sell the businesses of our leasing services unit, Dana Commercial Credit (DCC).

While extremely difficult, each of these decisions was nonetheless essential to our future success.

The most recent workforce reductions announced in October came on the heels of more than 10,000 layoffs during the preceding 18 months. Unfortunately, there's an inescapable relationship between customer production and our staffing levels. These actions affected not only those who left the company, but also those who remained – as many of our people have been asked to take on new or additional responsibilities. Clearly, the progress Dana has made amid these difficult circumstances is due to the ongoing efforts of our exceptional people.

For many of you reading this letter, the decision to reduce the fourth-quarter dividend was perhaps the most disappointing action of all. With a 65-year heritage of paying quarterly dividends without a reduced or missed payment, this action clearly did not come lightly.

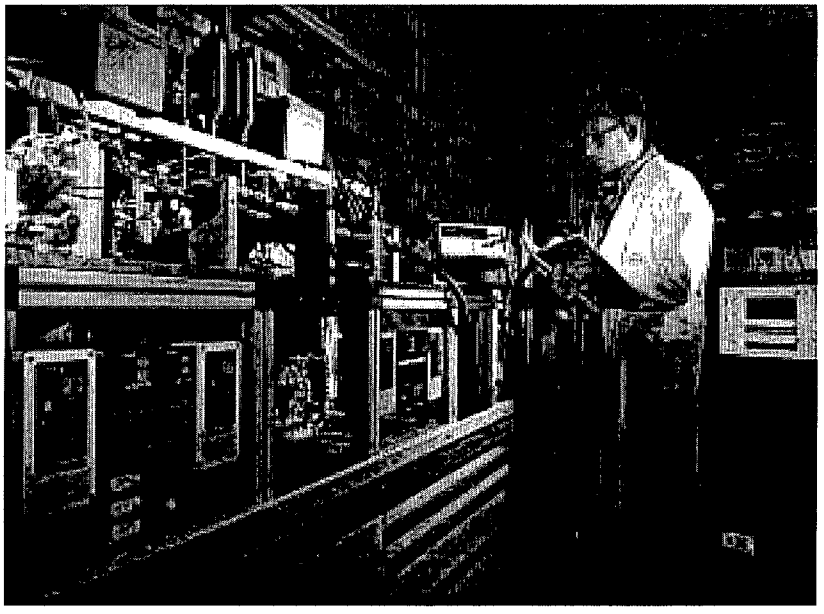


Dana's accelerated emphasis on innovation and technology has driven solid growth in patent activity.

We are also acutely aware that many Dana shareholders have come to depend on healthy dividend payments. However, at the same time, our broader responsibility to the company and its investors is to ensure that Dana represents a solid, long-term investment. In the midst of such daunting circumstances, it was not appropriate to maintain what was one of the highest yields among the S&P 500 at the time of this action.

In the near term, the cash flow benefit will help us focus our financial resources on strengthening our balance sheet. But we are not abandoning the dividend. To the contrary, as conditions allow, we intend to reward shareholders with a dividend rate that appropriately relates to our performance.

Finally, given the expected duration of the downturn in our markets – and its direct impact on the ability of DCC to conduct transactions – we are pursuing the sale of the businesses of Dana Commercial Credit. We believe these very successful businesses will be served well as part of a different corporate structure where the cost of capital is more competitive.



Chemical Technician Markus Lemm (six years of service) monitors a fuel-cell stack at Dana's Neu-Ulm, Germany, **Fuel Cell Support Center.** Dana has established fuel cell support centers in three countries where engineers are developing technology and high-volume production methods for numerous components and subsystems.

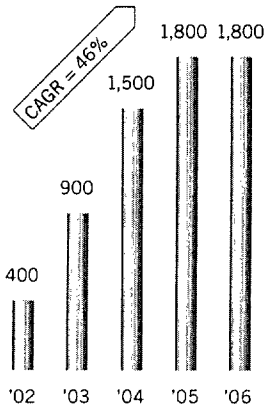
The Good News.

In addition to our restructuring actions, Dana made important progress in a number of other key areas during 2001.

We increased our emphasis on innovation and technology, as combined invention records, patent applications, and patents awarded continued an impressive five-year growth trend illustrated in the chart at left. This innovation is feeding the development of performance-enhancing traction technologies, electronic vehicle-control systems, intelligent cooling systems, and many more new technologies.

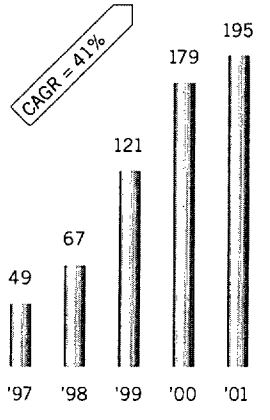
For example, Dana also continued to grow its role in the research and development of fuel-cell technology. Fuel cells have the potential to eventually replace internal combustion engines. Dana has established fuel-cell support centers in Canada, Germany, and the United States, where engineers are working to develop technology and high-volume production methods for numerous components and subsystems. Our first steps toward becoming a supplier of systems to the fuel-cell industry will be in the residential and industrial markets. Fuel cell-based home heating systems are expected to reach relatively widespread production within the next three years. Automotive applications should follow during the latter part of this decade.

$ in millions



New technology has been a major factor in helping Dana secure approximately $6 billion in new business over the next five years with a variety of global customers.

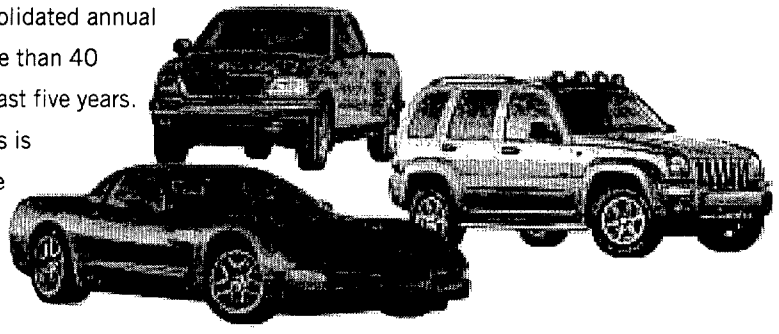
$ in millions



Automotive Systems sales to overseas manufacturers with U.S. operations has grown at an impressive 41% compound annual growth rate over the past five years, providing important diversification.

These new technologies and other promising innovations demonstrate our ongoing commitment to developing proprietary, high-value solutions to better serve our customers. They have also been major factors in helping to secure new business with a variety of global customers. In fact, Dana has been awarded net new business which is projected to add approximately $6 billion in total over the next five years.

Included among these programs are several projects with overseas manufacturers with U.S. operations, such as Toyota, Nissan, BMW, Land Rover, and others. As the graphic at bottom left illustrates, Automotive Systems growth in this area has been strong with a consolidated annual growth rate of more than 40 percent over the past five years.



Of course, this is not to diminish the importance of our largest customers, the traditional "Big Three" vehicle manufacturers: Ford, General Motors, and DaimlerChrysler. Despite a more intense competitive environment within the automotive industry, these manufacturers clearly remain global market leaders. We take pride in continuing to work closely with these customers in developing some of the world's most exciting cars and trucks, and we believe strongly in our collective future.

Our new business growth is also supported by a strong quality heritage. In April, I was honored to be among those representing the Dana Corporation in accepting our nation's highest quality honor, the Malcolm Baldrige National Quality Award, from U.S. President George W. Bush. Awarded to the U.S. operations of our Torque Management Group, the award is the second Baldrige earned by a Dana operation. Only five companies have earned this recognition twice.

Globally, we continued to build on this quality commitment with 19 state and national quality awards in 2001, as well as 55 quality certifications from our customers. We are honored by these awards, but the underlying statement they make is even more impressive: Dana people are committed to providing our customers with world-class products and services.

A New Model for Profitable Growth.

So where do we go from here? For starters, our industry – and our company – simply cannot continue to conduct business the way we have in the past. Over the years, there has been a great deal of conjecture about whether we are in a cyclical business.

And while we can argue semantics, the bottom line is that as long as our economy and our customers are cyclical, so too is our business. Our charge, then, is to evolve our business model into one that is dynamic and flexible enough to withstand, and prosper in, this environment.

Against this backdrop, a new business model has developed at Dana. This model represents a refinement of our business process, as we accelerate the shift from traditional asset-intensive manufacturing to a focus on deriving value from unique technologies and a network of partnerships serving our customers. This more efficient approach is designed to optimize our resources and improve capital efficiency. In doing so, we'll provide our customers with the products and services they desire. At the same time, this model will improve our return on invested capital and facilitate sustainable, long-term value for our investors.

> We believe strongly in our collective future.

The key elements of our new business model involve:

- Streamlining our operations to achieve a higher plane of performance;
- Strengthening our foundation businesses through an intensified focus on core content;
- Expanding our focus on modularity and systems integration;
- Leveraging strategic alliances to expand our capabilities at reduced levels of investment;
- Developing even more proprietary, uniquely valuable technologies; and
- Partnering with a strong base of reliable suppliers.

With the planned sale of DCC and the combination of our former Engine Systems and Fluid Systems business units, we essentially streamlined, and more tightly focused, our operations. The result is business units serving five distinct market segments: automotive systems, the automotive aftermarket, engine and fluid management, commercial vehicle systems, and off-highway systems.

In April, President George W. Bush and U.S. Secretary of Transportation Norman Y. Mineta (at left) presented the Malcolm Baldrige National Quality Award to Dana Chairman and CEO Joe Magliochetti (second from left), and Joe Sober, vice president and general manager of Dana's Torque Management Group.

We further sharpened our focus on foundation businesses with the divestiture of non-core operations accounting for more than $235 million in proceeds.

The restructuring and refocusing actions I've outlined are an integral part in our transition to this new business model. To optimize our resources, we're aggressively reducing our fixed asset base and lowering our break-even point (the production volume at which we begin to become profitable). In the near term, these actions will enable us to compete more profitably at lower levels of production. Over the longer term, this approach will help us optimize our performance as our markets recover.

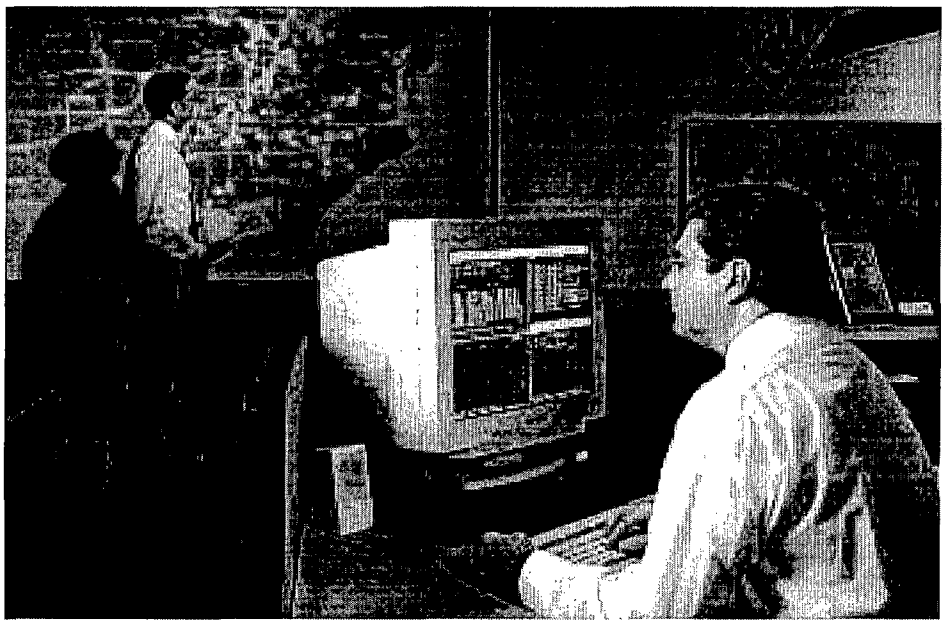
Along with scaling our business to be profitable at lower production volumes, we're also working to combine operations – dissolving organizational boundaries in some cases. For example, we will see growing integration among some of our light axle and driveshaft operations. This will maximize the return on our investment and provide greater cross-functional support to our customers.

Steve Wilson (at left, five years of service) and Troy Husband (14 years of service) track and expedite customer shipments with the help of a satellite-based communication system at the Dana Truck Fleet Command Center in Columbia City, Ind. The system is linked to each of the more than 500 trucks in the Dana fleet, providing two-way communication and the ability to track the status of deliveries across the United States down to the city-block level.

The Road Ahead.

Although our new business model was developed in today's challenging circumstances, I believe its greatest benefit lies in the future. This is because the fundamentals of this new model are aligned with our vision of tomorrow's automotive landscape.

In last year's annual report, we introduced *Transformation 2005,* Dana's strategic roadmap to growth. The rapid pace of change in our industry does not permit us to think of *Transformation 2005* as a distant objective. Our new business model will help ensure that we make daily progress toward these goals.



Technology development will be central to our success, by serving our customers, and ultimately, our shareholders. In order to fully exploit our current technologies, and quicken our pace of development, we recently appointed Chuck Heine to serve in the role of chief technology officer. Chuck's solid engineering background will serve Dana well as he works to secure longer-term opportunities related to our technologies, and pursue broader applications for our intellectual properties.

This heightened emphasis on technology also supports our industry's most significant trend – the move toward modularity and systems integration. A recent Schroder SalomonSmithBarney study projects outsourced modular assembly business growing from about $43 billion globally in 2000 to $73 billion in 2005, and more than $110 billion in 2010. Our future plans are linked to this projected growth.

Currently, our major automotive customers are telling us we may see vehicles composed of 15 to 20 major modules by the end of this decade. Our foundation product array is strategically aligned with what are expected to be five to seven of the most significant modules where our technical expertise has the greatest application. We believe this strategically focused product offering, coupled with our unparalleled systems integration experience, bodes well for the future.

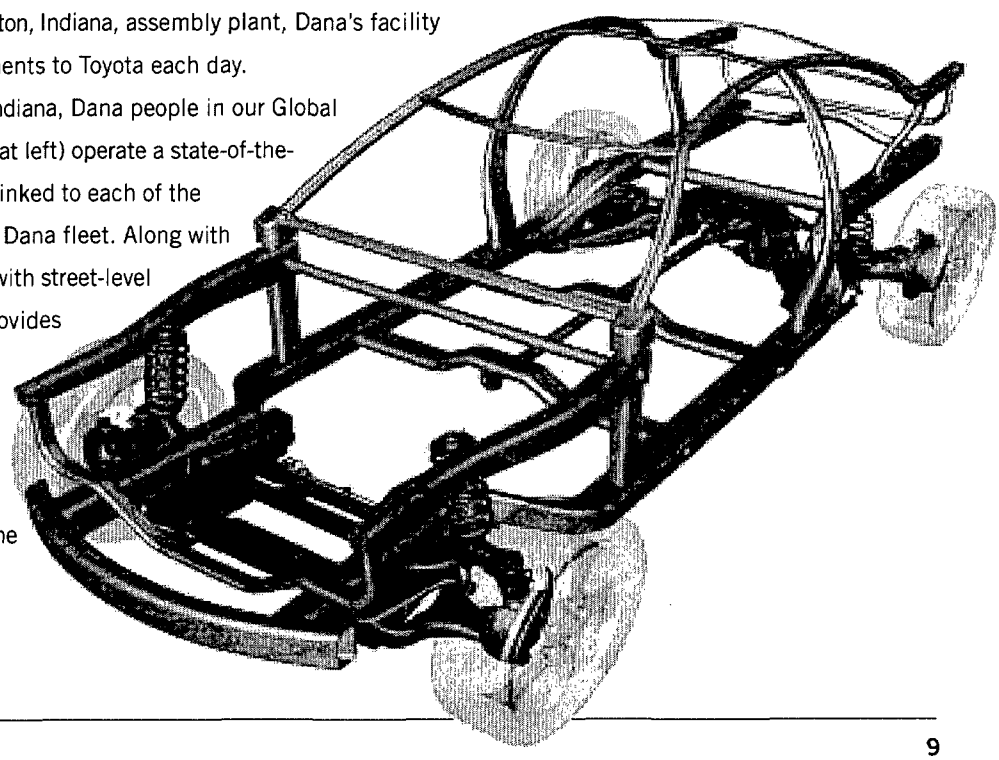
Technology development will be central to our success.

Customer Focus is Our Focus.

Amid the challenge and change of 2001, one aspect of our business has remained the same: our commitment to providing customers with value-driven products. We're also setting new standards in teaming with our customers to boost their productivity.

For example, our Owensboro, Kentucky, Structural Solutions facility produces sequenced frames for the Toyota Sequoia and Tundra vehicles. Electronic systems in the facility enable our people to accomplish model changeovers in just three seconds. Located near Toyota's Princeton, Indiana, assembly plant, Dana's facility makes 28 customized shipments to Toyota each day.

And in Columbia City, Indiana, Dana people in our Global Logistics operation (pictured at left) operate a state-of-the-art satellite tracking system linked to each of the more than 500 trucks in the Dana fleet. Along with tracking the status of trucks with street-level precision, the system also provides important advisories and directions that assist drivers and help keep customer shipments on schedule and within demanding just-in-time delivery requirements.



Dana's Rolling Spaceframe™ system is indicative of our emphasis on modularity and systems integration. The system will integrate product and material technologies with the benefits of modular manufacturing to produce a system with enhanced structural stability.

Of course, these are just two illustrations of customer-oriented activities within our company. Around the world, Dana continues to position itself relative to leading customers and strategic allies. This approach ties directly to the *Transformation 2005* goal of supporting our customers and pursuing those markets in which we can achieve an appropriate return on our investment.

Our transformation is well underway at Dana.

In Europe, which boasts the world's largest passenger car market, we are capitalizing on our partnership with Germany-based GETRAG (see photo at left) to expand our related capabilities. We also provide product and technology support to major customers through Dana operations in 17 countries throughout the region.

Andreas Fender, an engineer at GETRAG since 1990, takes precise measures of a differential at the company's Untergruppenbach, Germany, headquarters and research and development center. The partnership with GETRAG, a manufacturer of transaxles, axles, and other automotive components, has allowed Dana to expand its capabilities in the passenger car market.

The Asia-Pacific region reflects a number of customer-oriented approaches. In some areas, such as Thailand, we are investing to help support our customers' growth. In countries like Japan and Korea, we have established technical and sales operations that largely support our relationships with local automakers that also manufacture vehicles in the United States. And in emerging markets, such as China, we are strategically growing our presence.

Dana has maintained a presence in South America for more than four decades, supporting a wide range of customers. Recently, economic and political turbulence has contributed to disappointing performance in this market. But even as we streamline our operations to meet the current level of demand, we remain confident that as South America emerges from this situation, our core businesses in the region will play an important role in Dana's future.

Why Invest in Dana?

Recent events have been extremely challenging. However, Dana has successfully navigated many difficulties over its 98-year history. As we move forward, I am encouraged by:

- Our strong heritage of innovation and excellence;
- A growing number of leading-edge technologies;
- A dynamic business model propelled by actions begun in 2001; and
- The enduring spirit of our people.

At this critical juncture, we've taken historic actions to streamline our operations and accelerate the development of customer-focused technologies. As we continue to execute our plans, I'm confident our financial performance will improve.

History tells us that value stocks such as Dana perform well over the long term. And at our current valuation, we certainly believe Dana represents an excellent investment for the future.

Transforming Our Future.

Despite its challenges, I believe we're involved in the most exciting industry in the world. From the Model T to the striking concept vehicles and innovations of tomorrow, the automotive business has quite literally moved our world for generations. At Dana, we're proud of the role we've played in helping to shape the first century of the automotive industry. And we're genuinely enthused about the future.

Looking ahead, it's clear that the concepts of change and transformation will be pivotal to the future of our industry. Change, of course, is inevitable. But transformation is essential.

Our transformation is well underway at Dana. We have sharpened our focus. We are making fundamental refinements to improve our competitive advantage. And our future is bright.

I thank you for your continued support of Dana and its people as we work to accelerate this transition and better serve the needs of our customers and our shareholders.

State-of-the-art engineering resources, such as this hemi-anechoic sound chamber and chassis dynamometer at Dana's Customer and Engineering Support Center in Farmington Hills, Mich., provide valuable test data to enhance product performance.

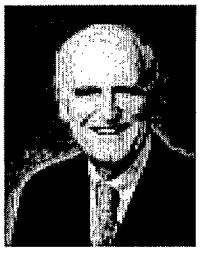
Sincerely,

Joseph M. Magliochetti
Chairman & Chief Executive Officer
February 12, 2002

Board of Directors

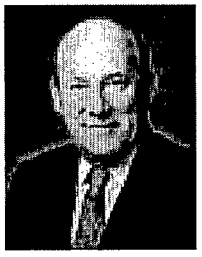
Benjamin F. Bailar

Benjamin F. Bailar, 67, served as Dean and Professor of Administration Emeritus of the Jesse H. Jones Graduate School of Administration at Rice University from 1997 to 2001. He was Dean and Professor of Administration at the Jesse H. Jones Graduate School of Administration from 1987 to 1997. A Director of Dana since 1980, Mr. Bailar is also a director of Smith International, Inc., and Trico Marine Services, Inc. He is Chairman of the Advisory Committee and a member of the Audit and Finance committees.



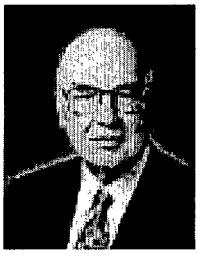
A. Charles Baillie

A. Charles Baillie, 62, has served as Chairman and Chief Executive Officer of The Toronto-Dominion Bank since 1997, and President since 1995. Mr. Baillie has been a Director of Dana since 1998. He serves on the Compensation, Finance, and Funds committees.



Edmund M. Carpenter

Edmund M. Carpenter, 60, has served as President and Chief Executive Officer of the Barnes Group, a diversified international company serving a range of industrial and transportation markets, since 1998. He was Senior Managing Director of Clayton, Dubilier & Rice, a private equity firm specializing in management buyouts, from 1996 to 1998. A Director of Dana since 1991, Mr. Carpenter is also a director of Campbell Soup Company. He is Chairman of the Funds Committee and a member of the Advisory, Audit, and Finance committees.

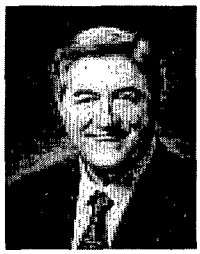


Eric Clark

Eric Clark, 67, served as Director of BICC plc, a United Kingdom company serving the international market for infrastructure development, from 1985 to 1996. He was Chairman and Managing Director of BICC Cables Limited from 1986 to 1996. Mr. Clark has been a Director of Dana since 1994, and served as a member of the Dana Europe Advisory Board from 1991 to 1999. He is a member of the Advisory, Audit, Compensation, and Finance committees.

Glen H. Hiner

Glen H. Hiner, 67, has served as Chairman and Chief Executive Officer of Owens Corning, a manufacturer of advanced glass and composite materials, since 1992. A Director of Dana since 1993, Mr. Hiner is also a director of Prudential Financial Inc., and Kohler Company. He is Chairman of the Audit Committee and a member of the Advisory, Compensation, and Finance committees.



Joseph M. Magliochetti

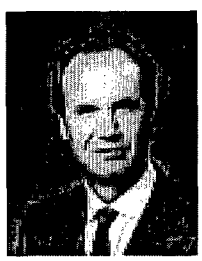
Joseph M. Magliochetti, 59, was appointed Chairman of the Board of Dana on April 5, 2000. Mr. Magliochetti has served as Chief Executive Officer of Dana since 1999, President of Dana since 1996, Chief Operating Officer of Dana since 1997, and a Director of Dana since 1996. He has served the company in various capacities since 1966. Mr. Magliochetti is also a director of BellSouth Corporation and CIGNA Corporation. He is Chairman of the Finance Committee, and a member of the Funds Committee.

Marilyn R. Marks

Marilyn R. Marks, 49, served as Chairman of the Board of Dorsey Trailers, Inc., a manufacturer of truck trailers, from 1987 to 2000. She was Chief Executive Officer of Dorsey Trailers from 1987 to December 1999. Ms. Marks served as Chairman and Chief Executive Officer of TruckBay.com, Inc., an Internet source for goods and services serving the trucking industry, from December 1999 to December 2000. A Director of Dana since 1994, Ms. Marks is also a director of the Eastman Chemical Company. She is a member of the Advisory, Finance, and Funds committees.

Richard B. Priory

Richard B. Priory, 55, has served as Chairman, President, and Chief Executive Officer of Duke Energy Corporation, a supplier of energy and related services, since 1997. He was President and Chief Operating Officer of Duke Power Company from 1994 to 1997. A Director of Dana since 1996, Mr. Priory is also a director of US Airways, Inc., and Duke Fluor Daniel Company. He is Chairman of the Compensation Committee and serves on the Audit and Finance committees.



Fernando M. Senderos

Fernando M. Senderos, 51, has served as Chairman of the Board and Chief Executive Officer of DESC, S.A. de C.V. ("DESC"), a Mexican diversified holding company engaged in automotive parts, chemical, food, and real estate businesses, since 1989. Mr. Senderos is former Chairman of the Board of the following wholly owned subsidiaries of DESC: Unik, S.A. de C.V. (1991 through 2001); Girsa, S.A. de C.V. (1989 through 2001); and Dine, S.A. de C.V. (1981 through 2001). Mr. Senderos is also a director of Industrias Peñoles, S.A. de C.V., a Mexican-natural resources industrial group; Televisa, S.A. de C.V., a Spanish-language entertainment business; Telefonos de Mexico, S.A. de C.V., a business providing telephone and Internet access services throughout Mexico; Kimberly Clark de Mexico, S.A. de C.V., a manufacturer and distributor of consumer, industrial, and institutional hygiene products; and Alfa, S.A. de C.V., which through its subsidiaries operates petrochemical, steel, synthetic fiber, food, automotive parts, and telecommunications businesses. Mr. Senderos has been a Director of Dana since 2000. He serves on the Finance and Funds committees.

World Operating Committee

The World Operating Committee is the management group responsible for Dana's product strategies and the global coordination of Dana's operations. Dana people have no more than five layers of management between them and the World Operating Committee.

Its members are:

Paul J. Bishop
President, Dana Credit Corporation
12 years of service

D. Bruce Butcher
Vice President, Structural Solutions
19 years of service

William J. Carroll ▪▲
President, Automotive Systems Group
32 years of service

Bernard N. "Nick" Cole ▲
President, Commercial Vehicle Systems and Off-Highway Systems groups
33 years of service

Michael L. DeBacker
Vice President, General Counsel, and Secretary
22 years of service

Heinz-Ubbo Eilks
Vice President, Sealing Products
9 years of service

Hugo E.I. Ferreira
President, Dana South America
39 years of service

Mark A. Fleischhauer (ex-officio)
Vice President, Dana Asia Pacific
23 years of service

Marvin A. "Gus" Franklin ▪▲
President, Dana International and Global Initiatives
27 years of service

Michael F. Greene
President, Torque Management Group
27 years of service

Stephen J. Hanley
Vice President, Systems Integration
24 years of service

Charles F. Heine ▲
President, Technology Development and Diversified Products
27 years of service

James M. "Mike" Laisure ▲
President, Engine and Fluid Management Group
28 years of service

Joseph M. Magliochetti ▪▲
Chairman and Chief Executive Officer
35 years of service

Terry R. McCormack ▲
President, Automotive Aftermarket Group
28 years of service

José Ismael Melgar
Global President, Traction Technologies Group
23 years of service

Daniel J. Moody
Vice President, Engine Products
29 years of service

Kevin P. Moyer ▲
Vice President and Director of e-Business
19 years of service

Karl A. Nitsch
President, Dana Europe
16 years of service

Larry A. Pavey
President, Under Vehicle – Aftermarket
18 years of service

Robert C. Richter ▪▲
Vice President and Chief Financial Officer, Dana Corporation;
Chairman, Dana Credit Corporation
27 years of service

John R. Washbish
President, Under Hood – Aftermarket
20 years of service

▪ denotes membership on Dana's Policy Committee, the management group responsible for corporate strategies and partnership relations, as well as the development of Dana's people, policies, and philosophies.

▲ denotes membership on Dana's Strategic Operating Committee, the management group responsible for business unit strategies and performance. Mr. Moyer is an ex-officio member.

Management Statement

We have prepared the accompanying consolidated financial statements and related information included herein for the three years ended December 31, 2001.

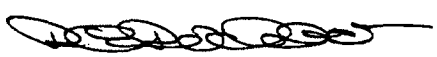
The management of Dana Corporation is primarily responsible for the accuracy of the financial information that is presented in this annual report. These statements were prepared in accordance with generally accepted accounting principles and, where appropriate, we used our estimates and judgment with consideration to materiality.

To meet management's responsibility for financial reporting, we have established internal control systems which we believe are adequate to provide reasonable assurance that our assets are protected from loss. These systems produce data used for the preparation of financial information.

We believe internal control systems should be designed to provide accurate information at a reasonable cost which is not out of line with the benefits to be received. These systems and controls are reviewed by our internal auditors in order to ensure compliance, and by our independent accountants to support their audit work.

The Audit Committee of the Board of Directors meets regularly with management, internal auditors and our independent accountants to review accounting, auditing and financial matters. Our Audit Committee is composed of only outside directors. This committee and the independent accountants have free access to each other with or without management being present.

We believe people are Dana's most important asset. The proper selection, training and development of our people is a means of ensuring that effective internal controls and fair, uniform reporting are maintained as standard practice throughout the Company.



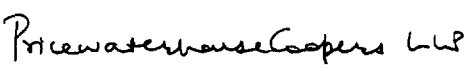
Robert C. Richter
Vice President and
Chief Financial Officer

Report of Independent Accountants

PRICEWATERHOUSECOOPERS

To the Board of Directors and Shareholders of Dana Corporation

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of income, of shareholders' equity and of cash flows, including pages 16 through 33, present fairly, in all material respects, the financial position of Dana Corporation and its subsidiaries at December 31, 2000 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



PricewaterhouseCoopers LLP

Toledo, Ohio
February 11, 2002

Statement of Income

In millions except per share amounts

	Year Ended December 31		
	1999	2000	**2001**
Net sales	$13,159	$12,317	**$10,271**
Revenue from lease financing	111	143	**115**
Other income, net	83	231	**83**
	13,353	12,691	**10,469**
Costs and expenses			
Cost of sales	10,964	10,599	**9,268**
Selling, general and administrative expenses	1,192	1,132	**985**
Restructuring and integration charges	181	173	**390**
Interest expense	279	323	**309**
	12,616	12,227	**10,952**
Income (loss) before income taxes	737	464	**(483)**
Estimated taxes on income	251	171	**(161)**
Income (loss) before minority interest and equity in earnings of affiliates	486	293	**(322)**
Minority interest	(13)	(13)	**(8)**
Equity in earnings of affiliates	40	54	**32**
Net income (loss)	$ 513	$ 334	**$ (298)**
Net income (loss) per common share			
Basic income (loss) per share	$ 3.10	$ 2.20	**$ (2.01)**
Diluted income (loss) per share	$ 3.08	$ 2.18	**$ (2.01)**
Cash dividends declared and paid per common share	$ 1.24	$ 1.24	**$ 0.94**
Average shares outstanding - Basic	165	152	**148**
Average shares outstanding - Diluted	166	153	**148**

The accompanying notes are an integral part of the financial statements.

Balance Sheet

In millions except par value

	December 31	
	2000	2001
Assets		
Current assets		
Cash and cash equivalents	$ 179	$ 199
Accounts receivable		
Trade, less allowance for doubtful accounts of $42 - 2000 and $45 - 2001	1,548	1,371
Other	318	371
Inventories	1,564	1,299
Other current assets	714	557
Total current assets	4,323	3,797
Investments and other assets	2,367	2,209
Investment in leases	1,037	1,068
Property, plant and equipment, net	3,509	3,133
Total assets	$11,236	$10,207
Liabilities and Shareholders' Equity		
Current liabilities		
Notes payable, including current portion of long-term debt	$ 1,945	$ 1,120
Accounts payable	1,015	1,045
Accrued payroll and employee benefits	398	317
Other accrued liabilities	856	873
Taxes on income	117	134
Total current liabilities	4,331	3,489
Deferred employee benefits and other noncurrent liabilities	1,507	1,640
Long-term debt	2,649	3,008
Minority interest in consolidated subsidiaries	121	112
Total liabilities	8,608	8,249
Shareholders' equity		
Common stock, $1 par value, shares authorized, 350; shares issued, 148 - 2000 and 149 - 2001	148	149
Additional paid-in capital	159	163
Retained earnings	2,909	2,471
Accumulated other comprehensive loss	(588)	(825)
Total shareholders' equity	2,628	1,958
Total liabilities and shareholders' equity	$11,236	$10,207

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows

In millions

	Year Ended December 31		
	1999	2000	**2001**
Net cash flows from operating activities	$ 608	$ 984	**$ 639**
Cash flows from investing activities:			
Purchases of property, plant and equipment	(807)	(662)	**(425)**
Purchases of assets to be leased	(480)	(191)	**(50)**
Acquisitions	(18)	(511)	**(21)**
Divestitures	36	571	**236**
Changes in investments and other assets	(155)	(183)	**1**
Loans made to customers and partnerships	(259)	(643)	**(68)**
Payments received on leases	200	146	**48**
Proceeds from sales of certain assets	45	41	**132**
Proceeds from sales of leased assets	135	82	**60**
Payments received on loans	206	561	**180**
Other	(4)	(5)	**(14)**
Net cash flows - investing activities	(1,101)	(794)	**79**
Cash flows from financing activities:			
Net change in short-term debt	(341)	577	**(888)**
Issuance of long-term debt	1,396	368	**847**
Payments on long-term debt	(376)	(504)	**(501)**
Dividends paid	(206)	(187)	**(140)**
Shares repurchased	(100)	(381)	
Other	1	5	**(16)**
Net cash flows - financing activities	374	(122)	**(698)**
Net increase (decrease) in cash and cash equivalents	(119)	68	**20**
Cash and cash equivalents - beginning of year	230	111	**179**
Cash and cash equivalents - end of year	$ 111	$ 179	**$ 199**
Reconciliation of net income (loss) to net cash flows from operating activities:			
Net income (loss)	$ 513	$ 334	**$(298)**
Depreciation and amortization	519	523	**548**
Unremitted earnings of affiliates	(37)	(54)	**4**
Deferred income taxes	74	57	**(116)**
Minority interest	6	10	**4**
Asset impairment	62	27	**206**
Change in accounts receivable	(528)	327	**137**
Change in inventories	(207)	108	**166**
Change in other operating assets	(11)	(58)	**(31)**
Change in operating liabilities	300	(144)	**78**
Additions to lease and loan loss reserves	8	18	**(9)**
Gains on divestitures	(5)	(106)	**(10)**
Other	(86)	(58)	**(40)**
Net cash flows from operating activities	$ 608	$ 984	**$ 639**

The accompanying notes are an integral part of the financial statements.

Statement of Shareholders' Equity

In millions

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)			Shareholders' Equity
				Foreign Currency Translation	Minimum Pension Liability	Net Unrealized Gain (Loss)	
Balance, December 31, 1998	$166	$591	$2,455	$(264)	$(11)	$ 3	$2,940
Comprehensive income:							
Net income for 1999			513				
Foreign currency translation				(214)			
Minimum pension liability					(2)		
Total comprehensive income							297
Cash dividends declared			(206)				(206)
Cost of shares repurchased	(3)	(105)					(108)
Issuance of shares for director and employee stock plans, net		34					34
Balance, December 31, 1999	163	520	2,762	(478)	(13)	3	2,957
Comprehensive income:							
Net income for 2000			334				
Foreign currency translation				(90)			
Minimum pension liability					(10)		
Total comprehensive income							234
Cash dividends declared			(187)				(187)
Cost of shares repurchased	(15)	(366)					(381)
Issuance of shares for director and employee stock plans, net		5					5
Balance, December 31, 2000	148	159	2,909	(568)	(23)	3	2,628
Comprehensive income:							
Net loss for 2001			**(298)**				
Foreign currency translation				**(152)**			
Minimum pension liability					**(80)**		
Unrealized loss						**(5)**	
Total comprehensive loss							**(535)**
Cash dividends declared			**(140)**				**(140)**
Issuance of shares for director and employee stock plans, net	**1**	**4**					**5**
Balance, December 31, 2001	**$149**	**$163**	**$2,471**	**$(720)**	**$(103)**	**$(2)**	**$1,958**

The accompanying notes are an integral part of the financial statements.

Notes to Financial Statements

In millions except share and per share amounts

Note 1. Summary of Significant Accounting Policies

Dana is a global leader in the engineering, manufacturing and distribution of components and systems for worldwide vehicular and industrial manufacturers and the related aftermarkets and a leading provider of lease financing services in selected markets through its wholly-owned subsidiary, Dana Credit Corporation (DCC).

The preparation of these financial statements requires estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying disclosures. Some of the more significant estimates include depreciation, amortization and impairment of long-lived assets; deferred tax assets and inventory valuations; sales returns, restructuring, environmental, product liability and warranty accruals; postemployment and postretirement benefits; residual values of leased assets and allowances for doubtful accounts. Actual results could differ from those estimates.

The following summary of significant accounting policies should help you evaluate the financial statements. Certain amounts in 1999 and 2000 have been reclassified to conform with the 2001 presentation.

Principles of Consolidation
The consolidated financial statements include all subsidiaries in which we have the ability to control operating and financial policies. Affiliated companies (20% to 50% ownership) are generally recorded in the statements using the equity method of accounting. Operations of affiliates accounted for on the equity method of accounting are generally included for periods ended within one month of our year end. Less-than-20%-owned companies are included in the financial statements at the cost of our investment. Dividends, royalties and fees from these cost basis affiliates are recorded in income when received.

Foreign Currency Translation
The financial statements of subsidiaries and equity affiliates outside the United States (U.S.) located in non-highly inflationary economies are measured using the currency of the primary economic environment in which they operate as the functional currency, which for the most part is the local currency. Transaction gains and losses which result from translating assets and liabilities of these entities into the functional currency are included in net earnings. When translating into U.S. dollars, income and expense items are translated at average monthly rates of exchange and assets and liabilities are translated at the rates of exchange at the balance sheet date. Translation adjustments resulting from translating the functional currency into U.S. dollars are deferred as a component of accumulated other comprehensive income in shareholders' equity. For affiliates operating in highly inflationary economies, non-monetary assets are translated into U.S. dollars at historical exchange rates and monetary assets are translated at current exchange rates. Translation adjustments for these affiliates are included in net earnings.

Inventories
Inventories are valued at the lower of cost or market. Cost is generally determined on the last-in, first-out (LIFO) basis for U.S. inventories and on the first-in, first-out (FIFO) or average cost basis for non-U.S. inventories.

Pre-Production Costs Related to Long-Term Supply Arrangements
The cost of tooling used to make products sold under long-term supply arrangements is capitalized as part of property, plant and equipment and amortized over its useful life if we own the tooling. These costs are also capitalized and amortized if we fund the purchase but our customer owns the tooling and grants us the noncancelable right to use the tooling over the contract period. Costs incurred in connection with the design and development of tooling that will be billed to customers upon completion is carried as a component of other accounts receivable. Design and development costs related to customer products are deferred if we have an agreement to collect such costs from the customer; otherwise, they are expensed.

Lease Financing
Lease financing consists of direct financing leases, leveraged leases and equipment on operating leases. Income on direct financing leases is recognized by a method which produces a constant periodic rate of return on the outstanding investment in the lease. Income on leveraged leases is recognized by a method which produces a constant rate of return on the outstanding net investment in the lease, net of the related deferred tax liability, in the years in which the net investment is positive. Initial direct costs are deferred and amortized using the interest method over the lease period. Equipment under operating leases is recorded at cost, net of accumulated depreciation. Income from operating leases is recognized ratably over the term of the leases.

Allowance for Losses on Lease Financing
Provisions for losses on lease financing receivables are determined based on loss experience and assessment of inherent risk. Adjustments are made to the allowance for losses to adjust the net investment in lease financing to an estimated collectible amount. Income recognition is generally discontinued on accounts which are contractually past due and where no payment activity has occurred within 120 days. Accounts are charged against the allowance for losses when determined to be uncollectible. Accounts where asset repossession has started as the primary means of recovery are classified within other assets at their estimated realizable value.

Goodwill
Cost in excess of net assets of companies acquired generally has been amortized on a straight-line basis over the estimated period of expected benefit, ranging from 10 to 40 years. The issuance of Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets," was approved by the Financial Accounting Standards Board in June 2001. The new guidance changes the post-acquisition accounting for goodwill and certain intangible assets by discontinuing the amortization of these assets and requiring impairment testing at least annually. After recording the impact of adopting the Statement, any reductions in the carrying value of goodwill or certain intangible assets will be included in the results of operations. Adoption of SFAS No. 142 is required in 2002.

We believe that the initial application of this Statement is likely to result in the impairment of a portion of our goodwill. We have substantially completed the first step of the initial impairment test required by the Statement and identified approximately $400 of goodwill that may be impaired based upon the new requirements. We will complete the impairment testing required to determine the actual amount of goodwill impairment in 2002.

Accordingly, we are unable to quantify the amount of impairment that may result from determining the implied fair value of the related goodwill at this time. Any adjustment of goodwill resulting from the initial assessment will be recognized as the effect of a change in accounting as of the beginning of 2002. The results of operations for the year ending December 31, 2002 would have included approximately $36 of goodwill amortization, including our share of amounts recorded by equity affiliates, if not for the adoption of SFAS No. 142.

Loans Receivable
Loans receivable consist primarily of loans to partnerships in which DCC has an interest and loans secured by equipment and first mortgages on real property. The loans to partnerships are collateralized by the partnerships' assets. Income on all loans is recognized using the interest method. Interest income on impaired loans is recognized as cash is collected or on a cost recovery basis.

Allowance for Losses on Loans Receivable
Provisions for losses on loans receivable are determined on the basis of loss experience and assessment of inherent risk. Adjustments are made to the allowance for losses to adjust loans receivable to an estimated collectible amount. Income recognition is generally discontinued on accounts which are contractually past due and where no payment activity has occurred within 120 days. Accounts are charged against the allowance for losses when determined to be uncollectible.

Properties and Depreciation
Property, plant and equipment are valued at historical costs. Depreciation is recognized over the estimated useful lives using primarily the straight-line method for financial reporting purposes and accelerated depreciation methods for federal income tax purposes. Long-lived assets are reviewed for impairment and where appropriate are adjusted to fair market value.

Revenue Recognition
Sales are recognized when products are shipped and title has transferred to the customer. Accruals for warranty costs, sales returns and other allowances are provided at the time of shipment based upon experience. Adjustments are made as new information becomes available. Shipping and handling fees billed to customers are included in sales and the costs of shipping and handling are included in cost of sales.

Income Taxes
Current tax liabilities and assets are recognized for the estimated taxes payable or refundable on the tax returns for the current year. Deferred tax balances reflect the impact of temporary differences between the carrying amount of assets and liabilities and their tax bases. Amounts are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered. Deferred tax assets are reduced, if necessary, by the amount of any tax benefits not expected to be realized.

The "flow-through" method of accounting is used for investment tax credits, except for investment tax credits arising from leveraged leases and certain direct financing leases for which the deferred method is used for financial statement purposes.

Financial Instruments
The reported fair values of financial instruments are based on a variety of factors. Where available, fair values represent quoted market prices for identical or comparable instruments. Where quoted market prices are not available, fair values are estimated based on assumptions concerning the amount and timing of estimated future cash flows and assumed discount rates reflecting varying degrees of credit risk. Fair values may not represent actual values of the financial instruments that could be realized as of the balance sheet date or that will be realized in the future.

Derivative Financial Instruments
We enter into forward exchange contracts to hedge our exposure to the effects of currency fluctuations on a portion of our projected sales and purchase commitments. The changes in the fair value of these contracts are generally offset by exchange gains or losses on the underlying exposures. We also use interest rate swaps to manage exposure to fluctuations in interest rates and to balance the mix of our fixed and floating rate debt. We do not use derivatives for trading or speculative purposes.

In January 2001, we adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," and SFAS No. 138, "Accounting for Certain Derivative Instruments and Certain Hedging Transactions." These Statements require, among other things, that all derivative instruments be recognized on the balance sheet at fair value. Interest rate swap arrangements have been formally designated as hedges. The effect of marking these contracts to market has been recorded as a direct adjustment of the underlying debt for those contracts designated as fair value hedges and as an adjustment of other comprehensive income for those contracts designated as cash flow hedges. Foreign currency forwards and other derivatives have not been designated as hedges and the effect of marking these instruments to market has been recognized in the results of operations. We will evaluate these transactions from time to time to determine whether they should be designated as hedges.

The adoption of SFAS Nos. 133 and 138 did not have a material effect on the results of operations.

Environmental Compliance and Remediation
Environmental expenditures that relate to current operations are expensed or capitalized as appropriate. Expenditures that relate to existing conditions caused by past operations which do not contribute to current or future revenue generation are expensed. Liabilities are recorded when environmental assessments and/or remedial efforts are probable and the costs can be reasonably estimated. Estimated costs are based upon current laws and regulations, existing technology and the most probable method of remediation. The costs are not discounted and exclude the effects of inflation and other societal and economic factors. If the cost estimates result in a range of equally probable amounts, the lower end of the range is accrued.

Pension Plans
Annual net periodic pension costs under defined benefit pension plans are determined on an actuarial basis. Our policy is to fund these costs as accrued, including amortization of the initial unrecognized net obligation over 15 years and obligations arising due to plan amendments over the period benefited, through deposits with trustees. Benefits are determined based upon employees' length of service, wages or a combination of length of service and wages.

Notes to Financial Statements

In millions except share and per share amounts

Postretirement Benefits Other Than Pensions
Annual net postretirement benefits liability and expense under the defined benefit plans are determined on an actuarial basis. Our policy is to pay these benefits as they become due. Benefits are determined primarily based upon employees' length of service and include applicable employee cost sharing.

Postemployment Benefits
Annual net postemployment benefits liability and expense under our benefit plans are accrued as service is rendered for those obligations that accumulate or vest and can be reasonably estimated. Obligations that do not accumulate or vest are recorded when payment of the benefits is probable and the amounts can be reasonably estimated.

Statement of Cash Flows
For purposes of reporting cash flows, we consider highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Cash and Marketable Securities
The majority of our marketable securities satisfy the criteria for cash equivalents and are classified accordingly. The remainder of our marketable securities are classified as available for sale. Available- for-sale securities, which are included in investments and other assets, are carried at fair value and any unrealized gains or losses, net of income taxes, are reported as a component of accumulated other comprehensive income or loss in shareholders' equity. Cash includes bank deposits of $31 that support letters of credit and may not be withdrawn under the terms of the arrangements.

Stock-Based Compensation
Stock-based compensation is accounted for using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations. No compensation expense is recorded for stock options when granted as the option price is set at the market value of the underlying stock.

Note 2. Preferred Share Purchase Rights

We have a Preferred Share Purchase Rights Plan which is designed to deter coercive or unfair takeover tactics. One right has been issued on each share of our common stock outstanding on and after July 25, 1996. Under certain circumstances, the holder of each right may purchase 1/1000th of a share of our Series A Junior Participating Preferred Stock, no par value, for the exercise price of $110 (subject to adjustment as provided in the Plan). The rights have no voting privileges and will expire on July 15, 2006, unless exercised, redeemed or exchanged sooner.

Generally, the rights cannot be exercised or transferred apart from the shares to which they are attached. However, if any person or group acquires (or commences a tender offer that would result in its acquiring) 15% or more of our outstanding common stock, the rights not held by the acquirer will become exercisable. In that event, instead of purchasing 1/1000th of a share of the Participating Preferred Stock, the holder of each right may elect to purchase from us the number of shares of our common stock that have a market value of twice the right's exercise price (in effect, a 50% discount on our stock). Thereafter, if we merge with or sell 50% or more of our assets or earnings power to the acquirer or engage in similar transactions, any rights not previously exercised (except those held by the acquirer) can also be exercised. In that event, the holder of each right may elect to purchase from the acquiring company the number of shares of its common stock that have a market value of twice the right's exercise price (in effect, a 50% discount on the acquirer's stock).

The Board may authorize the redemption of the rights at a price of $.01 each before anyone acquires 15% or more of our common shares. After that, and before the acquirer owns 50% of our outstanding shares, the Board may authorize the exchange of each right for one share of our common stock.

Note 3. Preferred Shares

There are 5,000,000 shares of preferred stock authorized, without par value, including 1,000,000 shares reserved for issuance under the Rights Plan. No shares of preferred stock have been issued.

Note 4. Common Shares

Certain of our employee and director stock plans provide that employees and directors may tender stock to satisfy the purchase price of the shares, the income taxes required to be withheld on the transaction, or both. In connection with these stock plans, we repurchased 304,927 shares in 1999, 91,074 in 2000 and 11,000 in 2001.

During 1999, the Board of Directors (Board) authorized the expenditure of up to $350 to repurchase shares of our common stock and in 2000 it authorized an additional expenditure of $250 for a total authorization of $600. The authorizations expired at the end of 2000. The repurchases were accomplished through open market transactions. In 1999, we repurchased 2,994,400 shares at an aggregate cost of $100 and in 2000, 15,455,747 shares were repurchased at a cost of $381.

All shares repurchased were cancelled and became authorized but unissued shares.

Common stock transactions in the last three years are as follows:

	1999	2000	**2001**
Shares outstanding at beginning of year	165,690,844	163,151,142	**147,877,034**
Issued for director and employee stock plans	764,535	272,713	**664,430**
Repurchased under stock plans	(309,837)	(91,074)	**(11,000)**
Repurchase program	(2,994,400)	(15,455,747)	
Shares outstanding at end of year	163,151,142	147,877,034	**148,530,464**
Average shares outstanding for the year - basic	165,322,644	152,038,862	**148,241,265**
Plus: Incremental shares from assumed conversion of -			
Deferred compensation units	461,112	571,029	**608,757**
Deferred restricted stock units	106,044	226,253	**232,257**
Stock options	608,165	95,182	**2,371**
Potentially dilutive shares	1,175,321	892,464	**843,385**
Average shares outstanding for the year - diluted	166,497,965	152,931,326	**149,084,650**

A net loss causes dilutive shares to have an antidilutive effect, so the potentially dilutive shares have been disregarded in calculating diluted earnings per share for the year ended December 31, 2001.

Note 5. Inventories

The components of inventory are as follows:

	December 31	
	2000	**2001**
Raw materials	$ 436	**$ 377**
Work in process and finished goods	1,128	**922**
	$1,564	**$1,299**

Inventories amounting to $1,005 and $841 at December 31, 2000 and 2001, respectively, were valued using the LIFO method. If all inventories were valued at replacement cost, inventories would be increased by $119 and $111 at December 31, 2000 and 2001, respectively.

Note 6. Short-Term Debt

Until the end of 2000, we had generally relied on the issuance of commercial paper to satisfy a significant portion of our short-term financing requirements. These commercial paper borrowings were supported by committed bank lines. However, the debt rating services lowered our credit ratings in the first quarter of 2001, primarily due to the significant downturn in our markets since the fourth quarter of 2000 and the impact of this downturn on our operations. Following the downgrade, the commercial paper markets ceased to be available to us and we began borrowing against the committed bank lines.

In March 2001, we established a $400 accounts receivable securitization program to supplement our committed bank lines. Under the program, certain of our divisions and subsidiaries either sell or contribute accounts receivable to Dana Asset Funding LLC (DAF), a special purpose entity. DAF funds its accounts receivable purchases in part by pledging a portion of the receivables as collateral for short-term loans from participating banks. DAF uses the amounts borrowed under the program to fund the purchase of accounts receivable. We used the sale proceeds received from DAF to reduce other debt.

The securitized accounts receivable are owned in their entirety by DAF and are not available to satisfy claims of our creditors. However, we are entitled to any dividends paid by DAF and would be entitled to all proceeds from the liquidation of DAF's assets upon the termination of the securitization program and the dissolution of DAF. DAF's receivables are included in our consolidated financial statements solely because DAF does not meet certain technical accounting requirements for treatment as a "qualifying special purpose entity" under generally accepted accounting principles. Accordingly, the sales and contributions of the accounts receivable are eliminated in consolidation and the loans to DAF are reflected as short-term borrowings in our consolidated financial statements.

Expenses incurred to establish the program are being amortized over five years, the contractual life of the program.

In December 2001, we entered into a new 364-day revolving credit facility with a group of banks and amended our existing long-term facility, which matures on November 15, 2005. The 364-day facility provides for a maximum borrowing capacity of $250 while the long-term facility has a borrowing capacity of $500. The 364-day facility provides each participating bank the option to terminate its commitment on April 30, 2002 unless we receive net cash proceeds of at least $200 from the issuance of debt in the capital markets or stock or the sale of assets by April 1, 2002. If the net cash proceeds exceed $200, the maximum borrowing capacity under the 364-day facility will be reduced by 50% of the excess. Both facilities require us to maintain specified financial ratios as of the end of each quarter, including the ratio of net senior debt to tangible net worth; the ratio of earnings before interest, taxes and depreciation and amortization (EBITDA) less capital spend to interest expense; and the ratio of net senior debt to EBITDA. For purposes of these ratios, tangible net worth excludes deferred currency translation adjustments, the 2001 minimum pension liability adjustment and intangible assets, while EBITDA is modified to exclude cash restructuring charges incurred from the fourth quarter of 2001 through the first quarter of 2003, to a maximum of $500, equity earnings, minority interest and certain other non-cash items. The ratio calculations are based on the additional financial information which presents Dana's consolidated financial statements with DCC accounted for on the equity basis.

Because our financial performance is impacted by various economic, financial and industry factors, we may not be able to satisfy these covenants in the future. Noncompliance with these covenants would constitute an event of default, allowing the lenders to accelerate the repayment of any borrowings outstanding under the related arrangement. We believe that we would be able to successfully negotiate amended covenants or obtain waivers if an event of default were imminent; however, we might be required to provide collateral to the lenders or make other financial concessions. Default under either of these facilities or any of our significant note agreements may result in defaults under other debt instruments. Our business, results of operations and financial condition might be adversely affected if we were unable to successfully negotiate amended covenants or obtain waivers on acceptable terms.

Dana, excluding DCC, had total committed borrowing lines of $1,252 and uncommitted borrowing lines of $296 at December 31, 2001. At December 31, 2001, Dana, excluding DCC, had $150 borrowed against the long-term facility, $260 borrowed under the accounts receivable securitization program and $33 of notes payable at its non-U.S. subsidiaries.

DCC had also relied on the issuance of commercial paper for short-term borrowings prior to 2001. Its borrowings against committed bank lines also increased after its credit ratings were lowered in the first quarter of 2001.

DCC had committed borrowing lines of $544, including approximately $67 denominated in British pounds and Canadian dollars, and uncommitted borrowing lines of $15 at December 31, 2001. Various lines totaling $292 mature in 2002; $250 available under a long-term facility matures in June 2004. DCC had $231 borrowed against committed U.S. bank lines at December 31, 2001.

Fees are paid to the banks for providing committed lines, but not for uncommitted lines. We paid fees of $9 in 2001 in connection with our committed bank lines. A portion of these fees is being amortized over the lives of the related credit facilities.

Selected details of short-term borrowings are as follows:

	Amount	Weighted Average Interest Rate
Balance at December 31, 2000	$1,526	7.0 %
Average during 2000	1,614	6.6
Maximum during 2000 (month end)	1,872	6.7
Balance at December 31, 2001	**$ 674**	**3.5 %**
Average during 2001	**1,450**	**5.4**
Maximum during 2001 (month end)	**1,919**	**6.9**

Notes to Financial Statements

In millions except share and per share amounts

Note 7. Interest Rate Agreements

Under our interest rate swap agreements, we agree to exchange with third parties, at specific intervals, the difference between fixed rate and floating rate interest amounts calculated by reference to an agreed notional amount. Differentials to be paid or received under these agreements are accrued and recognized as adjustments to interest expense. At December 31, 2001, Dana, exclusive of DCC, was committed to receive a rate of 9% on notional amounts of $575 and €200 and to pay variable rates equal to the six-month London interbank offered rate (LIBOR) plus an average of 3.09% (the combined rate was 5.07% at December 31, 2001) on a notional amount of $575 and the six-month Euro interbank offered rate (EURIBOR) plus an average of 3.79% (the combined rate was 7.04% on December 31, 2001) on a notional amount of €200. These agreements were entered in August 2001 in conjunction with the issuance of the 9% notes and expire when the notes mature in 2011. At December 31, 2001, DCC was committed to receive interest rates which change periodically in line with prevailing short-term market rates (the average rate being received at December 31, 2001 was 2.72%) and to pay an average rate of 7.13% which is fixed over the period of the agreements on notional amounts of $95. DCC's notional amounts of interest rate swaps expire as follows: 2002, $50 and 2003, $45.

Note 8. Long-Term Debt

	December 31	
	2000	**2001**
Indebtedness of Dana, excluding consolidated subsidiaries —		
Unsecured notes payable, fixed rates -		
6.25% notes, due March 1, 2004	$ 250	**$ 250**
6.5% notes, due March 15, 2008	150	**150**
7.0% notes, due March 15, 2028	196	**196**
6.5% notes, due March 1, 2009	349	**349**
7.0% notes, due March 1, 2029	371	**371**
9.0% notes, due August 15, 2011		**575**
9.0% euro notes, due August 15, 2011		**175**
6.92% - 7.04% notes, due 2002	470	**135**
Indebtedness of DCC —		
Unsecured notes payable, variable rates, 2.18% - 5.77%, due 2002 to 2006	220	**182**
Unsecured notes payable, fixed rates, 2.00% - 8.54%, due 2002 to 2011	865	**844**
Nonrecourse notes payable, fixed rates, 6.77% - 12.05%, due 2002 to 2010	108	**79**
Nonrecourse notes payable, variable rate of 5.38%, due 2003		**19**
Indebtedness of other consolidated subsidiaries	89	**129**
Total long-term debt	3,068	**3,454**
Less: Current maturities	419	**446**
	$2,649	**$3,008**

The total maturities of all long-term debt for the five years after 2001 are as follows: 2002, $446; 2003, $152; 2004, $482, 2005, $90 and 2006, $102.

We filed universal shelf registration statements in December 1997 and December 1998 authorizing us to issue debt or equity securities, or a combination thereof, in an aggregate amount not to exceed $1,350. In March 1998, we issued $150 of 6.5% unsecured notes due March 15, 2008 and $200 of 7.0% unsecured notes due March 15, 2028. In March 1999, we issued $250 of 6.25% unsecured notes due March 1, 2004, $350 of 6.5% unsecured notes due March 1, 2009 and $400 of 7.0% unsecured notes due March 1, 2029.

During 2001, Dana issued $575 and €200 of 9% unsecured notes due August 15, 2011. The indenture agreement related to these notes places certain limits on the borrowings, payments and transactions that we might wish to undertake.

During 1999, DCC established a $500 Medium Term Note Program. Notes under the program are offered on terms determined at the time of issuance. At December 31, 2001, notes totaling $500 were outstanding under the program. These notes are general, unsecured obligations of DCC. DCC has agreed that it will not issue any other notes which are secured or senior to notes issued under the program, except as permitted by the program.

Nonrecourse obligations represent debt collateralized by the assignment of contracts and a security interest in the underlying assets. In the event of a default under the nonrecourse debt obligation, the lender's recourse is limited to the collateral with no further recourse against DCC.

Interest paid on short-term and long-term debt was $285 in 1999, $314 in 2000 and $304 in 2001.

Note 9. Stock Option Plans

The Compensation Committee of the Board grants stock options to selected Dana employees under the 1997 Stock Option Plan. The option price is equal to the market price of our common stock at the date of grant. One-fourth of the options granted become exercisable at each of the first four anniversary dates of the grant; options generally expire ten years from the date of grant. Stock appreciation rights may be granted separately or in conjunction with the options.

This is a summary of transactions under the plan in the last three years:

	Number of Shares	**Weighted Average Exercise Price**
Outstanding at December 31, 1998	8,510,657	$36.43
Granted - 1999	2,333,919	45.50
Exercised - 1999	(569,933)	30.65
Cancelled - 1999	(193,138)	43.24
Outstanding at December 31, 1999	10,081,505	$38.78
Granted - 2000	3,322,750	23.06
Exercised - 2000	(120,857)	17.93
Cancelled - 2000	(420,999)	38.08
Outstanding at December 31, 2000	12,862,399	$34.94
Granted - 2001	2,763,200	25.05
Exercised - 2001	(52,003)	15.97
Cancelled - 2001	(632,643)	35.85
Outstanding at December 31, 2001	14,940,953	$33.14

The following table summarizes information about stock options under this plan at December 31, 2001:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
$19.63-28.13	7,526,087	7.7	$24.60	2,617,753	$25.40
29.06-38.44	3,094,246	4.4	34.49	3,094,246	34.49
40.08-52.56	4,320,620	7.0	47.05	3,085,939	47.22
	14,940,953	6.8	$33.14	8,797,938	$36.25

In April 2001, shareholders authorized an additional 5,000,000 shares under this plan. At December 31, 2001, 4,196,461 shares were available for future grants.

In accordance with our accounting policy for stock-based compensation, we have not recognized any expense relating to these stock options. If we had used the fair value method of accounting, the alternative policy set out in SFAS No. 123, "Accounting for Stock-Based Compensation," the after-tax expense relating to the stock options would have been $11 in 1999, $14 in 2000 and $16 in 2001. If we had charged this expense to income, our net income (loss) and earnings per share would have been as follows:

	1999	2000	2001
Net Income (Loss)	$502	$320	**$(314)**
Basic EPS	3.03	2.10	**(2.12)**
Diluted EPS	3.01	2.09	**(2.12)**

The fair value of each option grant was estimated on the date of grant using the Black-Scholes model with the following assumptions:

	1999	2000	2001
Risk-free interest rate	5.82%	6.16%	**4.63%**
Dividend yield	2.73%	5.38%	**4.95%**
Expected life	5.4 years	5.4 years	**5.4 years**
Stock price volatility	38.60%	40.72%	**44.67%**

Based on the above assumptions, the weighted average fair value per share of options granted under the plans was $15.79 in 1999, $6.51 in 2000 and $7.49 in 2001.

Under our Directors' Stock Option Plan, options for 3,000 common shares are automatically granted to each non-employee director once a year. The option price is the market value of the stock at the date of grant. The options can be exercised after one year and expire ten years from the date of grant, except in the event of retirement or death of the director.

This is a summary of the stock option activity of the Directors' plan in the last three years:

	Number of Shares	Weighted Average Exercise Price
Outstanding at December 31, 1998	120,000	$35.12
Granted - 1999	21,000	50.25
Exercised - 1999	(3,000)	24.25
Outstanding at December 31, 1999	138,000	$37.66
Granted - 2000	21,000	28.78
Outstanding at December 31, 2000	159,000	$36.49
Granted - 2001	24,000	17.64
Outstanding at December 31, 2001	183,000	$34.02

The following table summarizes information about stock options under this plan at December 31, 2001:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
$17.64-32.25	138,000	3.7	$27.01	114,000	$28.98
50.25-60.09	45,000	6.8	55.50	45,000	55.50
	183,000	4.4	$34.02	159,000	$36.49

At December 31, 2001, 82,000 shares were available for future grants under this plan.

The non-employee directors of Echlin Inc., which we acquired in 1998, participated in the Echlin Inc. 1996 Non-Executive Director Stock Option Plan under which options for 232,325 shares were authorized for issuance. Options were granted at market value at the date of grant, were exercisable after one year and expire ten years from the date of grant, except in the event of the retirement or death of the director. During 1999, options to purchase 39,265 shares were exercised at $35.43. No options were exercised in 2000 or 2001. At December 31, 2001, there were 38,752 options outstanding and exercisable at exercise prices ranging from $33.49 to $37.93 per share with a weighted average exercise price of $34.40. The weighted average remaining contractual life of these options was 5.2 years. No future grants are expected under this plan.

Note 10. Employees' Stock Purchase Plan

The majority of our full-time U.S. and some of our non-U.S. employees are eligible to participate in our stock purchase plan. Plan participants can authorize us to withhold up to 15% of their earnings and deposit this amount with an independent custodian. The custodian uses the funds to purchase our common stock at current market prices. As record keeper for the plan, we allocate the purchased shares to the participants' accounts. Shares are distributed to the participants on request.

We match up to 50% of the participants' contributions in cash over a five-year period beginning with the year the amounts are withheld. If a participant withdraws any shares before the end of five years, the amount of our match will depend on how long the shares were in the account. The custodian purchased 1,177,541 shares in 1999, 2,212,391 shares in 2000 and 2,405,040 shares in 2001. The charge to expense for our match was $9 in 1999, $10 in 2000 and $11 in 2001.

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Dollars in millions

Note 11. Additional Compensation Plans

We have numerous additional compensation plans under which we pay our employees for increased productivity and improved performance. One such plan is our Additional Compensation Plan for certain officers and other key employees. Under this plan, a percentage of the participants' compensation is accrued for additional compensation if we attain certain annual corporate performance goals. The Compensation Committee selects the participants and determines whether to pay the awards immediately in cash or to defer them for payment later in cash, stock or a combination of both. Participants may elect to convert deferred awards to units which are the economic equivalent of shares of Dana common stock. Units are credited with the equivalent of dividends on our common stock and adjusted in value based on the market value of our common stock. Compensation expense was credited $3 in 1999, $7 in 2000 and $1 in 2001 in connection with reductions in the value of deferred units. Awards not converted to units are credited quarterly with interest earned at a rate tied to the prime rate.

Activity related to the plan for the last three years is as follows:

	1999	2000	**2001**
Awarded to participants based on preceding year's performance	$14	$15	**$ 0**
Dividends and interest credited to participants' accounts	4	2	**2**
Charge (credit) to expense	19	(5)	**1**
Shares issued to participants	3,721	5,240	**25,106**

We also have two successive Restricted Stock Plans under which the Compensation Committee grants restricted common shares to certain key employees. The shares are subject to forfeiture until the restrictions lapse or terminate. Generally, the employee must remain employed with us for a specified number of years after the date of grant to receive the shares. Since 1997, participants have been able to convert their restricted stock into restricted stock units under certain conditions. The number of restricted shares converted to restricted units was 200,037 in 1999, 32,736 in 2000 and 27,500 in 2001. The units are payable in unrestricted stock upon retirement or termination of employment.

Grants occurred under the 1989 Restricted Stock Plan through February 1999, at which time the authorization to grant restricted stock under the plan lapsed. There were 20,500 shares granted in 1999 under the 1989 Plan. At December 31, 2001, there were 474,605 shares available for issuance in connection with dividends payable on shares granted under this plan.

Shareholders approved the 1999 Restricted Stock Plan in April 1999 and authorized the issuance of up to 750,000 shares. There were 82,000 shares granted in 1999, 31,200 shares in 2000 and 529,000 shares in 2001 under the 1999 Plan. At December 31, 2001, there were 74,319 shares available for future grants and dividends under the 1999 Plan.

Charges to expense for these plans were $2 in 1999, $2 in 2000 and $3 in 2001.

Note 12. Pension and Other Postretirement Benefits

We provide defined contribution and defined benefit, qualified and nonqualified, pension plans for certain employees. We also provide other postretirement benefits including medical and life insurance for certain employees upon retirement.

Under the terms of the defined contribution retirement plans, employee and employer contributions may be directed into a number of diverse investments. None of these plans allows for direct investment of contributions in Dana stock.

The following tables provide a reconciliation of the changes in the defined benefit pension plans' and other postretirement plans' benefit obligations and fair value of assets over the two-year period ended December 31, 2001, statements of the funded status and schedules of the net amounts recognized in the balance sheet at December 31, 2000 and 2001:

	Pension Benefits		Other Benefits	
	2000	**2001**	2000	**2001**
Reconciliation of benefit obligation				
Obligation at January 1	$2,425	**$2,477**	$ 1,140	**$ 1,198**
Service cost	76	**66**	16	**14**
Interest cost	168	**172**	79	**91**
Employee contributions	4	**4**	4	**7**
Plan amendments	6	**1**		**4**
Actuarial loss	28	**29**	56	**206**
Benefit payments	(224)	**(196)**	(84)	**(99)**
Settlement, curtailment and terminations	15	**7**	(12)	**(4)**
Acquisitions and divestitures	11	**9**		
Translation adjustments	(32)	**(20)**	(1)	**(2)**
Obligation at December 31	$2,477	**$2,549**	$ 1,198	**$ 1,415**
Reconciliation of fair value of plan assets				
Fair value at January 1	$2,931	**$2,752**		
Actual return on plan assets	49	**(294)**		
Acquisitions and divestitures	(26)	**11**		
Employer contributions	24	**18**		
Employee contributions	4	**4**		
Benefit payments	(198)	**(186)**		
Settlements	(1)	**(4)**		
Translation adjustments	(31)	**(18)**		
Fair value at December 31	$2,752	**$2,283**		
Funded Status				
Balance at December 31	$ 275	**$ (264)**	$(1,198)	**$(1,415)**
Unrecognized transition obligation	(1)	**(1)**		**(19)**
Unrecognized prior service cost	57	**43**	(30)	
Unrecognized (gain) loss	(351)	**229**	321	**512**
Accrued cost	$ (20)	**$ 7**	$ (907)	**$ (922)**
Amounts recognized in the balance sheet consist of:				
Prepaid benefit cost	$ 88	**$ 108**		
Accrued benefit liability	(168)	**(299)**	$ (907)	**$ (922)**
Intangible assets	23	**30**		
Accumulated other comprehensive loss	37	**168**		
Net amount recognized	$ (20)	**$ 7**	$ (907)	**$ (922)**

Benefit obligations of the U.S. non-qualified and certain non-U.S. pension plans, amounting to $114 at December 31, 2001, and the other postretirement benefit plans are not funded.

Components of net periodic benefit costs for the last three years are as follows:

	Pension Benefits			Other Benefits		
	1999	2000	**2001**	1999	2000	**2001**
Service cost	$78	$76	**$ 66**	$18	$16	**$ 14**
Interest cost	153	168	**172**	69	79	**91**
Expected return on plan assets	(219)	(232)	**(241)**			
Amortization of transition obligation	3	3	**1**			
Amortization of prior service cost	23	23	**13**	(10)	(7)	**(6)**
Recognized net actuarial gain (loss)	5	(6)	**(20)**	4	10	**13**
Net periodic benefit cost	43	32	**(9)**	81	98	**112**
Curtailment (gain) loss		18	**4**		(23)	**(2)**
Settlement (gain) loss		(3)	**2**			
Termination expenses			**10**			
Net periodic benefit cost after curtailments and settlements	$43	$47	**$7**	$81	$75	**$110**

The assumptions used in the measurement of pension benefit obligations are as follows:

	U.S. Plans		
	1999	2000	**2001**
Discount rate	7.25%	7.75%	**7.5%**
Expected return on plan assets	9.25%	9.25%	**9.5%**
Rate of compensation increase	4.31 - 5%	4.31 - 5%	**5%**

	Non-U.S. Plans		
	1999	2000	**2001**
Discount rate	5.5 - 7%	5.5 - 7.75%	**6% - 6.75%**
Expected return on plan assets	6.5 - 9%	6.5 - 9%	**7% - 7.5%**
Rate of compensation increase	3 - 5%	2.5 - 5%	**3% - 5%**

The assumptions used in the measurement of other postretirement benefit obligations are as follows:

	1999	2000	**2001**
Discount rate	7.25%	7.75%	**7.5%**
Initial weighted health care costs trend rate	7.2%	6.8%	**8.1%**
Ultimate health care costs trend rate	5%	5%	**5%**
Years to ultimate	9	9	**9**

Assumed health care costs trend rates have a significant effect on the health care plan. A one-percentage-point change in assumed health care costs trend rates would have the following effects for 2001:

	1% Point Increase	1% Point Decrease
Effect on total of service and interest cost components	$9	$(7)
Effect on postretirement benefit obligations	115	(99)

Note 13. Business Segments

Our operations are organized into six market-focused Strategic Business Units (SBUs). This structure allows our people in each of these areas to focus their resources to benefit Dana and our global customers. In December 2001, we combined the Fluid Systems Group and most of the operations of the Engine Systems Group to form the Engine and Fluid Management Group. The segment information has been restated to reflect all changes made to the SBU alignment in 2001.

The Automotive Systems Group (ASG) produces light duty axles, driveshafts, structural products (such as engine cradles and frames), transfer cases, original equipment brakes and integrated modules and systems for the light vehicle market and driveshafts for the heavy truck market.

The Automotive Aftermarket Group (AAG) sells primarily hydraulic brake components and disc brakes for light vehicle applications, internal engine hard parts, chassis products and a complete line of filtration products for a variety of applications.

The Engine and Fluid Management Group (EFMG) serves the automotive, light to heavy truck, leisure and outdoor power equipment and industrial markets with sealing products, internal engine hard parts, electronic modules, sensors and an extensive line of products for the pumping, routing and thermal management of fluid systems.

Commercial Vehicle Systems (CVS) is a major supplier of heavy axles and brakes, drivetrain components and trailer products to the medium and heavy truck markets.

The Off-Highway Systems Group (OHSG) produces axles and brakes, transaxles, power-shift transmissions, torque converters and electronic controls for the construction, agriculture, mining, specialty chassis, outdoor power, material handling, forestry and leisure/utility equipment markets.

For some time, we have also been a leading provider of lease financing services in selected markets through our wholly-owned subsidiary, Dana Credit Corporation (DCC). DCC and its subsidiaries provide leasing and financing services to selected markets primarily in the U.S., Canada, the United Kingdom and continental Europe. We announced our intention to pursue the sale of the businesses of DCC in October 2001.

Dollars in millions

Note 13. Business Segments (Continued)

Management evaluates the operating segments and regions as if DCC were accounted for on the equity method of accounting. Information used to evaluate the SBUs and regions is as follows:

1999	Sales	EBIT	Operating PAT	Net Profit (Loss)	Net Assets	Capital Spend	Depreciation/ Amortization
ASG	$ 4,403	$ 534	$ 341	$ 269	$1,759	$190	$142
AAG	2,955	294	180	127	1,965	117	76
EFMG	2,495	223	143	104	1,861	135	117
CVS	1,904	208	127	91	688	48	34
OHSG	870	61	37	24	560	31	37
DCC			34	34	145		
Other	532	(169)	(184)	29	262	26	23
Total operations	13,159	1,151	678	678	7,240	547	429
Restructuring and nonrecurring items		(229)	(165)	(165)			
Consolidated	$13,159	$ 922	$ 513	$513	$7,240	$547	$429
North America	$10,308	$1,235	$ 771	$612	$5,222	$379	$283
Europe	2,051	99	57	20	1,267	102	96
South America	549	16	13	3	581	48	37
Asia Pacific	251		(1)	(10)	143	13	9
DCC			34	34	145		
Other		(199)	(196)	19	(118)	5	4
Total operations	13,159	1,151	678	678	7,240	547	429
Restructuring and nonrecurring items		(229)	(165)	(165)			
Consolidated	$13,159	$ 922	$ 513	$513	$7,240	$547	$429
2000							
ASG	$ 4,522	$ 415	$ 282	$193	$2,036	$180	$149
AAG	2,768	116	71	6	1,903	74	78
EFMG	2,400	180	121	77	1,735	119	113
CVS	1,598	126	76	41	555	32	42
OHSG	786	58	35	21	500	19	29
DCC			35	35	174		
Other	243	(219)	(243)	4	77	10	16
Total operations	12,317	676	377	377	6,980	434	427
Restructuring and nonrecurring items		(25)	(43)	(43)			
Consolidated	$12,317	$ 651	$ 334	$334	$6,980	$434	$427
North America	$ 9,449	$ 804	$ 525	$346	$4,730	$306	$286
Europe	1,947	74	44	4	1,542	78	96
South America	563	24	11		451	32	30
Asia Pacific	358	7	5	(8)	169	11	11
DCC			35	35	174		
Other		(233)	(243)		(86)	7	4
Total operations	12,317	676	377	377	6,980	434	427
Restructuring and nonrecurring items		(25)	(43)	(43)			
Consolidated	$12,317	$ 651	$ 334	$334	$6,980	$434	$427
2001							
ASG	**$ 3,717**	**$ 194**	**$ 146**	**$ 68**	**$1,997**	**$188**	**$168**
AAG	**2,538**	**12**	**7**	**(54)**	**1,510**	**36**	**80**
EFMG	**2,137**	**77**	**50**	**8**	**1,430**	**56**	**117**
CVS	**1,118**	**33**	**20**	**(10)**	**407**	**19**	**39**
OHSG	**621**	**22**	**13**	**1**	**431**	**13**	**29**
DCC			**31**	**31**	**198**		
Other	**140**	**(191)**	**(262)**	**(39)**	**161**	**5**	**14**
Total operations	**10,271**	**147**	**5**	**5**	**6,134**	**317**	**447**
Restructuring and nonrecurring items		**(466)**	**(303)**	**(303)**			
Consolidated	**$10,271**	**$ (319)**	**$(298)**	**$(298)**	**$6,134**	**$317**	**$447**
North America	**$ 7,684**	**$ 280**	**$ 167**	**$ 10**	**$4,027**	**$212**	**$299**
Europe	**1,704**	**43**	**45**	**8**	**1,314**	**49**	**90**
South America	**553**	**13**	**(3)**	**(14)**	**475**	**28**	**38**
Asia Pacific	**330**	**5**	**3**	**(8)**	**177**	**25**	**14**
DCC			**31**	**31**	**198**		
Other		**(194)**	**(238)**	**(22)**	**(57)**	**3**	**6**
Total operations	**10,271**	**147**	**5**	**5**	**6,134**	**317**	**447**
Restructuring and nonrecurring items		**(466)**	**(303)**	**(303)**			
Consolidated	**$10,271**	**$ (319)**	**$(298)**	**$(298)**	**$6,134**	**$317**	**$447**

With the exception of DCC, operating profit after taxes (PAT) represents earnings before interest and taxes (EBIT), tax effected at 39% (our estimated long-term effective rate), plus equity in earnings of affiliates. The Other category includes operations not assigned to the SBUs, discontinued businesses, trailing liabilities for certain closed plants, interest expense net of interest income, corporate expenses and adjustments to reflect the actual effective tax rate. SBU and regional expenses are included in the respective SBU or region; otherwise they are included in Other. In arriving at net profit from operating PAT, allocations are based on sales.

Equity earnings included in the operating PAT and net profit reported in 1999, 2000 and 2001 were $15, $29 and $27 for ASG and $7, $11 and $3 for EFMG. Equity earnings included for the other SBUs were not material.

Net assets at the SBU and regional level is intended to correlate with invested capital. It includes accounts receivable, inventories (on a first-in, first-out basis), net property, plant and equipment, investments in affiliates, goodwill, trade accounts payable and 2% of annualized sales as an assumption for cash and prepaid expense.

DCC is evaluated based upon numerous criteria of which net profit and net assets (equity investment) shown above are the major items.

Restructuring and nonrecurring items consist of the gains on sales of business discussed in Note 19, restructuring and integration charges discussed in Note 20 and other nonrecurring charges.

Sales by region are based upon location of the entity recording the sale. Sales from the U.S. amounted to $9,413 in 1999, $8,552 in 2000 and $6,863 in 2001. No other country's sales exceeded 10% of total sales. U.S. long-lived assets were $1,835 in 1999, $1,865 in 2000 and $1,631 in 2001. No other country's long-lived assets exceeded 10% of total long-lived assets.

Net operating assets differ from consolidated assets as follows:

	1999	2000	**2001**
Net operating assets	$ 7,240	$ 6,980	**$ 6,134**
Accounts payable	1,129	1,014	**1,042**
DCC's assets in excess of equity	1,902	2,279	**2,012**
Non-trade receivables and other current assets	655	755	**775**
Other long-term assets	197	208	**244**
Consolidated assets	$11,123	$11,236	**$10,207**

The difference between operating capital spend and depreciation shown above and purchases of property, plant and equipment and depreciation shown on the cash flow statement represents the method of measuring DCC for operating purposes. DCC's capital spend and depreciation are not included above. In addition, DCC purchases equipment and leases the equipment to the other SBUs. These operating leases are included in the consolidated statements as purchases of assets and depreciated over their useful life.

Export sales from the U.S. to customers outside the U.S. amounted to $939 in 1999, $832 in 2000 and $649 in 2001. Total export sales (including sales to our non-U.S. subsidiaries which are eliminated for financial statement presentation) were $1,229 in 1999, $1,115 in 2000 and $874 in 2001.

Worldwide sales to Ford Motor Company and subsidiaries amounted to $2,130 in 1999, $2,396 in 2000 and $1,888 in 2001, which represented 16%, 19% and 18% of our consolidated sales. Sales to DaimlerChrysler AG and subsidiaries were $1,777 in 1999, $1,669 in 2000 and $1,169 in 2001 representing 14%, 14% and 11% of our consolidated sales. Sales to Ford were primarily from our ASG and EFMG segments, while sales to DaimlerChrysler were primarily from the ASG and CVS segments. No other customer accounted for more than 10% of our consolidated sales.

Note 14. Estimated Income Taxes

Income tax expense (benefit) consists of the following components:

	Year Ended December 31		
	1999	2000	**2001**
Current			
U.S. federal	$ 23	$ 22	**$ (94)**
U.S. state and local	15	18	**(5)**
Non-U.S.	139	74	**54**
	177	114	**(45)**
Deferred			
U.S. federal and state	120	48	**(111)**
Non-U.S.	(46)	9	**(5)**
	74	57	**(116)**
Total expense (benefit)	$251	$171	**$(161)**

Deferred tax benefits (liabilities) consist of the following:

	December 31		
	1999	2000	**2001**
Postretirement benefits other than pensions	$387	$328	**$339**
Expense accruals	150	210	**252**
Net operating loss carryforwards	117	128	**234**
Inventory reserves	35	58	**77**
Foreign tax credits recoverable		23	**79**
Other tax credits recoverable		7	**27**
Pension accruals			**33**
Postemployment benefits	38	32	**32**
Other employee benefits	24	23	**20**
Other	63	58	**85**
	814	867	**1,178**
Valuation allowances	(83)	(102)	**(128)**
Deferred tax benefits	731	765	**1,050**
Leasing activities	(441)	(557)	**(678)**
Depreciation - non-leasing	(215)	(239)	**(233)**
Pension accruals	(15)	(12)	
Other	(17)	(17)	**(24)**
Deferred tax liabilities	(688)	(825)	**(935)**
Net deferred tax benefits (liabilities)	$ 43	$ (60)	**$115**

Notes to Financial Statements

Dollars in millions

Note 14. Estimated Income Taxes (Continued)

Worldwide, we have operating loss carryforwards of approximately $687 with remaining lives ranging from one year to an indefinite period. Valuation allowances are provided for deferred benefits if the realization of the benefits is uncertain. To reflect uncertainties related to utilization of specific loss carryforwards, we increased the valuation allowance by $19 in 2000 and $26 in 2001. Net benefits recognized for loss carryforwards generally relate to the U.S., where we have traditionally been a taxpayer, and Brazil and the United Kingdom, where operating losses may be carried forward indefinitely. Foreign tax credits may be used to offset the U.S. income taxes due on income earned from foreign sources; however, the credit is limited to the total U.S. taxes payable on income from all sources. Excess foreign tax credits may be carried back two years and forward five years. As of December 31, 2000 and 2001, we believe it is more likely than not that we will generate a sufficient level and proper mix of taxable income within the appropriate period to utilize all the foreign tax credits. If we are unable to generate a sufficient level and proper mix of taxable income within the appropriate periods we may be unable to utilize some or all of these tax benefits. The foreign tax credit carryforwards expire as follows: 2003, $5; 2004, $20; 2005, $28; 2006, $26.

Cumulative undistributed earnings of non-U.S. subsidiaries for which U.S. income taxes, exclusive of foreign tax credits, have not been provided approximated $852 at December 31, 2001. U.S. income taxes have not been provided on these undistributed earnings since we intend to permanently reinvest them. If the total undistributed earnings of non-U.S. subsidiaries had been remitted in 2001, a significant amount of the additional tax provision would have been offset by foreign tax credits.

We paid income taxes of $136 in 1999 and $98 in 2000 and received a net refund of $38 in 2001.

The effective income tax rate differs from the U.S. federal income tax rate for the following reasons:

	Year Ended December 31		
	1999	2000	**2001**
U.S. federal income tax rate	35.0%	35.0%	**35.0%**
Increases (reductions) resulting from:			
State and local income taxes, net of federal income tax benefit	2.1	2.3	**4.2**
Non-U.S. income	(4.0)	(5.1)	**(1.6)**
Valuation adjustments	3.3	4.0	**(5.3)**
General business tax credits	(1.9)	(1.7)	**1.9**
Amortization of goodwill	0.6	1.2	**(0.8)**
Miscellaneous items	(1.0)	1.1	**(0.2)**
Effective income tax rate	34.1%	36.8%	**33.2%**

Note 15. Composition of Certain Balance Sheet Amounts

The following items comprise the net amounts indicated in the respective balance sheet captions:

	December 31	
	2000	**2001**
Investments and Other Assets		
Goodwill	$ 969	**$ 841**
Investments at equity	965	**877**
Marketable securities, cost of $37 - 2000 and $32 - 2001	41	**33**
Loans receivable	109	**80**
Other	283	**378**
	$2,367	**$2,209**
Property, Plant and Equipment, net		
Land and improvements to land	$ 146	**$ 133**
Buildings and building fixtures	1,167	**1,099**
Machinery and equipment	4,859	**4,808**
	6,172	**6,040**
Less: Accumulated depreciation	2,663	**2,907**
	$3,509	**$3,133**
Deferred Employee Benefits and Other Noncurrent Liabilities		
Postretirement other than pension	$ 831	**$ 834**
Deferred income tax	310	**214**
Pension	109	**299**
Postemployment	82	**82**
Compensation	54	**48**
Other noncurrent liabilities	121	**163**
	$1,507	**$1,640**
Investment in Leases		
Direct financing leases	$ 141	**$ 118**
Leveraged leases	867	**920**
Property on operating leases, net of accumulated depreciation	93	**75**
Allowance for credit losses	(43)	**(31)**
	1,058	**1,082**
Less: Current portion	21	**14**
	$1,037	**$1,068**

The components of the net investment in direct financing leases are as follows:

	December 31	
	2000	**2001**
Total minimum lease payments	$154	**$125**
Residual values	42	**38**
Deferred initial direct costs	2	**2**
	198	**165**
Less: Unearned income	57	**47**
	$141	**$118**

The components of the net investment in leveraged leases are as follows:

	December 31 2000	2001
Rentals receivable	$ 7,597	**$ 7,574**
Residual values	874	**944**
Nonrecourse debt service	(6,409)	**(6,445)**
Unearned income	(1,185)	**(1,143)**
Deferred investment tax credit	(10)	**(10)**
	867	**920**
Less: Deferred taxes arising from leveraged leases	423	**513**
	$ 444	**$ 407**

Total minimum lease payments receivable on direct financing leases as of December 31, 2001 are as follows:

Year Ending December 31:	
2002	**$ 23**
2003	**21**
2004	**18**
2005	**16**
2006	**12**
Later years	**35**
Total minimum lease payments receivable	**$125**

Total minimum lease payments receivable on operating leases as of December 31, 2001 are as follows:

Year Ending December 31:	
2002	**$ 20**
2003	**16**
2004	**12**
2005	**10**
2006	**8**
Later years	**15**
Total minimum lease payments receivable	**$ 81**

Note 16. Fair Value of Financial Instruments

The estimated fair values of Dana's financial instruments are as follows:

	December 31 2000 Carrying Amount	2000 Fair Value	**2001 Carrying Amount**	**2001 Fair Value**
Financial assets				
Cash and cash equivalents	$ 179	$ 179	**$ 199**	**$ 199**
Loans receivable (net)	219	228	**108**	**115**
Investment securities	55	55	**46**	**45**
Currency forwards		2	**1**	**1**
Financial liabilities				
Short-term debt	1,526	1,526	**674**	**674**
Long-term debt	3,068	2,943	**3,454**	**3,298**
Security deposits - leases	1		**2**	**2**
Deferred funding commitments under leveraged leases	1	1	**1**	**1**
Interest rate swaps		3	**6**	**6**

Note 17. Commitments and Contingencies

At December 31, 2001, we had purchase commitments for property, plant and equipment of approximately $128. DCC had commitments to provide loan and lease financing in the aggregate amount of $80. Subsequent financing under the DCC commitments is subject to satisfactory completion of normal conditions precedent to the execution of such lease financing arrangements.

At December 31, 2001, we had contingent obligations of up to $134 related to partial guarantees of third-party loans to equity affiliates.

Future minimum rental commitments under operating leases were $469 at December 31, 2001, with rental payments during the next five years of: 2002, $76; 2003, $70; 2004, $64; 2005, $55 and 2006, $60. Net rental expense was $117 in 1999, $103 in 2000 and $113 in 2001.

We are a party to various pending judicial and administrative proceedings arising in the ordinary course of business. These include, among others, proceedings based on product liability claims and alleged violations of environmental laws.

With respect to contingent asbestos-related product liability, we had approximately 100,000 asbestos-related claims outstanding at December 31, 2001, including approximately 27,000 claims that were settled pending payment. We have agreements with our insurance carriers providing for the payment of a significant majority of the defense and indemnity costs for pending claims as well as claims which may be filed against us in the future. At December 31, 2001, we had accrued $102 for contingent asbestos-related product liability costs and recorded $89 as an asset for probable recoveries from insurers for asbestos-related product liability claims, compared to $78 accrued for liabilities and $67 recorded as an asset at December 31, 2000.

At December 31, 2001 and 2000, amounts accrued for contingent environmental liabilities with no recovery expected from other parties were $52 and $40, respectively. At December 31, 2001, $11 was accrued for contingent non-asbestos product liability costs, with no recovery anticipated from third parties; $21 was accrued for liabilities and $2 recorded as an asset at the end of 2000.

Until 2001, the majority of our asbestos-related claims were administered by the Center for Claims Resolution (CCR), which settled claims for its member companies on a shared settlement cost basis. In February 2001, the CCR was reorganized and discontinued negotiating shared settlements. Certain former CCR members have defaulted on the payment of their shares of certain of the CCR-negotiated settlements. As a result, some of the settling parties are seeking payment of the unpaid shares from Dana and the other companies that were members of the CCR at the time of the settlements. We have been working with the CCR, other former CCR members, our insurers and the claimants plaintiffs to resolve these issues. At December 31, 2001, we estimated our contingent liability with respect to these matters to be approximately $44, of which we expect $39 to be recoverable from our insurers and under surety bonds provided by the defaulting CCR members. Our financial statements include our obligation relative to these contingencies, which are separate from the asbestos-related product liabilities discussed above.

We have reviewed our pending judicial and legal proceedings, including the probable outcomes, reasonably anticipated costs and expenses, availability and limits of our insurance coverage and our established reserves for uninsured liabilities. We do not believe that any liabilities that may result from these proceedings are reasonably likely to have a material adverse effect on our liquidity, financial condition or results of operations.

Notes to Financial Statements

Dollars in millions

Note 18. Acquisitions

In 1999, we acquired Innovative Manufacturing, Inc., a machining operation that supplies machined castings to our Spicer Outdoor Power Equipment Components Division. We also acquired the remaining interests not previously owned in Industrias Serva S.A. (30%), Dana Heavy Axle Mexico S.A. de C.V. (9%), Automotive Motion Technology Limited (49%) and Echlin Charger Mfg. Co. Pty. Ltd. (8%). These acquisitions were accounted for as purchases and the results of operations and earnings previously allocated to minority owners have been included from the dates of acquisition. The sales and total assets were not material.

In January 2000, we acquired the cardan-jointed propeller shaft business of GKN plc. In March, we acquired a majority interest in Tribometal a.s., a manufacturer of polymer bearings. The automotive axle manufacturing and stamping operations of Invensys plc were acquired in July 2000. In November 2000, we acquired a 30-percent interest in GETRAG Cie, a manufacturer of transmissions, transaxles, axles and other automotive components, and a 49-percent interest in GETRAG's North American operations. Except for the interests in GETRAG, which are being accounted for as equity investments, the acquisitions were accounted for as purchases and the results of their operations have been included in the consolidated financial statements from the dates of acquisition. The acquisitions accounted for as purchases had total assets of $373 at acquisition and recorded sales of $195 in 2000.

In June 2001, we acquired the remaining 51% interest in Danaven, a Venezuelan operation in which we previously held a minority position. This acquisition was accounted for as a purchase and the results of operations have been included in the consolidated financial statements since the date we attained 100% ownership. We previously accounted for our 49% interest in Danaven under the equity method of accounting. Total assets and debt of Danaven approximated $202 and $92 at June 30, 2001. Sales related to Danaven approximated $64 in 2001.

Note 19. Divestitures

In October 1999, we sold the Coldform operations of our Engine and Fluid Management Group and in November we sold Sierra International Inc. Coldform manufactured starter components, steering hubs and suspension components and Sierra manufactured and distributed marine and power equipment engine, drive and hose products. Annual sales of these operations were approximately $50.

In January 2000, we sold our Gresen Hydraulics business, the Truckline Parts Centres heavy-duty distribution business and certain portions of our constant velocity (CV) joint businesses. In February, we sold most of the global Warner Electric businesses and, in March, we sold Commercial Vehicle Cab Systems. In September 2000, we sold the remaining 35% interest in our Brazilian CV joint operation. Net gain recorded on these divestitures totaled $106. These businesses reported sales of $666 in 1999; through the dates of divestiture, 2000 sales for these operations totaled $103.

In March 2001, we sold Mr. Gasket, Inc., a wholly owned subsidiary. In the second quarter of 2001, we divested our Marion, Ohio forging facility and the assets of our Dallas, Texas and Washington, Missouri Engine and Fluid Management Group operations. In July 2001, we completed the sale of our Chelsea power take-off business to Parker Hannifin Corporation. In September 2001, we completed the sale of our Glacier industrial polymer bearings businesses to Goodrich Corporation. A net after-tax gain of $10 was recorded on these divestitures. Sales reported by these businesses were $241 in 2000 and $105 in 2001, through the dates of divestiture.

Note 20. Restructuring of Operations

During 1999, we continued executing the restructuring and integration plans announced in 1998 following our acquisition of Echlin Inc., including the closing and downsizing of facilities begun in 1998. We incurred integration charges of $51 for relocating assets, training and relocating employees and other integration activities at the acquired operations. These costs were charged to expense as incurred.

During the fourth quarter of 1999, we announced plans to downsize and close additional operations in the U.S., South America and Europe and recorded restructuring and integration charges totaling $170. The charges included the costs of exiting businesses, asset impairments and termination benefits. The announced restructuring and integration plans included closing five facilities, downsizing three facilities and terminating 1,280 people. The largest component of these plans was the downsizing of our Reading, Pa., structures facility. In total, $229 was charged to income during 1999. This amount consisted of $181 charged to restructuring and integration, $57 charged to cost of sales and a $9 gain on the sale of Sierra credited to other income.

During the third quarter of 2000, we announced plans to close our Reading structures facility and terminate approximately 690 people and recorded restructuring charges of $53. In the fourth quarter of 2000, we approved plans to close facilities in France, the United Kingdom and Argentina, resulting in $34 of charges and a workforce reduction of approximately 230 people. We also incurred integration expenses in 2000 related to consolidating our Engine Management warehouse operations and moving operations from closed facilities.

In the first quarter of 2001, we recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. We announced additional facility closings in the third quarter and accrued additional restructuring charges of $12, affecting earnings by $7.

In October 2001, we announced plans to reduce our global workforce by more than 15 percent and initiated a review of more than 30 facilities for possible consolidation or closure. These actions were undertaken to reduce capacity and outsource the manufacturing of non-core content. As of December 31, 2001, we had announced the closing of 21 facilities and reduced our work force by more than 7 percent in connection with these plans. Charges related to our actions announced in October were $431 and affected net earnings by $279. Charges for all restructuring activities totaled $440, including $155 for employee terminations, $196 for asset impairments and $89 for exit and other costs. We charged cost of sales for $85 of these expenses, including $38 for inventory impairment. Net earnings in the fourth quarter were impacted by $284.

For the year ended December 31, 2001, we recorded total expenses of $476, including $390 charged to restructuring expense and $86 charged to cost of sales, in connection with our restructuring actions. We expect our actions to reduce our break-even point by eliminating excess capacity.

The following summarizes the restructuring charges and activity recorded in the last three years:

	Employee Termination Benefits	Long-Lived Asset Impairment	Exit Costs	Integration Expenses	Total
Balance at December 31, 1998	$ 116	$	$ 11	$	$ 127
Activity during the year					
Charges to expense	60	59	11	51	181
Cash payments	(85)		(9)	(51)	(145)
Write-off of assets		(59)			(59)
Balance at December 31, 1999	91	-	13	-	104
Activity during the year					
Charges to expense	62	8	27	76	173
Cash payments	(60)		(20)	(76)	(156)
Write-off of assets		(8)			(8)
Balance at December 31, 2000	93	-	20	-	113
Activity during the year					
Charges to expense	**171**	**166**	**53**		**390**
Cash payments	**(58)**		**(20)**		**(78)**
Write-off of assets		**(166)**			**(166)**
Balance at December 31, 2001	**$ 206**	**$ -**	**$ 53**	**$ -**	**$ 259**

Employee terminations relating to the plans were as follows:

	1999	2000	2001
Total estimated	1,280	1,020	**7,690**
Less terminated:			
1999	(595)		
2000	(615)	(765)	
2001	(30)	(254)	**(3,571)**
Balance at December 31, 2001	**40**	**1**	**4,119**

At December 31, 2001, $259 of restructuring charges remained in accrued liabilities. This balance was comprised of $206 for the reduction of approximately 4,200 employees to be completed in 2002 and $53 for lease terminations and other exit costs. The estimated annual cash expenditures will be approximately $120 in 2002, $38 in 2003 and $101 thereafter. Our liquidity and cash flows will be materially impacted by these actions. It is anticipated that our operations over the long term will benefit from these realignment strategies through reduction of overhead and certain material costs.

Note 21. Noncash Investing and Financing Activities

In leveraged leases, the issuance of nonrecourse debt financing and subsequent repayments thereof are transacted directly between the lessees and the lending parties to the transactions. Nonrecourse debt issued to finance leveraged leases was $878 in 1999, $403 in 2000 and $163 in 2001; nonrecourse debt obligations repaid were $273 in 1999, $106 in 2000 and $76 in 2001.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Dollars in millions

We began the year 2001 experiencing the fluctuations in production runs that resulted from our original equipment (OE) customers trying to balance existing inventories and production schedules with the demands of an uncertain marketplace. Our efforts were focused on trying to scale our businesses to levels that would get us below conservative estimates for production and avoid the underabsorption of overhead that adversely affected our operating results in 2000. The second quarter provided the first signs that production schedules, while well below prior year levels, might be returning to more predictable patterns and that the efforts to downsize our operations were having a positive effect. Sales in our Automotive Systems Group rose 5% over the first quarter after falling 25% during the four previous quarters. Our automotive aftermarket business also reported measurable sales growth for the first time since the middle of 1999, and consolidated profit after tax increased substantially from the first quarter on a modest overall sales gain.

The optimism generated during the second quarter faded as we moved through the third quarter. Dealer inventory of light vehicles, especially models that are key to Dana, was increasing again despite increased incentives, and additional days were carved out of OE production schedules already reduced by seasonal closings. Hopes for a general recovery in the economy, which would have benefited the vehicular markets, were swept away in the days following September 11. The terrorist attacks resulted in immediate changes in how people and products were transported, especially movement across international borders. For a period of time, production schedules based on just-in-time deliveries were severely impacted by the delays resulting from increased security. The United States acknowledged that its economy was in a recession and consumer confidence declined amid uncertainty as to how long the weakness would last.

We faced the extraordinary challenges posed by the situation by making a number of difficult decisions that were necessary to properly align our resources with customer demand, ensure an adequate return on committed capital and preserve cash. In October, we initiated a review of more than 30 facilities for consolidation or closure, committed to reducing our work force by more than 15%, announced plans to sell the businesses of Dana Credit Corporation (DCC) and reduced our fourth quarter dividend to one cent per share. By the end of the quarter, we had announced the closure of 21 facilities and had reduced our work force by 7%. Additional closures are planned for 2002. Executing these restructuring plans continues to be our primary focus in 2002.

Liquidity and Capital Resources

Cash Flows – Operating activities in 2001 generated positive cash flow of $639, declining $345 from the prior year. The primary component of the change was earnings, as the $298 net loss in 2001 represents a $632 decrease from the net income of $334 reported in 2000. Included in the $476 of expenses related to our 2001 restructuring activities were charges of $206 related to the impairment of inventory and long-lived assets which did not require the use of cash. Our continuing focus on reducing working capital helped generate $350 during the year, including $303 from reductions in accounts receivable and inventory. This result was achieved despite the repayment of approximately $100 financed by a sale of accounts receivable at the end of 2000 and payment of $104 representing the final installment on our investment in GETRAG Cie. The latter item affected working capital through its inclusion in other accrued liabilities at the end of 2000.

Efforts to control capital spending impacted cash flows from investing activities in 2001. After reducing capital spending by 18% in 2000, we carved $237 or 36% from last year's total to finish at $425. Divestitures generated proceeds of $236 in 2001, while the acquisition of the remaining 51% interest in Danaven, a Venezuelan affiliate in which we previously held a minority position, required a $21 outlay. Net loan activity of our DCC businesses in 2001 resulted in proceeds of $112, while loan activity in 2000 required $82.

Our 2001 cash flows related to financing activities included an $888 reduction of net short-term borrowings, reflecting the application of a large portion of the proceeds from our August note placement and also cash available from the working capital reduction. Due to the reduced level of investments in new leases, DCC was able to use lease payments and proceeds from asset sales to fund $205 of the reduction in short-term debt. The new notes drove the net cash inflow of $346 related to long-term debt; however, a portion of the proceeds from those issues was used to retire medium-term notes. These debt reductions were partially offset on our balance sheet by the consolidation of approximately $90 of debt in the second quarter of 2001 in connection with our purchase of the interest in Danaven. The $140 of dividends paid in 2001 reflects a $47 reduction over 2000 as a result of reducing our quarterly dividend to one cent per share in the final quarter of 2001. Financing cash flows in 2000 included $381 expended for stock repurchases, which were discontinued in September 2000.

Managing our cash remains a high priority in 2002, especially in light of the $300 of cash outlays expected in connection with our restructuring activities. Based on the levels of production we have assumed for 2002, we are currently projecting a $100 decrease in working capital, exclusive of our restructuring activities. Within our investing activities, we have budgeted capital spending of approximately $275 in 2002 and expect to realize $300 or more in proceeds from divestitures. Annualizing the present quarterly dividend would result in related outflows of $6 versus the $140 paid in 2001. Hitting these targets should enable us to significantly reduce our outstanding debt during 2002.

Financing Activities – Until the end of 2000, we had generally relied on the issuance of commercial paper to satisfy a significant portion of our short-term financing requirements. However, the debt rating services lowered our credit ratings in the first quarter of 2001, primarily due to the significant downturn in our markets since the fourth quarter of 2000 and the impact of the downturn on our operations. Following the rating actions, the commercial paper markets ceased to be available to us and we began borrowing against our committed bank lines.

In March 2001, we established a $400 accounts receivable securitization program. The initial proceeds were used to reduce debt, including amounts outstanding under our revolving credit facilities. The amounts outstanding under the program are reflected as short-term borrowings in our consolidated financial statements. The amounts available under the program are subject to reduction based on significant adverse changes in the credit ratings of our customers, customer concentration levels or certain characteristics of the underlying accounts receivable. This program is subject to termination by the lenders in the event our credit ratings are lowered beyond a level specified in the agreement.

In August 2001, we completed the private placement of $575 and €200 of 10-year unsecured senior notes. We used the proceeds from these notes, along with a portion of the proceeds from divestitures, to further reduce borrowings under Dana's revolving credit facilities and satisfy maturities of existing medium-term debt, thereby extending the overall maturity of our outstanding debt.

In December 2001, we entered into a new 364-day revolving credit facility with a group of banks and amended our existing long-term facility, which matures on November 15, 2005. The 364-day facility provides for a maximum borrowing capacity of $250 while the long-term facility has a borrowing capacity of $500. The interest rates under these facilities equal LIBOR or the prime rate, plus a spread that varies depending on our credit ratings. The 364-day facility provides each participating bank the option to terminate its commitment on April 30, 2002 unless we receive net cash proceeds of at least $200 by April 1, 2002 from the issuance of debt in the capital markets or equity interests, or the sale of assets. If the net cash proceeds generated by these activities through December 18, 2002 exceed $200, the maximum borrowing capacity under the 364-day facility will be reduced by 50% of the excess. Both facilities require us to maintain specified financial ratios as of the end of each quarter, including the ratio of net senior debt to tangible net worth; the ratio of earnings before interest, taxes and depreciation and amortization (EBITDA) less capital spend to interest expense; and the ratio of net senior debt to EBITDA. For purposes of these ratios, tangible net worth excludes deferred currency translation adjustments, the 2001 minimum pension liability adjustment and intangible assets, and EBITDA excludes cash restructuring charges incurred from the fourth quarter of 2001 through the first quarter of 2003, to a maximum of $500, equity earnings, minority interest and certain other non-cash items. The ratio calculations are based on Dana's consolidated financial statements with DCC accounted for on the equity basis.

Because our financial performance is impacted by various economic, financial and industry factors, we cannot say with certainty whether we will satisfy these covenants in the future. Noncompliance with these covenants would constitute an event of default, allowing the lenders to accelerate the repayment of any borrowings outstanding under the related arrangement. While no assurance can be given, we believe that we would be able to successfully negotiate amended covenants or obtain waivers if an event of default were imminent; however, we might be required to provide collateral to the lenders or make other financial concessions. Default under either of these facilities or any of our significant note agreements may result in defaults under our other debt instruments. Our business, results of operations and financial condition may be adversely affected if we were unable to successfully negotiate amended covenants or obtain waivers on acceptable terms.

Committed and uncommitted bank lines enable us to make direct bank borrowings. Excluding DCC, we had committed and uncommitted borrowing lines of $1,148 at December 31, 2001. This amount includes our revolving credit facilities, of which $250 matures in December 2002 and $500 matures in November 2005. We also have a total capacity of $400 under the accounts receivable securitization program. Accordingly, we have a total short-term borrowing capability of $1,548, of which $1,105 was available at the end of 2001. In addition, DCC had credit lines of $559 at December 31, 2001, including two revolving credit facilities with an aggregate maximum borrowing capacity of $463. One facility matures in June 2002 and has a maximum borrowing capacity of $213. The other facility matures in June 2004 and has a maximum borrowing capacity of $250. The interest rates under these facilities equal LIBOR or the prime rate, plus a spread that varies depending on DCC's credit ratings. At December 31, 2001, approximately $231 was outstanding under the DCC lines, including $195 under the revolving credit facilities.

Based on our rolling forecast, we expect our cash flows from operations, combined with these credit facilities and the accounts receivable securitization program, to provide sufficient liquidity to fund our debt service obligations, projected working capital requirements, restructuring obligations and capital spending for a period that includes the next twelve months.

Hedging Activities – We utilize derivative financial instruments, to a limited extent, to hedge principally against the effects of fluctuations of foreign currency exchange rates and interest rate movements (see Notes 1, 7 and 16 to the financial statements). To accomplish these purposes, we use forward contracts to hedge against foreign currency movements and interest rate swaps to hedge against interest rate fluctuations and to balance the mix of fixed and variable rate debt. We do not use derivative instruments for trading purposes. Our policy requires that our business units involve our Treasury staff in the execution of all derivative contracts.

At December 31, 2001, we had a number of open forward contracts to hedge against certain anticipated net purchase and sale commitments. These contracts are for a short duration and none extend beyond 2002. The aggregate fair value of these contracts is a favorable amount less than $1. These contracts have been valued by independent financial institutions using the exchange spot rate on December 31, 2001, plus or minus quoted forward basis points to determine a settlement value for each contract.

In order to provide a better balance of fixed and variable rate debt, we have interest rate swap agreements in place to effectively convert the fixed interest rate on our 9% dollar and euro denominated notes to variable rates. These swap contracts have been designated as hedges and the impact of the change in their value is offset by an equal and opposite change in the carrying value of the notes. Under the contracts, we receive a fixed rate of interest of 9% on notional amounts of $575 and €200 and we pay a variable rate based on either the LIBOR, plus a spread, or the EURIBOR, plus a spread, respectively. The swap contracts expire in August 2011, which coincides with the term of the notes. DCC also has several interest rate swap contracts that have an aggregate notional amount of $95. Unlike the swap agreements hedging the 9% notes, the DCC swap contracts call for DCC to receive a variable amount of interest, based on prevailing short term market rates, and pay a fixed amount that averages 7.13%. DCC's swaps expire in 2002 ($50) and 2003 ($45). The fair value of all interest rate swaps at December 31, 2001 is reflected as a $6 liability in the balance sheet. The fair values of these swaps, by year of maturity, are net credits of $1 in 2002, $3 in 2003 through 2004 and $2 beyond 2006. The fair values of all swaps were determined by obtaining pricing estimates from independent financial institutions.

Cash Obligations – Under various agreements, we are obligated to make future cash payments in fixed amounts. These include payments under our long-term debt agreements, rent payments required under operating lease agreements, firm commitments made to acquire equipment and other fixed assets and purchases of certain raw materials. With the exception of payments required under our long-term debt and operating lease agreements, we do not have fixed cash payment obligations beyond 2003.

The following table summarizes our fixed cash obligations over various future periods.

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	Payments Due by Period				
Contractual Cash Obligations	Total	Less than 1 Year	1 – 3 Years	4 – 5 Years	After 5 Years
Long-Term Debt	$ 3,454	$ 446	$ 634	$ 192	$ 2,182
Operating Leases	469	76	134	115	144
Unconditional Purchase Obligations	244	236	8	-	-
Total Contractual Cash Obligations	$ 4,167	$ 758	$ 776	$ 307	$ 2,326

The unconditional purchase obligations presented are composed principally of commitments for procurement of fixed assets and the purchase of raw materials.

In addition to fixed cash commitments, we may have future cash payment obligations under arrangements where we are contingently obligated if certain events occur or conditions are present. We have guaranteed $1 of short-term borrowings of a non-U.S. affiliate accounted for under the equity method of accounting. DCC has guaranteed portions of the borrowings of its affiliates that are accounted for under the equity method. DCC's aggregate exposure under several of the guarantees is $24. Under another guarantee, DCC's exposure for changes in interest rates resulting from specific events described in the financing arrangements would vary but should not exceed $49 and its exposure for certain of the other guaranteed obligations is limited to $60. The term of the affiliates' financing agreements is one year. DCC anticipates that the affiliates will renew these arrangements on substantially the same terms as the current agreements. If this occurs, it is likely that DCC would provide similar guarantees. We do not expect to make any cash payments relating to these potential obligations.

At December 31, 2001, we had contingent liability for stand-by letters of credit totaling $109 issued on our behalf by financial institutions. These letters of credit are used principally for the purpose of meeting various states' requirements in order to self-insure our workers compensation obligations. These stand-by letters of credit must be renewed each year. We accrue the estimated liability for workers compensation claims, including incurred but not reported claims. Accordingly, no significant impact on our financial condition would result if the letters of credit were drawn.

Contingencies – We are a party to various pending judicial and administrative proceedings arising in the ordinary course of business. These include, among others, proceedings based on product liability claims and alleged violations of environmental laws. We have reviewed our pending judicial and legal proceedings, including the probable outcomes, reasonably anticipated costs and expenses, availability and limits of our insurance coverage and our established reserves for uninsured liabilities. We do not believe that any liabilities that may result from these proceedings are reasonably likely to have a material adverse effect on our liquidity, financial condition or results of operations.

For some time, the vast majority of our asbestos-related claims were administered by the Center for Claims Resolution (CCR), which settled claims for its member companies on a shared settlement cost basis. In February 2001, the CCR was reorganized and discontinued negotiating shared settlements. The CCR continued to administer Dana's claims and provide some legal and claims adjusting support through July 31, 2001. Since February 2001, there has been no sharing of indemnity costs and we have independently controlled our legal strategy and settlements. As of August 1, 2001, our claims administration was moved to a new organization, PACE, which is a subsidiary of Peterson Consulting, Inc. We do not expect these changes to materially affect our handling of asbestos claims or the costs thereof. However, there has been a marked increase in the number of claims filed against Dana since the CCR was reorganized. We believe that claimants are naming all former members of the CCR in individual claims, since all members of the CCR had previously participated in claims filed against any single member. As a result, many of the new claimants are parties that have no direct association with products manufactured by Dana. Since the reorganization of the CCR, a greater number of claims against Dana have been dismissed and the average cost of settlement has declined.

With respect to contingent asbestos-related product liability, we had approximately 100,000 asbestos-related claims outstanding at December 31, 2001, including approximately 27,000 claims that were settled pending payment. We have agreements with our insurance carriers providing for the payment of a significant majority of the defense and indemnity costs for pending claims as well as claims which may be filed against us in the future. At December 31, 2001, we had accrued $102 for contingent asbestos-related product liability costs and recorded $89 as an asset for probable recoveries from insurers for asbestos-related product liability claims, compared to $78 accrued for such liabilities and $67 recorded as an asset at December 31, 2000.

At December 31, 2001, $11 was accrued for contingent non-asbestos product liability costs with no recovery anticipated from third parties; at the end of 2000, $21 was accrued for such liabilities and $2 recorded as an asset for probable recoveries.

We estimate contingent environmental liabilities based on the most probable method of remediation, current laws and regulations and existing technology. Estimates are made on an undiscounted basis and exclude the effects of inflation. If there is a range of equally probable remediation methods or outcomes, the lower end of the range is accrued. At December 31, 2000 and 2001, the amounts accrued for contingent environmental liabilities with no recovery expected from other parties were $40 and $52, respectively.

At December 31, 2001, the difference between our minimum and maximum estimates for contingent liabilities, while not considered material, was $13 for the non-asbestos product liability claims and $2 for the environmental liability claims, compared to $14 and $2, respectively, at the end of 2000.

As noted above, the majority of our asbestos-related claims were administered by the CCR through February 2001, at which time the CCR was reorganized and discontinued negotiating shared settlements. Certain former CCR members have defaulted on the payment of their shares of certain of the CCR-negotiated settlements. As a result, some of the settling parties are seeking payment of the unpaid shares from Dana and the other companies that were members of the CCR at the time of the settlements. We have been working with the CCR, other former CCR member companies, our insurers and the claimants to resolve these issues. At December 31, 2001, we estimated our contingent liability with respect to these matters to be approximately $44, of which

we expect $39 to be recoverable from our insurers and under surety bonds provided by the defaulting CCR members. Our financial statements include our obligation relative to these contingencies, which are separate from the asbestos-related product liabilities discussed above.

Restructuring

During 1999, we continued executing the restructuring and integration plans announced in 1998 following our acquisition of Echlin Inc., including the closing and downsizing of facilities begun in 1998. We incurred integration charges of $51 for relocating assets, training and relocating employees and other integration activities at the acquired operations. These costs were charged to expense as incurred.

During the fourth quarter of 1999, we announced plans to downsize and close additional operations in the U.S., South America and Europe and recorded restructuring and integration charges totaling $170. The charges included the costs of exiting businesses, asset impairments and termination benefits. The announced restructuring and integration plans included closing five facilities, downsizing three facilities and terminating 1,280 people. The largest component of these plans was the downsizing of our Reading, Pa., structures facility. In total, $229 was charged to income during 1999. This amount consisted of $181 charged to restructuring and integration, $57 charged to cost of sales and a $9 gain recorded in other income on the sale of our marine and outdoor power equipment business, Sierra International Inc. (Sierra).

During the third quarter of 2000, we announced plans to close our Reading structures facility and terminate approximately 690 people and recorded restructuring charges of $53. In the fourth quarter of 2000, we approved plans to close facilities in France, the United Kingdom and Argentina, resulting in $34 of charges and a workforce reduction of approximately 230 people. We also incurred integration expenses in 2000 related to consolidating our Engine Management warehouse operations and moving operations from closed facilities.

In the first quarter of 2001, we recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. We announced additional facility closings in the third quarter and accrued additional restructuring charges of $12, affecting earnings by $7.

In October 2001, we announced plans to reduce our global workforce by more than 15% and initiated a review of more than 30 facilities for possible consolidation or closure. These actions were undertaken to reduce capacity and outsource the manufacturing of non-core content and other non-core processes. As of December 31, 2001, we had announced the closing of 21 facilities and reduced our work force by more than 7% in connection with these plans. Charges related to our actions announced in October were $431 and affected net earnings for the quarter by $279. Charges for all restructuring activities during the quarter totaled $440, including $155 for employee terminations, $196 for asset impairments and $89 for exit and other costs. We charged cost of sales for $85 of these expenses, including $38 for inventory impairment. Net earnings in the fourth quarter of 2001 were impacted by $284.

For the year ended December 31, 2001, we recorded total expenses of $476, including $390 charged to restructuring expense and $86 charged to cost of sales, in connection with our restructuring actions. In 2002, we expect to reduce our workforce further and announce additional facility closures related to our October 2001 initiatives. We expect the cost of these actions, along with related activities that must be expensed as incurred, to reduce our 2002 net income by $166. Including these projected expenses, the total after-tax cost of our October 2001 initiatives is estimated at $445. We expect our actions to reduce our break-even point by eliminating excess capacity. The related savings for the year ending December 31, 2002 are projected to be at least $80 after tax.

The following table summarizes the restructuring charges and activity recorded in the last three years:

	Employee Termination Benefits	Long-Lived Asset Impairment	Exit Costs	Integration Expenses	Total
Balance at December 31, 1998	$116	$	$ 11	$	$ 127
Activity during the year					
Charges to expense	60	59	11	51	181
Cash payments	(85)		(9)	(51)	(145)
Write-off of assets		(59)			(59)
Balance at December 31, 1999	91	-	13	-	104
Activity during the year					
Charges to expense	62	8	27	76	173
Cash payments	(60)		(20)	(76)	(156)
Write-off of assets		(8)			(8)
Balance at December 31, 2000	93	-	20	-	113
Activity during the year					
Charges to expense	**171**	**166**	**53**		**390**
Cash payments	**(58)**		**(20)**		**(78)**
Write-off of assets		**(166)**			**(166)**
Balance at December 31, 2001	**$206**	**$ -**	**$ 53**	**$ -**	**$ 259**

Dollars in millions

Employee terminations relating to the plans were as follows:

	1999	2000	2001
Total estimated	1,280	1,020	**7,690**
Less terminated:			
1999	(595)		
2000	(615)	(765)	
2001	(30)	(254)	**(3,571)**
Balance at December 31, 2001	**40**	**1**	**4,119**

At December 31, 2001, $259 of restructuring charges remained in accrued liabilities. This balance was comprised of $206 for the reduction of approximately 4,200 employees to be completed in 2002 and $53 for lease terminations and other exit costs. The estimated annual cash expenditures will be approximately $120 in 2002, $38 in 2003 and $101 thereafter. Additional cash requirements will arise in 2002 as the remaining facility closures and work force reductions under the October 2001 plan are implemented. We currently expect the total cash expenditures in 2002 relative to the October 2001 initiatives to approximate $300. Our liquidity and cash flows, while projected to be more than adequate to satisfy our obligations related to our restructuring plans, will be adversely impacted in 2002 by these expenditures.

Critical Accounting Policies

The following discussion of accounting policies is intended to supplement the Summary of Significant Accounting Policies presented as Note 1 to our 2001 financial statements. These policies were selected because they are broadly applicable within our operating units. The expenses and accrued liabilities or allowances related to certain of these policies are initially based on our best estimates at the time of original entry in our accounting records. Adjustments are recorded when our actual experience differs from the expected experience underlying the estimates. These adjustments could be material if our experience were to change significantly in a short period of time. We make frequent comparisons of actual experience and expected experience in order to mitigate the likelihood of material adjustments.

Goodwill and Impairment of Long-Lived Assets – We perform impairment analyses of our recorded goodwill and long-lived assets whenever events and circumstances indicate that they may be impaired. When the undiscounted cash flows, without interest or tax charges, are less than the carrying value of the assets being reviewed for impairment, the assets are written down to fair market value. During 2001, we recorded goodwill and long-lived asset impairment provisions of $166, which largely resulted from the downturn in our markets and the resulting restructuring of our operations.

The adoption of SFAS 142, Goodwill and Other Intangible Assets (SFAS 142) on January 1, 2002, will change our methodology for assessing goodwill impairments. We believe that the initial application of this statement is likely to result in the impairment of goodwill due to the differences in the methods of calculating impairment. We have substantially completed the first step of the initial impairment test required by SFAS 142 and identified $400 of goodwill that may be impaired based upon the new accounting requirements. We will complete the impairment testing required to determine the actual amounts of goodwill impaired in 2002.

Inventory – Inventories are valued at the lower of cost or market. Cost is generally determined on the last-in, first-out basis for U.S. inventories and on the first-in, first-out or average cost basis for non-U.S. inventories. Where appropriate, standard cost systems are utilized for purposes of determining cost; the standards are adjusted as necessary to ensure they approximate actual costs. Estimates of lower of cost or market value of inventory are determined at the reporting unit level and are based upon the inventory at that location taken as a whole. These estimates are based upon current economic conditions, historical sales quantities and patterns and, in some cases, the specific risk of loss on specifically identified inventories.

Sales Returns and Allowances – Accruals for sales returns and allowances are provided at the time of shipment based upon past experience and are recorded as a reduction of sales. The estimated value of product that will be returned to inventory as a result of returns is recorded as a reduction of cost of sales and the accrued returns allowance. As new information becomes available the accruals are adjusted accordingly. Accrued liabilities at December 31, 2000 and 2001 were $67 and $66, respectively.

Warranty – Estimated costs related to product warranty are accrued at the time of sale and included in cost of sales. Estimated costs are based upon past warranty claims and sales history and adjusted as required to reflect actual costs incurred, as information becomes available. Warranty expense totaled $68, $90 and $92 in 1999, 2000 and 2001, respectively. Accrued liabilities for warranty expense at December 31, 2000 and 2001 was $127 and $138, respectively.

Pension and Postretirement Benefits Other Than Pensions – Annual net periodic expense and benefit liabilities under our defined plans are determined on an actuarial basis. Each September, we review the actual experience compared to the more significant assumptions used and make adjustments to the assumptions, if warranted. The healthcare trend rates are reviewed with the actuaries based upon the results of their review of claims experience. Discount rates are based upon an expected benefit payments duration analysis and the equivalent average yield rate for high-quality fixed-income investments. Pension benefits are funded through deposits with trustees and the expected long-term rate of return on fund assets is based upon actual historical returns modified for known changes in the market and any expected change in investment policy. Postretirement benefits are not funded and our policy is to pay these benefits as they become due.

Certain accounting guidance, including the guidance applicable to pensions, does not require immediate recognition of the effects of a deviation between actual and assumed experience or the revision of an estimate. This approach allows the favorable and unfavorable effects that fall within an acceptable range to be netted. Although this netting occurs outside the basic financial statements, disclosure of the net amount is disclosed as an unrecognized gain or loss in the footnotes to our financial statements. The actuarial loss related to our 2001 return on pension plan assets was offset, in part, by the unamortized portion of gains experienced in prior years. A portion of the unrecognized loss of $229 will be amortized into earnings in 2002. The effect on years beyond 2002 will depend in large part on the actual experience of the plans in 2002.

Other Loss Reserves – We have numerous other loss exposures, such as environmental claims, product liability, litigation, recoverability of deferred income tax benefits, accounts receivable and loan and lease loss reserves. Establishing loss reserves for these matters requires the use of estimates and judgment in regards to risk exposure and ultimate liability. We estimate losses under the programs using consistent and appropriate methods; however, changes to our assumptions could materially affect our recorded liabilities for loss. Where available we utilize published credit ratings for our debtors to assist us in determining the amount of required reserves.

Results of Operations (2001 versus 2000)

Our worldwide sales decreased $2,046 in 2001 to $10,271, a 17% decline from the $12,317 recorded in 2000. The decline included $113 related to the effect of divestitures, net of acquisitions, and $232 of adverse effects of currency fluctuations. Excluding these effects, worldwide sales decreased $1,701 or 14%. Our worldwide experience was largely based on our volume in the U.S., where 2001 sales of $6,863 represented a decline of $1,689 or 20% versus the prior year. Excluding the net effect of acquisitions and divestitures, U.S. sales declined $1,538 or 18%.

Overall sales outside the U.S. fared better, slipping $357 or 9% compared to last year. Nearly two-thirds of the decline resulted from the strengthening of the U.S. dollar relative to foreign currencies since last year. The currencies accounting for the largest components of the approximately $232 adverse impact were the Brazilian real ($87), the euro ($44), the Canadian dollar ($30), the Australian dollar ($24), and the British pound ($21). Excluding the adverse effects of currency fluctuations and acquisitions and divestitures, sales decreased $89 or 2%. The net decline related to acquisitions and divestitures was $36.

Sales by region for the year were as follows:

	2000	**2001**	% Change	% Change Excluding Acquisitions & Divestitures
North America	$9,449	**$7,684**	(19)	(17)
Europe	1,947	**1,704**	(12)	(11)
South America	563	**553**	(2)	(15)
Asia Pacific	358	**330**	(8)	(9)

Sales in North America decreased $1,765 or 19% for the period. Excluding the effect of divestitures, the decline was $1,614 or 17%. As noted above, the relative weakness of the Canadian dollar accounted for $30 of the reduction in sales. European sales were down 9% in local currency but conversion to U.S. dollars pared another $69 for a total decline of $243 or 12%. Sales lost through divestitures exceeded the amount added through acquisitions by $39. South American sales improved 16% in local currencies and net acquisitions added $73, but sales were down $10 or 2% after absorbing $100 of adverse currency effects. Sales in Asia Pacific were down $28 as $35 of adverse currency impact was partially offset by local growth of $3 and a $4 net effect of acquisitions and divestitures.

Our Strategic Business Units (SBUs) – Automotive Systems Group (ASG), Automotive Aftermarket Group (AAG), Engine and Fluid Management Group (EFMG), Commercial Vehicle Systems (CVS), Off-Highway Systems Group (OHSG) and Dana Credit Corporation (DCC) – represent our business segments. We realigned certain businesses within our SBU structure in 2001. The most significant change was consolidating our Engine Systems and Fluid Systems Groups into the newly created EFMG. Our segment information has been restated to reflect the changes made to the SBU alignment in 2001.

Sales by SBU for 2000 and 2001 are presented in the following table. DCC did not record sales in either year. The "Other" category in the table represents facilities that have been closed or sold and operations not assigned to the SBUs.

	2000	**2001**	% Change	% Change Excluding Acquisitions & Divestitures
ASG	$4,522	**$3,717**	(18)	(20)
AAG	2,768	**2,538**	(8)	(7)
EFMG	2,400	**2,137**	(11)	(10)
CVS	1,598	**1,118**	(30)	(27)
OHSG	786	**621**	(21)	(20)
Other	243	**140**	(42)	(32)

ASG incurred a sales decline in 2001 of $805 or 18% when compared to 2000. The North American region experienced $742 of this shortfall. The decline in production volume which began in the second half of 2000 continued for North American light vehicle and heavy truck manufacturers in 2001, with light vehicle production dropping to 15.5 million units from 17.2 million units in 2000. Sales in both markets were generally flat in the first quarter of 2001 when compared to the fourth quarter of 2000, but demand was sporadic and margins were adversely affected by the high volume of production shift cancellations by our OE customers. The production schedules improved in the second quarter of 2001 in terms of volume but still displayed some of the irregularities of the first quarter. In the third quarter, the number of production shifts cancelled by our OE customers was nearly identical to what we experienced in the first quarter of 2001, as our customers countered excess dealer inventories with incentives and reduced production. Record incentives late in the year were effective in reducing the overall dealer inventories of our customers to a 15-year low, but production levels declined further. In addition, Ford and Chrysler vehicles in general and certain models with high Dana content in particular declined more than the light vehicle market overall in 2001. The decline in heavy truck production which began in the middle of 2000 continued through the end of 2001. The North American heavy truck market saw more than a 40% reduction in volume when compared to 2000. Outside North America, the regions reported an aggregate sales decrease of $63. Sales in Europe were down $49 as an adverse currency impact of $19 and $42 of organic declines (organic decline being the residual change after excluding the effects of acquisitions, divestitures and currency changes) more than offset acquisition benefits of $12. Sales in South America were $10 below the same period in the prior year, as the $14 of organic decline and $45 of adverse effects of weaker currencies more than offset the net acquisition impact of $49. Sales in Asia Pacific were flat with currency declines of $29 offsetting acquisition impact of $21 and modest organic growth.

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Dollars in millions

AAG also ended the year with a decline in sales. Most of the decline was in North America, which represents more than three-fourths of its global market, where volumes were down $187 or 8%. While there was a reported improvement in domestic aftermarket retail sales in 2001, this did not significantly improve our sales, as retailers generally met the higher demand with existing inventory. Divestitures also contributed $44 to the decline. Sales in Europe declined $25 due to $8 in adverse currency effects and a $17 decline in organic sales. Sales in South America were down $2 as a $23 currency decrease was partially offset by local growth of $15 and $6 of acquisition impact. Divestitures accounted for $13 of the $16 sales decline recorded in Asia Pacific.

EFMG experienced a sales decrease of $263 or 11% for 2001 versus last year. Sales for the final quarter of 2001 held even with the third quarter, which had shown a 14% decline from the second quarter of the year. The Fluid Systems business in this group benefited from having content on models that avoided the severe OE production cuts that have affected most of the other SBUs. Sales in North America were down $231 or 14% as the automotive, commercial vehicle and aftermarket sectors all trailed prior year volumes. Sales in Europe were down $31 or 5% with adverse currency effects of $25 playing a significant role. Sales were generally flat in South America as adverse currency effects of $22 were nearly offset by organic growth of $15 and a net acquisition impact of $5.

CVS experienced a year-on-year decline in sales in 2001 of $480 or 30% for the reasons cited relative to the heavy truck market in the discussion of ASG above. The decline in CVS sales included $60 of divestiture impact, $56 of which was in North America. Excluding this effect, sales in North America for the period were 26% below those of 2000. Aggregate sales for the other three regions declined $33 or 36% in a year-on-year comparison with $7 due to divestitures and adverse currency effects.

OHSG finished the year down $165 or 21% in sales versus 2000, with $9 resulting from divestitures, all in North America. Currency impact accounted for $19 of the decline, and organic sales fell $92 in North America, where overall markets were weak, and $49 in Europe, where the construction market softened and the agricultural market remained weak.

Sales in Other decreased $104 or 43% compared to 2000, reflecting the sale of most of the Warner Electric businesses at the end of February 2000.

Revenue from lease financing decreased $28 or 20% in 2001 as DCC realized a decline of $24 on reduced leasing activity, including a $10 decline in income realized on the sale of leased assets, and a $4 decline in its interest income.

In 2001, other income included a $50 gain on the divestitures of our Chelsea power take-off business and of our Glacier industrial bearings businesses. Also included in 2001 was a $35 loss on the sales of our Mr. Gasket subsidiary, our Marion, Ohio forging facility and the assets of our Dallas, Texas and Washington, Missouri Engine and Fluid Management Group operations. Included in the total for 2000 was $179 of gains on the divestitures of the Gresen hydraulics business, certain portions of our constant velocity joint business, most of the global Warner Electric businesses and the Commercial Vehicle Cab Systems Group. In addition, a $10 net charge related to final settlement of the Midland Grau divestiture was recorded in the third quarter of 2000, bringing to $169 the amount of net non-recurring income included in other income.

Gross margin for 2001 was 9.8% versus 13.9% in 2000. Margins in all our SBUs were severely affected as the decline in volume reduced our ability to absorb fixed operating expenses. Cost of sales included charges of $86 in 2001 and $17 in 2000 in connection with our restructuring activities.

Selling, general and administrative (SG&A) expenses decreased $147 during 2001 compared to last year. The net effect of divestitures accounted for $21 of this change, and currency exchange caused another $20 of the decline. The largest changes occurred in Europe, where currency fluctuations caused $7 of the $33 non-divestiture related decrease. Most of the remaining decrease was from the North American region, where our operating units scaled their capacity in reaction to severely reduced customer production schedules in the light truck and commercial vehicle markets.

Operating margin (our gross margin reduced by SG&A expenses) was 0.2% in 2001 compared to 4.8% in 2000 for the above reasons.

Interest expense was $14 lower as a result of lower debt and reduced rates.

Both the effective tax rates and the comparison of the effective tax rates for 2001 and 2000 are impacted by the substantial pre-tax loss reported in 2001. Because of the pre-tax loss in 2001, certain permanent differences between financial accounting rules and tax regulations that increase the tax rate when we report pre-tax income serve to reduce the effective rate.

Equity in earnings of affiliates in 2001 was $22 lower than in 2000. The $39 reduction in equity earnings in Mexico and the $11 decrease in earnings from DCC's equity investments adversely affected this line item. Partially offsetting these items were the earnings related to our investment in GETRAG and the loss reduction that occurred when we acquired the remaining interest in Danaven and began consolidating its results.

We reported a $298 net loss in 2001 versus net income of $334 reported in 2000. Comparisons are made difficult by the unusual charges and one-time gains recorded in both years. In 2001, we recorded after-tax charges of $313 in connection with our restructuring efforts and $10 of gains on divestitures. In 2000, we recorded $43 of restructuring and other unusual charges net of the gains recorded on several divestitures. Excluding these items, earnings would have been $5 in 2001 and $377 in 2000.

Unusual items in 2001 included net after-tax charges of $41 in ASG, $85 in AAG, $108 in EFMG, $12 in CVS and $43 in OHSG; a net charge of $14 was reflected in the Other category. In 2000, unusual charges were $47 in ASG, $39 in AAG and $32 in EFMG, while one-time gains were $27 in CVS, $16 in OHSG and $32 in Other.

Results of Operations (2000 versus 1999)

Our worldwide sales were $12,317 in 2000, a 6% or $842 decline from the $13,159 recorded in 1999. The divestitures completed in the first quarter of 2000 were a significant factor in the decline. Net of the effect of acquisitions, these divestitures accounted for a $410 reduction in sales for the year. Currency fluctuations accounted for an additional $279 decline in sales.

U.S. sales were $8,552, a 9% or $861 decline from the 1999 level, with divestitures net of acquisitions accounting for $408 of the decrease. Exports from the U.S. declined from $939 in 1999 to $832 in 2000.

Sales by region for 1999 and 2000 are presented in the following table.

	1999	2000	% Change	% Change Excluding Acquisitions & Divestitures
North America	$10,308	$9,449	(8)	(4)
Europe	2,051	1,947	(5)	(8)
South America	549	563	3	14
Asia Pacific	251	358	43	43

In 2000, overall sales outside the United States increased $20 despite the $279 adverse impact of further strengthening of the U.S. dollar. Sales for our operations in Canada and Mexico were flat after considering a $4 benefit from currency changes; acquisitions and divestitures were not a factor in those countries. Sales in Europe benefited from a net $65 increase related to acquisitions net of divestitures and organic growth added another $79. These positive effects were more than offset by $247 of adverse currency impact as the U.S. dollar equivalent of sales denominated in euros and pounds declined $207 and $32, respectively, due to weakness in those currencies. In South America, where currency weakness resulted in an $11 sales decline, the effect of divestitures net of acquisitions was a $66 drop in sales. Continuing recovery in the region was evident however in the $90 of organic growth. Organic growth in Asia Pacific sales totaled $133, more than offsetting the $25 of adverse currency effects. Sales due to acquisitions equaled those lost by way of divestitures.

Sales by SBU for 1999 and 2000 are presented in the following table. DCC did not record sales in either year.

	1999	2000	% Change	% Change Excluding Acquisitions & Divestitures
ASG	$4,403	$4,522	3	-
AAG	2,955	2,768	(6)	(5)
EFMG	2,495	2,400	(4)	(4)
CVS	1,904	1,598	(16)	(11)
OHSG	870	786	(10)	1
Other	532	243	(54)	(1)

ASG sales in North America decreased $103 or 3% in 2000 as a result of light vehicle and heavy truck OEM production cuts intended to reduce dealer inventory. Light vehicle production in North America started the year near all-time record levels but declined in the second half of 2000 to end at 17.2 million units. SUVs and light trucks displayed a similar trend line while maintaining their share of overall production. While sales appeared flat in South America, internal growth in Brazil across all the ASG product lines was slightly more than the combined negative effect of currency ($8) and net divestitures ($55). Sales in Europe benefited from our acquisition of the GKN driveshaft business early in the year, which added sales of $142, but gave back $75 to currency effects. ASG's internal growth of nearly $40 resulted from improvement in both driveshaft and axle sales. The acquisition of the automotive axle manufacturing and stamping business of Invensys plc added $34 of sales in Asia Pacific, more than offsetting the $22 adverse currency effect and complementing the $141 of organic growth resulting mainly from new modular systems business.

AAG ended 2000 with a $187 decrease in sales, of which nearly $44 related to the late 1999 divestiture of Sierra. Inefficiencies in consolidating parts of its warehousing operations and softness in the North American automotive aftermarket were key factors in the $85 sales decline at AAG's operating units in this region. Sales in Europe were marginally higher than in 1999 but the region lost $40 to currency movements. Modest sales improvement in South America was offset by decreases in Asia Pacific. There were no acquisitions or divestitures in either region and currency effects were minimal.

Sales in EFMG declined $95 in 2000 as North America lost $42 in its ongoing operations and another $6 due to a divestiture. Operations in Europe incurred currency losses of $78 to account for their $52 sales decline after $27 of organic growth. Sales in South America were up slightly due to modest internal growth.

CVS continued its success of 1999 during the first half of 2000, growing sales 4% after excluding the effects of two divestitures in the first quarter of 2000. However, early in the second half of the year, heavy truck manufacturers sharply reduced production in response to falling demand and excess inventory. CVS sales fell by one-third in the second half and finished the full year $306 below 1999 results. The divestiture impact for the full year was $106 and currency losses pared another $9, leaving $190 of organic sales reductions.

OHSG sales fell $84 overall in 2000 as the divestiture of the Gresen Hydraulics business in January 2000 resulted in a $99 decline in sales and adverse currency impacts accounted for another $44. Organic growth was flat. North American sales declined $96 with $86 attributable to the Gresen divestiture. In Europe, sales were $14 higher as much of the $58 added through acquisitions was offset by a $44 adverse effect from weakness in the euro. South American sales were down $3 as $8 of organic growth was negated by $11 lost through the Gresen divestiture.

Revenue from lease financing increased $32 or 29% in 2000 on a $15 increase in direct finance lease income and a $17 increase in interest income and income from property rentals recognized by DCC.

Other income increased $148 in 2000, primarily the result of a $156 increase in gains on divestitures that was partially offset by a $9 decrease in interest income exclusive of the DCC interest income which is included in lease financing revenue.

Gross margin in 2000 was 13.9%, well below the 16.7% reported in 1999. Results in all regions reflected lower gross margins, but the declines were most severe in North America and Asia Pacific. In North America, ASG and CVS were both affected by producing above optimum capacity in the first half of the year. In the second half, these units were impacted by erratic demand from their major customers and generally fell well below efficient production levels. AAG margins were impacted by softness in the automotive aftermarket. In Asia Pacific, ASG margins were affected by startup costs related to our new modular business in Australia. We incurred $17 in 2000 in connection with discontinuing certain lines of business and $57 in 1999 related to impairment and other rationalization adjustments and charged these amounts to cost of sales. Gross margins excluding these items would have been 14.1% in 2000 and 17.1% in 1999.

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Selling, general and administrative expenses (SG&A) decreased $60 in 2000, slightly exceeding the $56 attributed to the net effect of divestitures and acquisitions. DCC increased its general and administrative expenses by $9 with higher depreciation on leased assets and expenses related to a real estate investment being the largest components. SG&A as a percentage of sales was 9.2% in 2000 and 9.1% in 1999.

Interest expense rose $44 or nearly 16% in 2000 as overall debt increased by almost 11%. Average short-term borrowings rose $452 to $1,614 and the average interest rate increased from 5.4% to 6.6%.

Our effective tax rate was 36.8% in 2000. We continue to benefit from tax credits generated by our leasing operations and from relatively low state and local tax rates.

Minority interest was unchanged in 2000. The minority interest in the gain recognized by Albarus S.A. on the sale of its interest in one of its affiliates was generally offset by the absence of the minority interest's participation in operating earnings.

We recorded $54 of equity in the earnings of our affiliates in 2000. Increased earnings at our affiliate in Mexico and expansion of the portion of leasing revenue earned on DCC's equity investments more than offset the $27 loss recorded in the fourth quarter at our 49%-owned affiliate in Venezuela.

Net income was $334 in 2000 versus $513 reported in 1999. Comparisons are made difficult by restructuring and other unusual items recorded in both years. In 1999 we recorded $165 of such charges net of the gain recorded in the AAG on the sale of Sierra. In 2000, we recorded $43 of restructuring and other unusual charges net of the gains recorded on several divestitures. Excluding these items, earnings would have been $377 in 2000 and $678 in 1999.

Unusual items in 2000 included net charges of $47 in ASG, $39 in AAG, $32 in EFMG and net credits of $27 in CVS and $16 in OHSG; a net gain of $32 was reflected in the Other category. In 1999, unusual charges were $59 in ASG, $40 in AAG, $3 in CVS, $34 in EFMG, $1 in OHSG and $28 in Other.

Market Trends

The light vehicle market in North America is difficult to project as we pass the midpoint in the first quarter of 2002. One uncertainty is the impact that the record incentives offered in the fourth quarter of 2001 will have on future retail sales volume. Absent broader economic recovery, demand may weaken in the first half of 2002. We remain conservative in projecting light vehicle production of 14.5 million units in North America in 2002. No improvement is anticipated in the light vehicular markets outside North America in 2002.

The automotive aftermarket continues to demonstrate strength at the retail level. As our customers resolve their consolidation and inventory reduction issues, which adversely affected our AAG sales inthe second half of 2001, we expect increased demand for our products in 2002. Combined with the effect of price increases implemented in recent months and others planned for this year, we expect the increase in demand to result in modest growth in our automotive aftermarket business during 2002.

Inventory levels in the heavy truck market declined by nearly 50% in 2001, while production for the year was down more than 40%. The inventory reduction was a prerequisite for the leveling out expected in this market. Although preliminary orders for heavy trucks reported for January 2002 were at their highest level in nearly two years, they represent relatively modest improvement on an historic scale. The new EPA standards governing diesel engine emissions that become effective in October 2002 could impact the timing of 2002 production if customers rush to buy units in advance of the new standards. This possibility may make it difficult for us to interpret the monthly volume of orders and production, but we expect North American heavy truck volume to approximate 130,000 units for the year.

We expect to benefit from net new business estimated at $405 for 2002 and approximately $6,000 through 2006, based on our review of the production projections of our OE customers. New business wins in 2001 included innovative products for Ford and General Motors, as well as for non-U.S.-based manufacturers, including BMW, Isuzu, Nissan, Toyota and Volkswagen. In the heavy truck market, key wins in 2001 included business with International and PACCAR.

Forward-Looking Information

Forward-looking statements in this report are indicated by words such as "anticipates," "expects," "believes," "intends," "plans," "estimates," "projects" and similar expressions. These statements represent our expectations based on current information and assumptions. Forward-looking statements are inherently subject to risks and uncertainties. Our actual results could differ materially from those which are anticipated or projected due to a number of factors, including national and international economic conditions (including additional adverse effects from terrorism or hostilities); the strength of the euro and other currencies relative to the U.S. dollar; the cyclical nature of the global vehicular industry; the performance of the global aftermarket sector; changes in business relationships with our major customers and in the timing, size and continuation of our customers' programs; the ability of our customers and suppliers to achieve their projected sales and production levels; competitive pressures on our sales and pricing; increases in production or material costs that cannot be recouped in product pricing; our ability to complete the sale of DCC's businesses and other divestitures as contemplated; and the success of our restructuring, cost reduction and cash management programs and of our long-term transformation strategy for the company.

Additional Information – Statement of Income

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	Year Ended December 31		
	1999	2000	**2001**
Net sales	$13,159	$12,317	**$10,271**
Other income	58	190	**43**
	13,217	12,507	**10,314**
Costs and expenses			
Cost of sales	11,016	10,662	**9,335**
Selling, general and administrative expenses	1,074	1,007	**895**
Restructuring and integration charges	181	173	**390**
Interest expense	208	218	**205**
	12,479	12,060	**10,825**
Income (loss) before income taxes	738	447	**(511)**
Estimated taxes on income	273	168	**(167)**
Income (loss) before minority interest and equity in earnings of affiliates	465	279	**(344)**
Minority interest in net income of consolidated subsidiaries	(13)	(13)	**(8)**
Equity in earnings of affiliates	61	68	**54**
Net income (loss)	$ 513	$ 334	**$ (298)**

Additional Information – Balance Sheet

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	December 31	
	2000	**2001**
Assets		
Current assets		
Cash and marketable securities	$ 149	**$ 182**
Accounts receivable		
Trade, less allowance for doubtful accounts of		
$42 - 2000 and $45 - 2001	1,505	**1,371**
Other	318	**253**
Inventories	1,564	**1,299**
Other current assets	535	**518**
Total current assets	4,071	**3,623**
Investments and other assets		
Investments at equity	636	**628**
Goodwill	969	**841**
Other	212	**246**
Total investments and other assets	1,817	**1,715**
Deferred income tax benefits	209	**449**
Property, plant and equipment, net	3,069	**2,778**
Total assets	$9,166	**$8,565**
Liabilities and Shareholders' Equity		
Current liabilities		
Notes payable	$1,307	**$ 617**
Accounts payable	1,014	**1,042**
Accrued payroll and employee benefits	395	**315**
Other accrued liabilities	809	**826**
Taxes on income	165	**142**
Total current liabilities	3,690	**2,942**
Deferred employee benefits and other noncurrent liabilities	1,155	**1,400**
Long-term debt	1,574	**2,155**
Minority interest in consolidated subsidiaries	119	**110**
Shareholders' equity	2,628	**1,958**
Total liabilities and shareholders' equity	$9,166	**$8,565**

Additional Information – Statement of Cash Flows

In millions

Dana Corporation
(including Dana Credit Corporation on an equity basis)

	Year Ended December 31		
	1999	2000	**2001**
Net cash flows from operating activities	$ 464	$ 850	**$ 475**
Cash flows from investing activities:			
Purchases of property, plant and equipment	(547)	(434)	**(317)**
Acquisitions	(18)	(511)	**(21)**
Divestitures	36	571	**236**
Additions to investments and other assets	(26)	(1)	**(24)**
Other	29	16	**33**
Net cash flows - investing activities	(526)	(359)	**(93)**
Cash flows from financing activities:			
Net change in short-term debt	(555)	424	**(599)**
Issuance of long-term debt	1,017	9	**776**
Payments on long-term debt	(220)	(313)	**(370)**
Dividends paid	(206)	(187)	**(140)**
Shares repurchased	(100)	(381)	
Other		5	**(16)**
Net cash flows - financing activities	(64)	(443)	**(349)**
Net increase (decrease) in cash and cash equivalents	(126)	48	**33**
Cash and cash equivalents - beginning of year	227	101	**149**
Cash and cash equivalents - end of year	$ 101	$ 149	**$ 182**
Reconciliation of net income (loss) to net cash flows from operating activities:			
Net income (loss)	$ 513	$ 334	**$(298)**
Depreciation and amortization	429	427	**447**
Deferred income taxes	9	(60)	**(244)**
Minority interest	6	8	**4**
Asset impairment	62	27	**206**
Net change in receivables, inventory and payables	(568)	357	**366**
Other assets and accruals	107	(65)	**48**
Unremitted earnings of affiliates	(45)	(68)	**(17)**
Gains on divestitures	(5)	(106)	**(10)**
Other	(44)	(4)	**(27)**
Net cash flows from operating activities	$ 464	$ 850	**$ 475**

Additional Information

In millions except per share amounts

Shareholders' Investment

The following table shows the range of market prices of our common stock on the New York Stock Exchange and the cash dividends declared and paid for each quarter during 2000 and 2001. At December 31, 2001, the closing price of Dana common stock was $13.88.

	Stock Price						Cash Dividends Declared and Paid	
	2000			2001			2000	2001
Quarter Ended	High	Low	Close	High	Low	Close		
March 31	$ 33.25	$ 20.31	$ 28.19	**$ 20.40**	**$ 15.63**	**$ 17.18**	$ .31	**$ .31**
June 30	31.81	20.88	21.19	**23.50**	**16.25**	**23.34**	.31	**.31**
September 30	27.69	20.63	21.50	**26.90**	**13.07**	**15.60**	.31	**.31**
December 31	24.00	12.81	15.31	**15.73**	**10.25**	**13.88**	.31	**.01**

Unaudited Quarterly Financial Information

Quarter Ended	Net Sales	Gross Profit	Net Income (Loss)	Net Income (Loss) Per Share Basic	Net Income (Loss) Per Share Diluted
For the year ended December 31, 2000					
March 31	$ 3,468	$ 566	$ 245	$ 1.55	$ 1.54
June 30	3,296	518	144	.95	.95
September 30	2,865	384	29	.19	.19
December 31	2,688	250	(84)	(.57)	(.57)
For the year ended December 31, 2001					
March 31	**$ 2,731**	**$ 288**	**$ (27)**	**$ (0.18)**	**$ (0.18)**
June 30	**2,768**	**354**	**14**	**0.10**	**0.10**
September 30	**2,399**	**250**	**13**	**0.08**	**0.08**
December 31	**2,373**	**111**	**(298)**	**(2.01)**	**(2.01)**

In the first quarter of 2000, we recognized approximately $85 (53 cents per share) of non-recurring income representing gains on divestitures, net of $12 of integration expenses. In the second quarter, we recorded $10 (7 cents per share) of integration charges incurred in connection with consolidating our Engine Management warehouse operations. In the third quarter, we recorded a charge of $32 (21 cents per share) related to the closing of our Reading, Pa., structures facility.

In the fourth quarter of 2000, we recorded $86 million of unusual charges (58 cents per share), including restructuring expenses related to closing several facilities ($34), integration expenses incurred primarily in the Engine Management Division and in relocating operations of closed facilities ($21), equity losses related to our 49%-owned affiliate in Venezuela ($20) and costs associated with exiting several lines of business ($11).

In the first quarter of 2001, we recorded an after-tax loss of $12 on the sale of Mr. Gasket, a wholly owned subsidiary. We also recorded $22 of restructuring expense in connection with the announced closing of six facilities in the ASG and EFMG and workforce reductions at other facilities. These charges included $10 for employee termination benefits, $7 for asset impairment and $5 for other exit costs and impacted net earnings by $14. Total unusual charges for the quarter totaled $28 (19 cents per share).

In the second quarter of 2001, we divested our Marion, Ohio, forging facility and the assets of EFMG facilities in Dallas, Texas, and Washington, Mo. A net after-tax loss of $8 (5 cents per share) resulted from these transactions. Charges related to our ongoing efforts to downsize various operations adversely affected net income by $4 (3 cents per share) in the second quarter.

We completed the sale of our Chelsea power take-off business to Parker Hannifin Corporation in July. The sale of our Glacier industrial polymer bearings businesses to Goodrich Corporation was completed the following month. After-tax gains totaling $30 were recorded on these transactions. We announced additional facility closings in the third quarter. We accrued additional restructuring charges of $12 in connection with these announcements, which affected earnings by $7 net of tax benefits. Net nonrecurring income for the quarter was $21 (14 cents per share).

In October, we announced plans to reduce our global workforce by more than 15 percent and initiated a review of more than 30 facilities for possible consolidation or closure. During the fourth quarter, we announced the closing of 21 of these facilities and reduced our workforce by more than 7%. Charges for these and related actions totaled $440, including $155 for employee terminations, $196 for asset impairments and $189 for exit and other costs. Net earnings were impacted by $284 ($1.92 per share).

Eleven-Year History†

In millions except per share amounts

Financial Highlights

For the Years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	**2001**
Net Sales	$6,084	$6,655	$7,404	$8,843	$10,472	$10,979	$11,911	$12,464	$13,159	$12,317	**$10,271**
Net Income (Loss)	55	(318)	174	352	443	451	320	534	513	334	**(298)**
Net Income (Loss) per Common Share											
Basic	.41	(2.27)	1.18	2.29	2.81	2.83	1.97	3.24	3.10	2.20	**(2.01)**
Diluted	.41	(2.26)	1.17	2.28	2.80	2.81	1.94	3.20	3.08	2.18	**(2.01)**
Cash Dividends per Common Share	.80	.80	.80	.83	.90	.98	1.04	1.14	1.24	1.24	**.94**
Total Assets	5,371	5,584	5,895	6,701	7,814	8,522	9,511	10,138	11,123	11,236	**10,207**
Long-Term Debt	1,684	1,608	1,341	1,381	1,325	1,887	1,790	1,718	2,732	2,649	**3,008**

Dana Corporation

(including Dana Credit Corporation on an equity basis)

For the Years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	**2001**
Summary of Operations											
NET SALES	$6,071	$6,646	$7,401	$8,836	$10,472	$10,979	$11,911	$12,464	$13,159	$12,317	**$10,271**
Cost of Sales	5,074	5,569	6,066	7,202	8,702	9,183	10,099	10,485	11,016	10,662	**9,335**
Income (loss) before Income Taxes	37	142	362	558	723	669	569	697	738	447	**(511)**
Tax Rate	60.7%	39.8%	36.9%	38.0%	35.8%	33.9%	50.3%	39.8%	37.0%	37.7%	**32.7%**
NET INCOME (LOSS) *	55	120	223	349	443	451	320	534	513	334	**(298)**
Percentage Pre-tax Profit on Sales	.6%	2.1%	4.9%	6.3%	6.9%	6.1%	4.8%	5.6%	5.6%	3.6%	**(5.0)%**
Capital Expenditures	204	159	218	352	442	397	518	552	547	434	**317**
Financial Position											
Current Assets	$2,107	$2,282	$2,518	$2,902	$3,345	$3,591	$3,886	$4,174	$4,637	$4,071	**$3,623**
Current Liabilities	1,315	1,363	1,590	2,036	2,819	2,792	3,231	3,630	3,320	3,690	**2,942**
Current Ratio	1.6-1	1.7-1	1.6-1	1.4-1	1.2-1	1.3-1	1.2-1	1.1-1	1.4 - 1	1.1 - 1	**1.2 - 1**
Working Capital	792	919	928	866	526	799	655	544	1,317	381	**681**
Long-Term Debt	929	828	630	531	544	830	1,036	1,147	1,862	1,574	**2,155**
Total Shareholders' Equity	1,638	1,401	1,515	1,739	2,063	2,435	2,602	2,940	2,957	2,628	**1,958**
Return on Average Shareholders' Equity	3.3%	7.9%	15.2%	21.5%	23.3%	20.1%	12.7%	19.3%	17.4%	12.0%	**(13.0)%**
Common Stock Data											
Average Number of Shares Outstanding–Basic	134	140	147	154	157	159	163	165	165	152	**148**
Book Value per Share	$12.19	$9.71	$9.88	$11.29	$12.97	$15.12	$15.89	$17.74	$18.12	$17.77	**$13.18**
Earnings (loss) per Share *											
Basic	.41	.86	1.51	2.29	2.81	2.83	1.97	3.24	3.10	2.20	**(2.01)**
Diluted	.41	.86	1.51	2.28	2.80	2.81	1.94	3.20	3.08	2.18	**(2.01)**
Stock Price High	18.25	24.13	30.13	30.69	32.63	35.50	54.38	61.50	54.06	33.25	**26.90**
Low	12.31	13.38	22.00	19.63	21.38	27.25	30.63	31.31	26.00	12.81	**10.25**
Close	13.88	23.50	29.94	23.50	29.25	32.63	47.50	40.88	29.94	15.31	**13.88**
P/E Ratios High	45	28	21	13	12	13	28	19	18	15	**
Low	30	16	15	9	8	10	16	10	8	6	**

† The information for years prior to 1998 has been restated to reflect the Echlin merger, which has been accounted for as a pooling of interests. Echlin amounts included for years prior to 1995 are for fiscal years ended August 31.

* Excludes one-time SFAS No. 106 charge of $438 ($3.12 per share) in 1992, SFAS No. 112 charge of $49 (33 cents per share) in 1993 and SFAS No. 109 increase in net income of $3 in 1994.

** Not meaningful in 2001 due to the reported net loss.

Investor Information

Stock Exchanges
Dana common stock (ticker symbol: DCN) is listed on the New York Stock Exchange and the Pacific Exchange.

www.dana.com
Dana's website provides a host of information about the company, including:
- An order form to obtain current financial and shareholder-related information;
- Stock price information;
- E-mail access to Dana;
- Recent press releases;
- Dana's products, services, and markets;
- Dana's global operations; and
- Dana's history, philosophy, and policies; *Transformation 2005* strategy; and recent speeches and presentations by Dana people.

Dial-for-Dana
Dial (800) 537-8823 anywhere in the U.S. and Canada. In Ohio, call (800) 472-8810. Through this 24-hour, toll-free, voice-interactive phone service, callers may:
- Request annual and quarterly shareholder reports, as well as Forms 10-K and 10-Q;
- Learn whom to contact for answers to specific shareholder-related questions, and participant inquiries about the Dana Employees' Stock Purchase Plan;
- Listen to recordings of quarterly conference calls with analysts; and
- Submit requests for a Dana representative to respond directly to the caller.

Dana Information and Inquiries
Requests for information may be addressed to Greg Smietanski, Director, Investor Relations, Dana Corporation, P.O. Box 1000, Toledo, Ohio 43697.

Shareholder Services
Mellon Investor Services is the company's principal transfer agent and registrar. Please contact Mellon directly with all inquiries and requests to:
- Transfer stock;
- Change a name or address;
- Replace lost stock certificates or dividend checks;
- Consolidate duplicate accounts;
- Obtain statements of holdings;
- Obtain copies of Form 1099-DIV; and
- Obtain information about dividend reinvestment or direct deposit of dividends.

Mellon Investor Services LLC
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History

Introduction

People familiar with Dana know we're not the kind of company to sit by the fire and trade feel-good stories when there's work to be done (and there's always work to be done). So maybe it'll strike them as odd that we're celebrating our heritage. But we're doing more than that. This bool is not simply a monument to the Dana family's remarkable history. It's a concrete reminder that our history, our collective experience, is something we can draw strength and wisdom from, something that can help us in the future.

We date our history from 1904, the year Clarence Spicer set up his universal joint manufacturin company in the corner of the Potter Printing Press. But our heritage is much broader and richer than that one company. It embraces all the history of all the companies that have joined the Dar family since then. Those companies are not simply members of the Dana family -- they are the family. And that family is still growing, and moving forward.

And the great distance we've already come is not the exclusive accomplishment of Clarence Spicer, or even of our other founding fathers. Their imagination and determination were essenti but Dana's progress over the years has come from dedicated teamwork as much as individual initiative. If I may use the automobile as an analogy for the Dana journey, our founding fathers built the engine and cranked the starting handle, but it's Dana people who have been driving ev since, and they've brought us a tremendous way.

By that, I mean all Dana people, not just the leaders. We've had some pretty powerful character behind the wheel over the years, but it's the unique character of our company that's given space and opportunity to those people, not the other way round. And that unique character comes fron the Dana people who have contributed more than their time and energy and skill; people who have given their hearts and minds too. Dana people have enabled our company to prosper, and so this book is a tribute to their achievement.

As a multi-billion-dollar global corporation, it's easy to underestimate just what an extraordinary accomplishment Dana is. But consider this: between 1900 and 1920, over 2,000 separate, independent companies built one or more cars. Each of those companies had hopes, plans and ambitions. Each believed it had something unique to offer. Yet today, only 23 fairly large car manufacturers exist. To survive is an achievement. To flourish is remarkable.

Why did Dana succeed while others failed? I believe it's because most of those early companie were unprepared for change, or lacked the heart needed for continued leadership. They design and developed a new product, then sold it, and for a while they prospered. But when they pause a moment to admire their work, the relentless tide of technology swept past them, and they foundered.

I've looked at the patent records held by some of the most influential figures in our history, and they tell the story; Clarence Spicer had some 40 patents issued to him. Albert Weatherhead hac 75. A.P. Warner 100. Alexander Brown an incredible 300. They knew it wasn't enough to rely or single product. They knew they had to keep moving. They knew they had to keep ahead.

We can learn from this, and that's another reason for this book, maybe the most important. Hist

is the reservoir for one of Dana's greatest strengths -- its experience. Because we believe in an invest in our people, they like to stay with us. As a result, Dana has a richer reservoir of experience than any company I know. That experience creates wisdom and judgment. It provide for caution in the good times, and optimism in the bad. It is extraordinarily valuable. After all, nothing in this world stands still for long. Everything changes.

Experience prepares us for change. It teaches us to keep moving forward, looking for opportunities, wary of pitfalls. Change can sometimes be intimidating, because it's uncertain -- b it's also vital to our continued growth. After all, if it wasn't for change, we'd still be making universal joints in the corner of a printing plant, not enjoying our stature as a Fortune-100, multi-product, global corporation.

Change has been good to us. Change has made us strong.

- Introduction
- Section 1: Laying the Foundation
- Section 2: Coming of Age
- Section 3: Moving Into the Future

Top of Page

People Finding A Better Way®

History

SECTION 1: Laying the Foundation

SCENE SETTER

We're at the brink of a new millennium, and looking into the future can be disorienting. So much has changed in just this century; what changes will the future bring? In the last few decades alone, advances in information technology have revolutionized work, just as eighty years ago Henry Ford revolutionized manufacturing. These advances have created a global economy, whi has transformed the way that we look at our markets and loosened the once-rigid hierarchies of business and social convention.

But if you think we're in the middle of extraordinary and unprecedented change now, think back the cusp of the twentieth century, when the internal combustion engine was just one of the man ways that the accepted practices of life were being turned upside down.

Communication was being transformed by improvements to the telephone and the wireless. Sound could be captured by the phonograph, and memories saved by Kodak's first hand camer The first public motion picture was shown in Paris in 1895, the same year as the first safety razc was produced, revolutionizing the world's grooming habits.

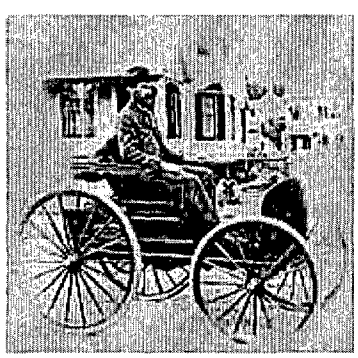
And that was not all.

A.P. Warner, founder of Warner Electrics and one of the founders of Dana, liked to tell the story a lecture he once attended. The lecturer, a learned Harvard mathematician, proved conclusively on his blackboard, through a combination of diagrams and equations, that flight in a heavier-tha air machine was a mathematical impossibility.

Shortly afterwards, Warner became only the sixth American to fly such a machine. The unimaginable can become the everyday, almost overnight, and we have to be ready for it, as ou founders were.

1st vignette

The motor car and power transmission



In 1902, at Cornell University's Sibley College, a young stude of Mechanical Engineering named Clarence Winfred Spicer w assigned a project that had intrigued some of the finest scientific minds in history -- to design a self-propelled carriage or automobile. Plans for such a vehicle had been drawn by bc Leonardo da Vinci and Isaac Newton, while the first road teste steam vehicle was built by Louis Cugnot in the 1760s.

But it was in 1886 that the modern automobile was born, as Gottleib Daimler developed a practical internal-combustion engine, and his German contemporary Karl Benz integrated a

engine with a chassis. Their advances took time to cross the Atlantic, and it was not until 1893 that Frank and Charles Duryea built and road-tested the motorized carriage which is recognized as the first American automobile.

The automobile was a remarkable, world-changing breakthrough, and because it was so revolutionary, it created an extraordinary number of opportunities for people with bright ideas. Power transmission, for example, had been pretty straightforward with horse-drawn carriages. The horse pulled, and the wheels turned.

With the internal combustion engine, however, power transmission became a complex engineering problem. Early cars used sprockets and chains to turn the rear axle, but these were unsightly and noisy at high speeds. Worse, they were difficult to lubricate and broke frequently.

At the turn of the century, several French designers experimented with a propeller shaft, and in 1901 the Autocar company built the Type VIII, the first American propeller-shaft-driven car. In each of these designs, though, the propeller shaft was fixed in place with crude joints that seize up, and shattered easily. They offered little or no improvement over sprockets and chains.

Clarence Spicer

Clarence Spicer had been fascinated by mechanics since the day his dairy-farmer father had bought cooling machinery for the farm creamery and told Clarence to look after it. Clarence Spicer's lifelong competitiveness and dedication to quality was also instilled early. One year his father won an award for the highest-quality butter at a World's Fair. The next year he was beaten into second place in another butter competition -- by Clarence.

Clarence Spicer left the Illinois farm to study at Alfred University, then in 1899 entered Cornell's Sibley College to study engineering. There, under the tutelage of Dean Thurston, he worked on his design for an automobile and became increasingly with the issue of power transmission. Dissatisfied with sprockets and chains, Spicer determined to use a propeller shaft, which he attached to the engine and rear axle with specially designed "universal" joints. Spicer's universal joints were a major engineering breakthrough. They were n just easy on the eye and ear -- they were proof against dust and dirt, and were easy to lubricate

When Spicer showed his drawings to Dean Thurston, Thurston recognized the originality and commercial viability of the universal joint design, and advised his pupil to file for a patent, grante in May 1903. The design was duly published in a patent journal, where it caught the admiring attention of several automobile manufacturers. These people contacted Spicer and asked him t supply the joints, or license their manufacture.

With this firm assurance of the potential of his brainchild, Spicer left Cornell in the Spring of 190 and went to Plainfield, New Jersey, to begin manufacture of his universal joint. Within two years he had a lengthy list of prestigious clients, including Buick, Wayne, Mack, Olds, Stevens-Duryea American Motor Car, Diamond T and E.R. Thomas.

The new universal joints were so good that soon they soon became the industry standard for power transmission. Spicer was rightfully proud that his joints were used at both ends of the market. The best and most expensive American cars regularly used his joints, as did the good low-priced cars, demonstrating that Spicer joints were the best money could buy, yet were still competitively priced.

Plainfield, and the Seventh Day Baptists.

As a dedicated Seventh Day Baptist, Clarence Spicer determined to set up his business in an environment where people shared his conviction that Saturday should be a day of rest. Plainfiel New Jersey, was therefore an obvious choice. It was a stronghold of Seventh Day Baptists, and

was situated near the heart of the early automotive industry. Besides, Spicer already had relativ in Plainfield, connected with the Potter Printing Press Company.

At first, he contracted Potter to manufacture his universal joints, until Potter received a huge ord for printing presses and could no longer help. Spicer then rented a corner of their plant, hired three employees, and began manufacturing the joints himself. In 1905, as orders kept coming ir he incorporated the Spicer Universal Joint Manufacturing Company.

The history of the universal joint

Jerome Cardan, an Italian mathematician born in 1501, is credited with discovering the principle the universal joint, a coupling that allows angular motion in all directions, and the transmission o rotary motion. The first practical application of his idea, however, was made by Robert Hooke, a seventeenth-century English experimental philosopher. Hooke's design was so efficient and reliable that Clarence Spicer remained faithful to its essential principles when he designed his o joint more than two hundred years later.

In its earliest days, the joint had limited use. In 1675, Isaac Newton contrived a universal joint o which to mount his telescope. Other early applications included compass and gun mountings, d spindles and some agricultural machinery. However, it was not until the advent of the internal combustion engine, the growth of the motor car industry, and Spicer's patent that the universal joint truly came of age.

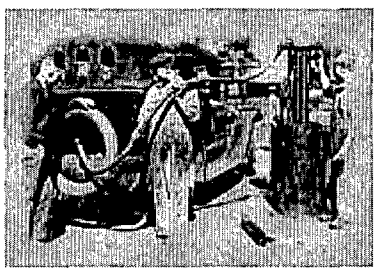
The World War I Liberty Truck

The advances in mechanized transport that had been achieved by the first World War meant th armies could be supplied and moved more quickly than ever before. Yet the variety of trucks being used created a logistical nightmare. Staff had to stock every conceivable size of bolt, nut and screw, and be familiar with the workings of all the different engines.

In 1917, Clarence Spicer was one of a group of engineers and industry leaders summoned to Washington to solve the problem by designing the best possible standardized truck. At first the group was reticent. The engineers were accustomed to being rivals, and were reluctant to share their secrets with each other; but they soon got into the spirit, and competed to see who could contribute the most. The result was the Liberty Truck, rugged, easy to maintain and equipped w interchangeable parts.

2nd Vignette

The early transport industry



That Clarence Spicer's universal joint was in demand befor was even manufactured testified to both the quality of its design and the healthy state of the automotive industry in 1904. After their slow start, American automobile manufacturers had caught up with and even passed their European counterparts. The car proved perfect for the Unite States; Americans loved new technology, and they loved to travel. As a growing, thriving country, mobility was a way of life, not a luxury. Also, the oil fields discovered at Spindleto Texas, in 1901, provided an enormous source of cheap fuel.

Maybe the greatest difference between Europe and America, however, was the attitude of car makers to their work and their customers. In Europe, motoring was not viewed as a means of mass transport so much as an expensive hobby. Cars were custom-built; there were few economies of scale and costs were high. Because cars were expensive, the market for them remained small.

By contrast, American manufacturers were systematic, specialized and eager to improve their

product. They did not make their components in-house, but contracted out business to parts suppliers, from whom they demanded the highest standards. Henry Leland of Cadillac was quality's standard-bearer. He demanded identical, interchangeable parts from his suppliers, whose tolerances were measured to the hundred-thousandth of an inch. But Leland's creed did not stop there. Each employee checked every component as it was received to ensure it was defect free, creating the first quality-assurance program in the automotive industry.

Second, American manufacturers perceived their market differently from Europeans. Because their market was potentially huge, they reckoned that cars could be sold cheaply, and profit mac on volume. In 1900, Ransom E. Olds commissioned his Jefferson Avenue staff to produce a runabout car (the first Oldsmobile) that he sold for $625, making his return by mass production.

Later, Henry Ford introduced the moving assembly line at Highfield Road, slashing car productic time, and enabling him to offer a high class car at unprecedentedly low cost. Interchangeable parts, mass production and the assembly line would allow America to dominate world automobil production for decades to come.

Perfect Circle

Established by Charles Teetor in Hagerstown, in 1895, as the Railway Cycle Manufacturing Company, Perfect Circle was one of many companies that started serving a non-automotive transport industry before realizing the future was with automobiles. Studebaker, for example, wa a world-renowned builder of horse carriages before it ever designed a car. Olds made steam engines. The Duryea brothers, builders of America's first car, made bicycles, while Henry Lelan made bicycle gears.

Charles Teetor began in similar fashion, designing and manufacturing a pedal-powered vehicle use on railroad tracks. The Teetor cycle was an immediate success, and was soon being export around the world. By 1907, the company was making a wide range of products, including piston cylinders and piston rings.

In 1918, confident of the future of its piston-ring business, the Teetor-Hartley Motor Company sc off all other areas of the company and renamed itself the Indiana Piston Ring Company. In 1921 it introduced the brand name Perfect Circle, and in 1924, it changed its company name once again, this time to Perfect Circle. In 1963, Perfect Circle became part of the Dana family.

Dana Distribution Europe

Dana Distribution Europe was founded in London in 1889 as a cycle dealership called Brown Brothers. The business grew briskly, and soon the company was distributing cycle parts in Grea Britain, Spain, France and Portugal. In 1898, Brown Brothers opened a separate department to supply parts for cars, motorcycles and related equipment. Later it became involved in the aviatic business, supplying parts to pioneer aviator Colonel S.F. Cody and setting up a factory to produ precision aircraft components.

After World War I, Brown Brothers merged with Scottish based James Thomson & Sons, and opened branches in many leading British cities, supplying a wide range of motor, electrical and hardware goods. In 1964, the company determined to focus on its core business, which was no supplying the motor trade, and gradually closed its main branches in favor of smaller, concentrated motor suppliers. In 1973, Dana took an interest in Brown Brothers, and in 1981, Dana acquired all of its outstanding shares.

Spicer Europe

Founded in Wolverhampton, England, in 1902, as Thomas Turner & Co, Spicer Europe began t building bicycles, tricycles and horseless carriages, including the Turner-Meisse Steam Car. In 1907, the company began to design and manufacture petrol-engine vehicles. After World War I, the company established a reputation as a components suppler.

In 1949, Turner began manufacture of an all-purpose diesel-engine tractor, the Yeoman of England which achieved worldwide sales, and led the company to set up manufacturing facilitie in many countries around the world. In 1972, Dana took a 30 percent stake in the company. The partnership proved such a success that in 1978 Dana bought the company outright.

3rd vignette

The Founding Fathers

While Leland, Olds and Ford were transforming the way automobiles were made, and Clarence Spicer was redefining power transmission, many future members of the Dana family were also making dramatic contributions to the automotive industry.

It was an era of extraordinary inventiveness. In 1882, when A.P. Warner (founder of Warner Electric and one of the Dana family's most prolific patent-holders) was just 12-years old, he told his grandfather he'd like to be an inventor. "Arthur, you are too late," his grandfather replied. "Everything to be invented is invented, and there is no use your wasting time in trying to make something new."

Rarely can an observation have been so wrong. There was a frenzy of invention at the turn of th twentieth century as new power sources, improved communications technology, better process and machining all added to the heady mix of progress. Inspired by Thomas Edison, "the Wizard Menlo Park," inventors had become celebrities.

The automobile, at first no more than an engine and chair on wheels, offered great potential to these ingenious minds. Tremendous competition amongst rival inventors meant that everything was up for improvement. The internal combustion engine had not even become the dominant power source. The first recognized land speed record, set in 1898 by an electric car (at 39.24 mph), was beaten over the next eight years by electric, steam and gas engines. And the earlies cars offered little of today's standard equipment -- no headlights, ignition, windshield, instrumen or even a roof. All these had to be thought of, designed, patented, manufactured and sold.

No one exemplified that spirit of inventiveness better than A.T. Brown, arguably the most prolific and versatile inventor in the Dana family. While working with L.C. Smith, a gun company, Brown designed a safety catch for guns, a breech loading gun, an electric firearm and the double-lock bolt for the Smith Gun. Later, working for the Smith Premier Typewriter Company, he perfected double-keyboard typewriter. In 1892 he invented a pneumatic bicycle tire, and later sold the patents to the English Dunlop brothers.

As well as being a hugely successful inventor, Brown was president of several companies. In 1895, with close friend Charles E. Lipe, (inventor of a milling machine and the first man to perfe an invention for sewing brooms), Brown conceived an idea for a two-speed gear for bicycles. Th gear proved too expensive for commercial success, but the Brown-Lipe partnership continued. I 1904 Brown-Lipe sold a progressive type motor car transmission to the H. H. Franklin Company Syracuse. Two years later E.R. Thomas Company bought Brown-Lipe's first selective type auto transmission, while the first Brown-Lipe clutch was shipped to the Grabowsky Power Wagon Company in 1911.

Paying the highest-ever per-share price for a Syracuse business, Spicer acquired Brown-Lipe ir 1929, and moved the business to Toledo in 1931.

Victor

John H. Victor, co-founder of Victor Manufacturing and Gasket Company, applied for many patents in his inventive career, including one for an improved golf club and another for a filing cabinet. But it was in establishing the gasket company with his brother Joseph in 1909 that he found his greatest success. Victor's copper-asbestos gaskets provided longer life and better sealing than their competitors, and soon the company became the leading supplier of gaskets t the automotive industry.

In 1966 Victor joined the Dana family of companies, as part of Dana's strategy of diversifying int the aftermarket, and in 1993 merged with German-based gasket manufacturer Reinz to become Victor-Reinz.

Weatherhead

Albert Weatherhead (founder of Weatherhead & Co, holder of 75 patents) once heard the chief engineer for Studebaker say, "If you want to sell the automotive industry, you must develop an article of better quality, at less cost."

The Harvard engineering graduate took the advice to heart. Returning from World War I service France as a combat pilot, he bought a small shop in Cleveland and began designing and manufacturing automotive products. His first design for an automobile-engine priming cup was successful enough. His second, for a radiator drain cock, was a breakthrough that became standard equipment for practically every car made in the United States.

As with all Dana people, quality of product was not enough by itself. Weatherhead insisted on delivering his products on time and in exact quantities to his clients, who included Chevrolet and Ford. This mix of inventiveness and dedication served the company well, and Weatherhead's product line and client list expanded steadily. By the time Weatherhead joined the Dana family in 1977, it had become a major supplier of components used in braking, steering, air conditioning, fuel, cooling and lubricating systems.

4th vignette

New York to Paris Race

On February 12th, 1908, 250,000 New Yorkers crowded into the Times Square district to witness the start of the New York to Paris Race, an unprecedented test of automotive reliability and endurance. The race, co-sponsored by newspapers Le Matin and The New York Times, would take the competing cars across North America to San Francisco, across Alaska, across Japan, and from Vladivostok to Paris. It would also prove that the car had come of age as a means of worldwide transport. There was a sub-plot, as well. As with Cadillac's entry in the Dewar Trophy the same year, the New York-to-Paris race was symbolic of the Transatlantic struggle to lead the automotive industry.

An American car, an Italian car, a German car, and three French cars lined up to fight for the honors. The European entries were built specially for the race, but the American car, a Thomas Flyer, was from regular stock, built with parts provided by no fewer than four members of the Dana family. Salisbury provided wheels, Brown-Lipe the transmission and Parish the frame, while forgings were provided by the General Drop Forge company.

The first leg of the race from New York to San Francisco took the crews through appalling weather conditions. The roads, bad enough at the best of times, were so blanketed in snow, or thick with mud that few believed any of the cars would reach the first checkpoint, let alone Paris. But five of the six contestants did make it to San Francisco. The Thomas Flyer, leading the way, took a boat to Alaska, but the weather conditions there were even more severe, and no progress at all was possible. By the time the American team had returned to San Francisco, the other teams had decided to bypass Alaska and had already shipped ahead to Japan.

The teams started even again in Vladivostok (except for the German Protos, which had been awarded a 30 day penalty for shipping their car by train from Idaho to Seattle). French driver St. Chaffray, told by the Marquis De Dion to retire from the race, was so desperate to complete the course that he cornered the gasoline supply in Vladivostok, and tried to barter fuel for a seat on the Thomas. Rejecting the unfair pressure, the enterprising Thomas crew called on American residents, who provided a sufficient supply from their power launches.

The Germans gained the lead on the road, and kept it all the way to Paris, but because of their

30-day penalty they were 26 days behind the Thomas Flyer, which arrived in Paris on July 30, winner of the race. Dana's integral involvement with the racing industry had begun.

The Perfect Circle band

In 1909, Carl Graham Fisher, a flamboyant entrepreneur and car salesman, opened a 2.5-mile, rectangular track some five miles north of Indianapolis. The first races held there were hampere by accidents and poor attendance, so the track was resurfaced and in 1911 a huge purse was offered for a one-day extravaganza -- which proved to be the first Indianapolis 500 Mile Race.

The Light Inspection Car Company band (later Perfect Circle), consisting of the Teetor family members and company employees, paraded past the grandstand just before the inaugural race Perfect Circle's connection with the event did not end there, as many great drivers enjoyed tremendous success using Perfect Circle piston rings. A.J. Foyt, the first driver to win four Indy 500s, used Perfect Circle rings, as did Al Unser Jr. when he took the checkered flag in 1994, driving for Team Penske.

Leland and the Dewar Trophy

In 1908, Henry Leland and Cadillac demonstrated to Europe that American manufacturing practices had left their European rivals behind. Three Cadillac cars were shipped over to Englar to stake a claim for the Dewar Trophy, an annual RAC award for the greatest achievement in th automotive world.

Cadillac mechanics disassembled the three cars, allowed independent judges to thoroughly mix up the parts, then recreated three cars from the pile. When the cars were reassembled, they we filled with gasoline and oil. To the crowd's astonishment, two of the three started at the first pull. The third took two goes. The three cars were then run full out on an oval track for 500 miles, ea completing the course at an average speed of 34 miles an hour, at 30 miles per gallon, out-racir the Europeans.

Clarence Spicer, himself dedicated to quality control, was a huge admirer of Leland. In a brief history of Spicer Corporation written in 1925, Clarence Spicer refers to him as "Pop" Leland, an singles him out for praise, thanking him in particular for a half-hour-long personalized chat in which Leland "emphasized the importance from a manufacturing standpoint of making every operation and every piece commercially right the first time".

5th Vignette

Charles A. Dana

In 1914, Clarence Spicer learned one of harshest lessons that can be taught in business -- his universal joints had become so popular that his company was pushed to the brink of bankruptcy. Over-hurried expansion had increased the cost of production, sales and delivery, and, because Spicer joints had become the industry standard, many competitors had simply resorted to imitation. Spicer's only defense had been lengthy, expensive and inconclusive law-suits. Near desperation, he traveled to New York to put his case to the investment bank, Spencer Trask & Co.

Spicer's was far from a unique story. Some 1,500 automotive companies had already failed by 1914, and Mr. Trask did not fancy betting his money that Spicer's company wouldn't be the next. He did, however, see enough promise in the company to hand the papers to a young lawyer called Charles Dana. Dana saw enough promise to visit South Plainfield -- where, lore has it, he found Clarence Spicer's desk piled high with papers.

"What are those?" asked Dana.

"New orders," answered Spicer.

"And where are your bills?"

For answer Spicer opened a drawer and showed Dana a bare handful of invoices. The huge pil of orders next to the small stack of bills was all the encouragement Dana needed to become involved in the business.

In exchange for a controlling interest in the company, Charles Dana lent $25,000 to Spicer, ther dedicated himself to leading the company through its hard time. Dana was no engineer, but he was a great salesman. Convinced that Spicer's universal joints were without equal, he proceede to share his opinion with the leaders of the automotive world, with dramatic success.

Dana also knew how to motivate people and win their loyalty. He set up a range of benefits for Spicer people, including a group-insurance plan, an employee-stock-purchase plan, and an in-house publication, The Drive-Shaft. In addition, plant and equipment was invested in, cafeteria facilities were improved, houses were built and sold cheaply to Spicer employees, food was bought in bulk and sold at cost, and a course of seven lectures in Modern Production Methods was offered at no cost to management, foremen and supervisors.

With Charles Dana in charge, and with a surge in demand in the automotive industry because o World War I, Spicer was soon back in the black. In 1916, with the help of Charles Merrill of Merr Lynch, the company was re-organized as the Spicer Manufacturing Corporation. The new corporation boomed and Dana took advantage by acquiring a series of complementary automotive suppliers, including Chadwick Engine Company, Salisbury Axle, Sheldon Axle, Paris Pressed Steel, Snead & Co, Almetal and Brown-Lipe.

In the twenties, Dana also led the company overseas, expanding a licensing agreements and acquiring interests in Hardy Spicer in England, Societe Spicer Glaenzer in France and Hayes Wheel and Forging in Canada.

Lawyer, rancher, soldier

The only son of a successful banker, Charles Dana was an active man, with wide interests. Afte studying liberal arts at Columbia University, Dana entered Columbia Law School, then practiced law in New York. He was deeply interested in politics, running campaigns for Teddy Roosevelt, and himself being elected three times as Republican member to the Assembly of the New York Legislature. By 1908, at the age of 27, Dana was already president of two companies, the New York & New Jersey Water Company and the New Jersey Suburban Water Company.

Dana also served for eleven years as a farrier in the New York National Guard, and was an exp marksman. He made a habit of going each year to the Corralitos Ranch in Chihuahua, Mexico, t work as a cowhand at roundup and branding time.

Driveshaft

The Driveshaft, Spicer's in-house magazine for the South Plainfield workforce, arrived in Januar 1917 with the following explanation of its purpose: "Each month it is planned to issue this sheet keep us informed as to what those in other departments are doing, social doings, the Company' plans, and information that otherwise it would be difficult to pass around, and in general to add t the fellowship, good will, comfort and pleasure of those connected with this Company."

As the company expanded with acquisitions and new plants, the Driveshaft kept Spicer people i the know. The magazine also undertook a campaign to promote safety in the workplace, which paid off handsomely as the number of injuries decreased. The Driveshaft was succeeded by the Drive Line, and then by the Dana Digest. Today more than twenty in-house magazines are published by Dana people.

Clarence Spicer

Even after Charles Dana became Managing Director of the Spicer Corporation, Clarence Spicer remained intimately involved with the company he had founded. Dedicated to quality, he once turned down an offer to leave Dana and join General Motors because he wanted to ensure the leadership of the Spicer name. He kept tabs on the competition by installing their equipment in cars and driving his family thousands of miles across the country, stopping every two hundred miles or so to check how the rival equipment was holding up.

As the company's Chief Engineer, Clarence Spicer also worked on many new products. He invented a machine for balancing propeller shafts, and another for producing welded tubing. He also designed a rail-road generator drive and a safety clutch for a generator drive. He was a member of both the American Society of Mechanical Engineers and the Engineers Society of Detroit, and treasurer and president of the Society of Automotive Engineers.

Clarence Spicer died in Miami in November, 1939. A tribute from the Society of Automotive Engineers acclaimed his life as "a beacon of example and inspiration in the engineering profession."

6th vignette

Expansion, Detroit and Toledo

Despite a slump in demand following the end of World War I, by 1920 it was clear the automobil was going to be bigger than anyone had forecast. In 1909, North American vehicle sales had totaled just 123,990. By 1917, they had rocketed to 1,745,792. And by 1929, the number had nearly reached 4 million. The problem for the Dana family was not in sales, but in producing enough to meet demand.

New plants at Pottstown and Reading were not enough, and Spicer Corporation looked to consolidate its manufacturing operations. At the same time, the company needed to deal with another issue that was becoming more and more pressing. Most Spicer customers were no lon on the East Coast. If Spicer wanted to keep its reputation for responsive service, it needed to move its manufacturing facilities. The harsh truth was, New Jersey no longer meant much in the automotive world

Detroit had taken over.

Why Detroit should have become so dominant in an industry founded in Europe and originally based on the East Coast is not easy to answer. Michigan had abundant raw materials, shipyard and foundries, but it also had the right people at the right time, which was fortunate. Legend has for example, that Henry Leland had originally determined to settle in Chicago, but when he arriv there he was greeted with "pistol shots and flying brickbats," so he bought a ticket on the first tr out -- which just happened to take him to Detroit.

Along with Leland, R.E. Olds and Henry Ford were already established in the Detroit area by 1900. William C. Durant acquired Buick of Flint, Michigan, in 1904, and proceeded to build General Motors. Because of the incredible success of these pioneers, suppliers and associated companies gravitated towards Michigan and Ohio. When Walter Chrysler reorganized Maxwell Motor Company as Chrysler in the 1920s, and built it into one of the Big Three, Detroit's domination of the industry was complete.

It was not surprising then that Spicer Corporation determined to relocate. Toledo was preferred Detroit partly because an overnight train service would allow Charles Dana to continue living on the East Coast and still visit the company on a regular basis. In 1928, therefore, land was acquired on Bennett Road in Toledo, and a new plant was erected. In early 1929 manufacturing equipment was moved from South Plainfield. Within two years Brown-Lipe and Salisbury Axles had also relocated to the Toledo plant.

Relocation was a typically smooth Dana operation. Forty families were taken on a special train over the Pennsylvania railroad. On the train, it was business as usual. Even the mail was distributed to the proper department officials. At Toledo, a fleet of automobiles from the Reuben Realty Company met Spicer people and their families off the train, and took them on a tour of th town, during which many of them selected their new homes

Henry Ford

Between 1910 and 1920, the United States automotive industry was transformed from a thriving cottage industry into a major industrial power. Remarkably, one man was largely responsible for this achievement.

With a determination to bring the automobile within the reach of every hard-working American, Henry Ford used the moving assembly line to accelerate production and reduce costs. His methods, and the phenomenal success of the Model T, speak for themselves. In 1908, when the Model T was introduced, Ford's sales were 10,202. By 1916, they had risen to 734,811.

Henry Ford also had an enormously beneficial impact on American industrial workers, when in 1914 when he offered to pay an unprecedented $5 for a day's labor (a little over double the minimum wage). The offer created such havoc outside Ford's factories that water canons were used to turn away the crowds.

Ideas - What are they worth

Realizing that "incentive was a good stimulus to constructive thinking," in 1924 Dana assured in house inventors they would receive a proper reward for any commercially valuable innovations. addition, Dana offered potential inventors the services of the Engineering and Experimental Department, and promised to cover all of their associated expenses.

"It is ideas that control markets, not bricks, mortar, machinery or even money," read an editorial the Driveshaft. "It is ideas that are going to insure the future of this Company and those who depend upon it for their livelihood, therefore the Management invites you to think with them for c mutual benefit, to the end that our advancement in the Universal Joint art may keep well ahead any other manufacturer in the same line."

Looking after number one

When Spicer moved in 1928 from South Plainfield to its new offices in Toledo, Gladys Kummer was their first new employee -- a stenographer for the temporary offices in the Secor Hotel. She was given Workcard Number 1. "The man at the employment agency which recommended me f the job warned me for the job warned that Spicer was just a little outfit," she said, "but I took the job anyway."

The first office was erected on the company's Bennett Road site, and rest-room facilities were rented from a neighbor. As the company grew, it hired a local woman to arrange food, setting up planks on sawhorses on her home for dining tables. "Those meals were unforgettable," said Mrs Kummer. "I can remember the huge platters of pork chops, potatoes, and bowls of gravy she served us for 35 cents a person. It was wonderful."

Spicer production facilities started its move from New Jersey in 1929 and completed its arrival to Toledo in 1931. Remarkably, throughout the Depression, the plant was never closed down. As f Gladys Kummer, she stayed with the company for the next 40 years, until she retired. By the tim she retired workcard No. 1, the company had grown into a multinational organization, boasting annual sales of more than $500 million.

7th vignette

Sales, promotions and advertising

From the automotive industry's earliest days, sales were split into two broad categories -- Origin Equipment Manufacture (OEM) and the replacement sales market, or aftermarket. Many early accessories, like shock absorbers, spring mounted bumpers and rear view mirrors would soon become standard, but before they did, they needed to be sold to a discriminating public. Good marketing and advertising was essential.

The Indiana Piston Ring Company quickly recognized the benefits of advertising. Its Perfect Cir piston ring was so successful that in 1924 the company re-christened itself Perfect Circle. It advertised in the Saturday Evening Post, and published The Regulator, a quarterly tabloid for th automotive trade through which it notified the dealers of its new products. Finally, it sponsored a nationally broadcast radio musical show, and eventually advertised on television.

Victor Gasket recognized the value of endorsements to advertising. In 1927, the company ran a impressive campaign, highlighting some of the successes the company had enjoyed that year. Charles Lindbergh crossed the Atlantic in a Ryan monoplane equipped with a Wright Whirlwind engine and Victor gaskets. Three Victor equipped Stutz cars finished first, second and third in a 150 mile Stock Car race at the Atlantic City Speedway, establishing a feast of new records. As i that were not enough, three Victor equipped Studebakers set endurance, speed and distance marks of more than a mile a minute for 16 days and nights.

The award for the Dana family's most imaginative publicity campaign, though, would surely go t A.P. Warner. Warner, a long-time advocate of advertising, invented a device called a "cut-meter for measuring the speed of industrial machinery. He soon realized that it could easily be adapte to the automobile, and his new "speedometer" proved enormously popular among car-owners anxious to record their exploits, or perhaps to stay within the limits of the law.

Resolving to sell directly to the public, he went to A.D. Lasker, the famed president of Lord and Thomas. Lasker (who, proving that advertising pays, built a $75 million fortune from his agency) and Warner got along from the start. The two men often visited automobile manufacturers together. Warner attributed much of his company's success to Lasker's advertising, and also remarked that Lasker spent money with both hands but that it was returned multiplied many tim

But it was Warner himself who devised the most colorful promotion of his speedometer. He built giant, gold-plated speedometer, mounted it on the rear of a car, then sent it on a tour of the country. Teddy Roosevelt was so enchanted with the car that he got in with the driver and rode around outside the White House. Warner's speedometer even got the law changed. At the time, New York had a 10-mph speed limit that was completely ignored. So, Warner contacted the pre and then got himself arrested by driving past the police at 15 mph -- while he was being overtak by trucks and cars going twice his speed. All the state's newspapers carried the story, and spee limits were soon raised.

NAPA

The National Automotive Parts Association (NAPA), is far and away America's leading replacement parts organization. It is also one of Dana's foremost customers. Remarkably, the Dana family played a major role in NAPA's foundation.

As the motor industry flourished in the 1910s, leading companies like Ford, Buick, Chevrolet, Willys and Maxwell recognized that their customers deserved fast, quality service when their ca broke down. They therefore established networks of dealers around the country, and distributed their parts to them.

For companies like Spicer, this arrangement was unsatisfactory. Spicer was supplying all these leading companies, so their parts were often available through several dealerships in the same city. Yet no single dealer held a full stock of Spicer parts, and some independent shops didn't carry Spicer parts at all.

In 1919, engine manufacturer Continental addressed this problem by forming their own network dealers, appointing one distributor in each large distribution center. Spicer, Brown-Lipe and

Timken Detroit all recognized the merit of Continental's scheme, and promptly appointed the same agents, known as "parts stations." By 1924, there were parts stations in 31 cities, and the manufacturers recognized they needed an organization to oversee the national distribution of parts, and NAPA was consequently formed on April 17, 1925.

Reinz

Founded by Hugo Reinz in Berlin in 1920, Reinz's greatest breakthrough came in 1928 when th company patented a new cylinder head gasket. Called the Reinz Special, it consisted of a wove metal core surrounded by asbestos fibers, and was so advanced that in the 1930s nearly all European manufacturers used it, even the great car racing companies, Audi Union and Mercede

Even though the Reinz Special was in production for sixty years, Reinz did not rest on its laurels In 1942, when material supplies were squeezed by the war, Reinz developed an asbestos-free gasket, Deuma. After the war, Reinz moved headquarters to Neu-Ulm, where the company continued to grow, and in 1993 Reinz joined the Dana family. Merged with Victor, Victor-Reinz was the largest manufacturer of flat gaskets in the world.

8th vignette

Dana's People

In 1929, the United States produced 4.5 million cars. In 193 production slumped to 1.1 million. After the boom years of t 1920s, the Wall Street Crash and the Depression devastate industry. By the time the Depression bottomed out in 1932, huge numbers of workers had been laid off, and wages in tl automotive industry had dropped by 35%. The workers wer hurting, and in an effort to protect themselves they formed unions that quickly grew powerful.

In place of the friendly relations established at Spicer during the boom years, there grew an atmosphere of confrontation. The workers had lost faith in their management, and Charles Dana, while he loved working with people one-to-one, mistrusted the new adversarial organizations.

On the morning of Friday, February 23, 1934, matters came to head in Toledo. After delays in recognizing an United Auto Workers (UAW) contract, 4,000 workers went on strike from Spicer, Logan, Bingham and Electric Auto-lite factories. Over 2,000 Spicer workers participated in the walk-out, and, despite the sub-zero temperatures, they set up a picket line outside the plant. Charles Dana was at the plant early, chatting to the pickets, sending out coffee and carrying out buckets of coal to keep their fires going.

On Sunday, Dana held conferences with business leaders and bankers, then gathered the principal management and union members together at the Commodore Perry Hotel, where they laid out the basis for agreement. That night, Dana took a train to Washington, where he conferre with NRA leaders and officials from the American Federation of Labor, before returning to Toled on Tuesday for more conferences. When negotiations seemed headed for stalemate, Dana insisted on another conference on Wednesday, and they finally reached a settlement.

The terms were laid before the workers that evening, and the union's business agent, Thomas Ramsey, urged the workers to accept the pact. They did, almost unanimously, by a standing vot The workers, having grown fond of "Charley" Dana, called for him to speak. "I felt it was a privilege to work to provide jobs for you," he said. "There is only one thing really worth while abc an organization and that is its men and women. Stone and mortar, bricks and machinery can be duplicated, but the workers cannot."

At the end of his speech, Charles Dana was cheered. But the strike left an indelible mark on hin

For years afterwards he remained deeply mistrustful of worker's organizations, often refusing to negotiate with them at all.

Wix

Established in 1939 by Jack Wicks and Paul G. Crawshaw to manufacture replacement filters tc inside costly filter cases, Wix started with a flourish, able to sell all the filters it could make into a automotive market that boomed briefly after the Depression.

Then World War II broke out, and supplies of essential materials were cut, threatening Wix's survival. In response, Wix people showed determination and resourcefulness by developing nev filter cartridge materials. A small supply of steel was still necessary, so Wix people went out anc collected empty oil cans from service stations, from which they stamped parts. Again, when knitting companies were no longer able to supply knitted sock material, Wix people found discarded machines in a junk yard, cleaned them up, and used them until the end of the war. Tr perseverance paid off, and by the end of the war Wix was even supplying filters to American forces in the Pacific.

Wix went from strength to strength. In 1955, Kingsley Humbert and Paul Francois perfected the design for a spin-on oil filter conceived and patented by Jack Wicks. The filter revolutionized the industry, and became standard equipment in new cars.

Spicer Clutch

in 1936, Seth and James Atwood, owners of the Atwood Vacuum Machine Company, acquired the rights to several clutch designs invented by C.A. and W.V. Thelander. W.V. Thelander also joined the company and completed the designs, and production began in 1938 when an old plai was purchased in Auburn, Indiana.

Demand proved so great that a new plant was built, ready in time for war emergency. The plant not only supplied all the clutches for the Willys and Ford Jeeps, it supplied clutches for International Harvester's M-5 Prime Mover and for Allis-Chalmers track-laying tractors. In 1947, Auburn Clutch joined the Dana family. Later, Brown-Lipe and Monmouth clutches were consolidated into the company, and Auburn was renamed the Spicer Clutch Division.

9th vignette

World War II

World War II was a conflict of unprecedented movement -- with faster, more flexible machinery covering vaster distances and more diverse terrain than ever before. Yet almost every type of vehicle used by the Allies in combat service, on land, on sea or in the air, was equipped in some way with one or more Spicer products. That Spicer people were able to contribute so greatly to the war effort testified to their dedication, and the preparations they had been making as far bac as the early 1930s.

Because of their heavy truck experience, for example, Spicer people worked with the army on developing equipment that would be suitable, with minimum change, for military use.

Most famously, though, Spicer was intimately involved in the design and manufacture of the Jee the light reconnaissance car that was the envy of the Axis powers. Robust, capable of fast transportation of men and military equipment, the Jeep gave the Allied armies a significant advantage in mobility. Spicer not only designed the four-wheel drive and axle, but also supplied the parts in huge volume.

Other companies in the Dana family contributed massively to the war effort as well. Salisbury, Victor and Perfect Circle products were everywhere. Parish manufactured heavy frames, while Weatherhead supplied artillery shells and parts for the B29 bombers. The General Drop Forge (provided equipment for the B-29, as well as the Aircobra, the Wildcat and others.

Spicer's enormous contribution during this era was recognized by the armed services. In particular, America's two senior armed forces jointly awarded Spicer the Army-Navy "E", a coveted recognition of exceptional achievement. Presented to Spicer's Toledo plant in Decembe 1942 for "great work in the production of war equipment," the award consisted of a flag to be flo above the plant and a lapel pin for every person who worked there.

By the end of the war, every plant in the Spicer family flew the award.

Spicer Axle

The Salisbury Wheel Company was founded in Jamestown, New York, in 1901 when C.W. Salisbury, a key-maker and mender of umbrellas, patented an automobile wheel, then pooled hi life savings with two colleagues, Scott Penfield and E.D. Sherman, and started manufacture. Salisbury's first customer was the E.R. Thomas company, maker of the Thomas Flyer. In 1905, the company started manufacturing front axles. Two years later rear axles were added to its product line.

Acquired by Spicer in 1919, Salisbury was moved to Toledo in 1929, closer to the center of the automotive industry. Salisbury axles became standard equipment in thousands of automotive vehicles. At the outbreak of World War II the light, Salisbury's rugged axles proved ideal for the Jeep. The Jeep proved so popular that in 1945 Salisbury had to build a new plant in Fort Wayne Indiana. In 1970, the Salisbury Axle group was renamed the Spicer Axle Division.

Parish

Organized in 1905, the Parish Pressed Steel Company pioneered heat-treatment to produce automobile frames strong enough to stand up to the shock and abuse of the unpaved roads. Founded by Neff E. Parish and John E. Sullivan, Parish's first customer was Stevens Duryea. Ir 1910, Parish switched from making car frames to making heavy duty truck frames, receiving orders from Mack, Autocar and the White Motor Co.

Parish contributed greatly to the war effort in both World Wars. In World War II, in particular, the company produced parts for gun carriages, tanks and aircraft as well as parts for field kitchens. The company was awarded the Army-Navy Burgee for Excellence in War Production, the Militai Police Guidon and the National Security Award.

Floquet Monopole

French company Floquet Monopole was founded in 1920 by Swiss manufacturer Denys Guerne At first known as "Le segment Monopole," the company specialized in piston rings, before expanding its product line to include cast-iron and aluminum pistons. Production was greatly reduced during the war, not in small part because the Poissy factory was heavily bombed in 19<

Floquet Monopole, which joined the Dana family in 1978, was not the only European member of the Dana family to suffer damage in the conflict. Brown Brothers branches in Birmingham, Hull, Liverpool, Southampton and Bristol all were severely bombed, while the main London warehous received a direct hit.

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People Finding A Better Way®

History

SECTION 2: Coming of Age

SCENE SETTER

Dana is famous for the Dana Style, and for good reason. But sometimes when our company get talked about, too much attention gets paid to how we do things and not enough to what we achieve. The bottom line of the Dana Style is that it works, and it works because it's not a doctri but an attitude -- a flexible, progressive way of empowering people to get things done.

Although the Dana Style wasn't fully articulated until the 1970s, it owes a considerable debt to tl leadership of Charles Dana. Hating paperwork, Dana was committed to education, employee benefits and idea-sharing. He liked keeping plants to a workable size, and locating them near customers. He also prized growth and success -- of which the company enjoyed so much under his leadership, it was renamed Dana Corporation in his honor in 1946.

But although aspects of the modern Dana style were already present, much of the substance of today's company still had to be integrated. Dana was relatively small, with annual sales of $108 million, and relied too heavily on a single segment of the automotive industry -- original equipme for passenger cars.

1st vignette

A new era

For fifteen long years of depression and war, the civilian car market had been lifeless. Yet millio of cars had fallen apart during this time, and millions more were held together only by ingenuity prayer. Demand was ready to explode.

It did not happen immediately. For two years, while veterans demobbed into civilian life, people hung on to their money. Automobile companies used the lull well. They retooled their factories a designed a generation of stylish, aerodynamic and powerful vehicles.

As these came onto the market, confidence soared. There was talk of jet cars, even atomic cars Customers began to demand automatic transmission, power steering, power brakes and other accessories. Tail fins and bubble tops grew popular, as imagination seemed the only boundary progress. The 1949 Nash even had a folding bed in the back seat.

Cars were fun again, and fun was big business.

At the same time, the pioneers and long-time leaders of the automotive world were retiring, and new generation was coming to the fore. At Dana, this shift began in 1949 when Charles Dana w appointed Chairman of the Board, and R.E. Carpenter succeeded him as President. Then, in 1952, Jack Martin was recruited from Firestone, and in 1954 he was appointed President.

From the start, Martin recognized that Dana needed to prepare leaders for the future. He recruit a series of young, talented people, then encouraged them to form "discussion groups" to study

Dana's management style and plan for the future.

Dana had much to be proud of. The company's products were first class, their quality was high and their people were dedicated. But Dana also had some problems, a legacy of its centralized structure. Too much power and information was concentrated in the hands of a few company leaders. Communications between people were poor, and the decision-making process had become creakingly slow.

Little effort was put into building relationships with investment banks or the financial press. Advertising and corporate identity programs were undervalued. Purse-strings were tight, and growth opportunities were being missed, both in the United States and abroad.

Most alarmingly, Dana relied too heavily on original equipment for the North American car mark a high-volume, low-margin series of non-proprietary products that anyone could make. That wa fine in the boom that followed the Korean War, because there was plenty of work for everyone.

But the question was, what would happen in a downturn?

From Spicer to Dana

The acquisition of Auburn Clutch in 1946 created a formidable line-up for Spicer. Formidable, b confusing. Because Spicer, Salisbury, Parish, Brown-Lipe, Sheldon and Auburn were all trade- names owned by the Spicer Corporation, the distinction between Spicer the brand and Spicer t corporation was becoming blurred. The company therefore decided to rename itself, and in recognition of his 32 years of service, Charles Dana's family name was chosen.

The Spicer name did not disappear. It remained where Clarence Spicer would have wanted it -- on the products that he had designed and made famous, still manufactured to the quality he ha insisted on.

Jack Martin

John E. (Jack) Martin was appointed Executive Vice President of the Dana Corporation on Mar 27, 1952. Formerly President of the Firestone Steel Products Company of Akron Ohio, Martin w a charismatic and confident figure who saw huge potential in the Dana Corporation. In 1954 he succeeded R.E. Carpenter as Dana President, and as Chairman of the Board Charles Dana visited Toledo less and less often over the years, Martin became the effective leader of the Dan Corporation.

Martin recognized the need for future management, hiring young people and giving them room t grow. He was also dedicated to developing new, proprietary products that offered customers a material advantage, then making the most out of those products. Under his stewardship, Dana grew into a world leading company with interests in distribution, in non-automotive markets, and overseas. Martin was appointed Dana Chairman in 1967, a position he held until his retirement i 1972.

The "modern" corporation

In 1923, Alfred Sloan was appointed President of a sprawling General Motors. Where William C Durant had given GM its diversity and size, Sloan proceeded to give it shape and purpose. He divisionalized operations, then decentralized power. Armed with his creeds "a car for every purs and purpose" and "give a man a clearcut job and let him do it," he built General Motors into the world's leading car company -- and in the process created the template for the "modern" corporation.

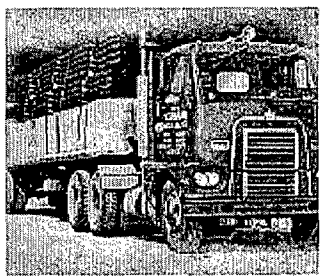
Even as General Motors flourished, Ford seemed headed for ruin. In the early 1940s, Ford was overtaken in sales by Chrysler, and was losing millions of dollars a month. All power was concentrated in Henry Ford's hands; all decision making went through his office. Only one set o figures existed for the entire operation, making serious cost control impossible. Worse, as Henr

Ford's health was failing, his son Edsel Ford tragically died of stomach cancer in 1943.

Henry Ford II, grandson of the founder, was released by the Navy to manage the company. He was 27 years old, had no real business experience and faced a company that was losing million of dollars every month. Using General Motors as a model, he divisionalized his company, decentralized decision-making and appointed a generation of managers from General Motors ai the Defense Department. This group, known as the "Ford Whiz Kids," applied their procurement and cost control skills to Ford with immediate results. By the end of the decade, Ford had taken second place back from Chrysler, and returned to profitability.

2nd vignette

Diversification



Detroit, in the 1950s, and the new breed of financially smart managers were examining ways to cut their costs and increase business. The Big Three had traditionally concentrated on design and assembly, but now they could see no reason why they shouldn't start manufacturing more of their car parts as well, particularly where technology was available, process was straightforward and volume was high. They expanded their in-house capacity, and used their traditional suppliers like Dana to meet extra demand while the times were good.

But in 1957 and 1958, the American economy suffered a recession. Demand for passenger cars plummeted and Dana's sales fell by over a quarter. It could have been a critical blow to morale a Dana. Instead, it became a springboard to even greater success.

First item on the agenda was to reduce Dana's reliance on original equipment for passenger cai which, before the downturn, accounted for 65 percent of sales. A strategy of controlled expansic was developed, through which Dana diversified its product range, customers and markets, while not stepping outside its areas of expertise.

Dana people strengthened their relationships with companies like GMC, Ford Truck, Kaiser, Mack, International Harvester and Paccar -- manufacturers of trucks and other heavy duty vehicles, who appreciated Dana's rugged, high-technology product.

At the same time, Dana dedicated greater resources to new product development. Heavy investment in engineering and chemical-testing facilities enabled Dana people to make major technological breakthroughs, such as Constant Velocity joints and Powr-Lok axles. Dana people talked with client engineers to find out their concerns and ambitions, then joined forces to find solutions. Dana people also began looking outside the automotive original-equipment industry -- establishing a presence in the replacement part market, and making and selling consumer products such as boat trailers and golf carts.

There was one other area of major growth. In 1957, Dana had acquired an interest in Albarus of Brazil. Dana was going overseas.

History of trucking

At the same time as pioneers in the car industry were changing the way people got places, trucking companies like longtime Dana clients Mack and Diamond T were transforming the way trade was done.

The earliest trucks were open wagons that offered no protection from the elements, poor reliability, and solid rubber tires that bumped and banged over pot-holed roads. But as design, technology and roads improved, so the industry progressed. In 1908, there were just 4,000 trucl in the United States. By 1914, there were 300,000. And in 1918, as veterans wise to the benefit of trucking returned from Europe, the number reached 1,000,000.

Developments were swift. Efficient loading and unloading was enabled by the growing popularit of full-trailers from 1915, and semi-trailers from 1920. In 1917 both pneumatic tires and tandem axle suspenders were introduced, improving comfort and load capacity. Safety was greatly enhanced when power brakes were developed during the 1920s. And in 1935, the first cab-ove truck was built, cutting the tractor's length and allowing greater payloads.

However, the industry was still chaotic and unregulated, until the American Trucking Associatio were formed in the 1930s, establishing minimum wages and maximum labor hours. After World War II, the interstate highways improved on an already efficient road system, and the trucking industry, long since integral to trade, became absolutely vital.

The pond behind the shed

Like every progressive company, Dana had its new-product disasters. Launched with a big splash, these seemingly brilliant ideas just didn't float, and were finally thrown away out of sight, rusting in the pond behind the shed.

Dana's effort to expand into consumer products was a simple concept -- Dana was already manufacturing a significant proportion of the containers, golf carts and boat trailers that were being sold under other company names. All Dana needed to do was put its name on its product and sell directly to the consumer. What could go wrong?

Plenty.

First, Dana went in so whole-heartedly that their products were over-engineered. Secondly, consumer products required sophisticated marketing and distribution skills, which Dana lacked. Finally, Dana's customers protested that if Dana became a competitor, they would no longer bu their supplies from it. Chastened, Dana returned to the business it knew best.

Navistar

Navistar (formerly International Harvester) was established in 1901 as a conglomeration of agricultural equipment companies. In 1907, Navistar expanded into truck production with the "Auto-Wagon," and in November 1914, Navistar submitted its first order for Spicer Universal Joints.

A Fort Wayne plant was opened in 1923 for the production of heavy duty trucks, and an Indianapolis plant was erected a few years later for the production of truck engines. In 1928, it began to produce a 4-cylinder heavy truck, and by 1937 it was the top medium and heavy truck producer in the United States. In 1986, International Harvester renamed itself Navistar. And in 1989, working closely with Dana, Navistar developed a 9-speed heavy truck transmission.

3rd vignette

The multinational company

Dana legend has it that once, when Winston Churchill was touring America, raising funds for wa bonds, he met Charles Dana while staying at the Toledo Club. The story goes that the two lead met and stayed up all night, arguing passionately about the future of Great Britain, which Charle Dana believed was fated to an irreversible political and economic demise.

In 1954 Dana ended thirty years of direct transatlantic association by selling his shares of the British company Hardy Spicer. Ironically, when America had been isolationist, Dana had expanded overseas; and now that America was expanding overseas, Dana decided to retrench.

The decision proved ill-timed.

In 1950, the United States produced some 80 percent of the world's trucks, cars and buses. Ov

the following two decades, that share slipped to 35 percent. Dana needed to go abroad, or lose out.

The automotive industry that was emerging around the world owed much to the trade restriction of World War II, which had starved people in regions like South America of the replacement part they needed for their cars. Local entrepreneurs, like Esteban Daneri in Argentina, and Ricardo Albarus in Brazil, began manufacturing the parts themselves, but technology was limited, and quality needed to be improved.

In the 1950s, piston ring manufacturer E. Daneri and U-joint kit maker Albarus wanted to expan into the original equipment market, but it did not prove easy. Their technology was limited and their quality was not sufficient for people like Ford, General Motors and Kaiser who were shippir in parts from the United States and assembling them locally.

Then new trade laws were passed, encouraging the use of local parts. Albarus and E. Daneri recognized that to take advantage of the opportunity they needed access to new equipment anc well-known brand name. While E. Daneri forged an alliance with Perfect Circle, Albarus was introduced to Dana by Ford. In 1954, Dana granted Albarus a Technical Assistance License, an in 1957 Dana traded manufacturing equipment for a 30 percent stake in the Brazilian company.

Instead of trying to run the business from Toledo, Dana trusted their new partner to know about their way around Brazilian business. Autonomous decision making was encouraged, local financing was used for expansion, and costs were kept to a minimum.

This hands-off policy worked well, and both Albarus and E. Daneri expanded rapidly and profitably. Dana started other ventures like Danargen, then moved to Venezuela and Columbia. Soon Dana produced almost their entire range of products in South America. Meanwhile, Dana looked to establish a presence in the world's other major markets. In 1972, Dana established up Spicer drive-shaft plant in Korea, and later in the 1970s Dana took an interest in two English companies, Turner Transmission and Brown Brothers.

Turner was a manufacturing company that contributed to Dana's traditional markets, but Brown Brothers was something new. Brown Brothers was in distribution, and the aftermarket.

The VW Beetle, and Reinz

In 1939, due to recession and war, the number of foreign cars imported into the United States w just 298. By 1959, that number had swelled to 614,131. Led by the Volkswagon Beetle, Europe manufacturers were building dealer networks and customer goodwill across America. They were also earning a reputation for engineering quality and dedicated service.

Reinz, a supplier to Volkswagon and the other leading European car companies, symbolized the European attitude. Demonstrating a tremendous willingness to work with customers, Reinz established an application engineering department to ensure that their products exactly fitted ea customer's needs. Aware of the global nature of the automotive industry, Reinz established facilities in India, Japan, and the United States. Yet costs were kept low, and Reinz's product quality and dedication to service remained high.

Dana Industrial

In 1969, a subtle shift in Dana's stated goal acknowledged the opportunities being created by Dana's engineering and manufacturing know-how. Instead of being a purely automotive compar Dana would expand its horizons to include: "The worldwide design and manufacture of systems for the transmission and control of power."

At first most industrial sales were of equipment evolved through Dana's traditional operations, b soon Dana Industrial was designing equipment specially for aviation, marine, mining, exploratio and agriculture customers.

C.V. Joints

In 1959 Dana acquired Rzeppa, a manufacturer of constant velocity (C-V) joints to the off-highw market. Two years later, while working with Ford on a small car (the Cardinal), Dana people designed and patented a C-V joint suitable for small cars. But this was before the time of the oil crisis, and small cars were small business in the United States. Ford abandoned the project, an Dana stopped development of their C-V Joint.

But small cars grew hugely fashionable in Europe and South America, and the C.V. joint industr integral to small car technology, just grew and grew. Although too late to make a significant imp in Europe, Dana established a South American C.V. manufacturing joint venture with GKN. The partnership proved enormously successful, and became one of Dana South America's most profitable operations.

Divisionalization and the aftermarket

When Spicer had moved to Toledo in 1928, annual sales had been $10 million. Charles Dana, i a fit of optimism, said that he could see sales reaching as high as $12 or 13 million a year. In fa in 1964, he saw company sales top $364 million.

Dana was growing big.

It was not all good news. Sheer size threatened Dana's ability to provide the top quality service prided itself upon, while Dana people were being stifled by the unwieldy, increasingly bureaucra corporate structure. On January 1, 1964, Dana reorganized into seven separately managed divisions.

Each division was responsible for engineering, manufacturing and selling their own product line Five of the seven divisions represented Dana's traditional original equipment manufacturing bas -- but there were also an International Division and the Perfect Circle Corporation.

Dana's acquisitions of Perfect Circle in 1963 and Victor Gaskets in 1966 demonstrated Dana's strategy of diversification within the industry Dana knew best. Both Perfect Circle and Victor we well known distributors of replacement parts to the aftermarket, and both had extensive oversea operations.

The two companies also immediately gave Dana access to the $4.5 billion replacement parts market, where Dana had traditionally lacked the distribution skills and network necessary to mal a real impact. In November 1964, Dana amalgamated its distribution businesses into the Dana Parts Company. Main lines included Monmouth clutches, Triplex pistons, Perfect Circle piston rings, Perfect Circle engine and chassis parts, Allied engine and chassis parts, and Spicer products (such as transmissions, transfer cases, PTOs and propeller shafts).

With more than 100 salespeople in the field, the Dana Parts Company used marketing and sale programs to promote its products, with considerable success. By 1967, the aftermarket already accounted for 18 percent of Dana's sales.

The divisions

The 1964 divisionalization split Dana into seven parallel operations. Along with the International Division and Perfect Circle Corporation, five manufacturing divisions were created -- Spicer, Salisbury, Parish, Atlas and T&G.

Spicer was responsible for truck transmissions, transfer cases, propeller shafts, Power Take Off and C-V and universal joints. Salisbury made clutches, gear boxes, slip differentials, and front a rear axles. Parish was the world's largest producer of heat-treated heavy-duty frames. Atlas ma forgings, connecting rods, cam shafts and other automotive parts. T&G (Transmission & Gear), acquired by Dana in 1961, designed and manufactured automatic and mechanical transmission

Dana Distribution Europe

In 1964, Brown Brothers was experimenting with a new sales strategy. Most its fifty five outlets were still Main Branches, situated in prestigious town center sites, these flagship retail outlets offered everything from supplies to the motor trade to radio and electrical goods.

But twenty-one Brown Brother's branches were now Specialized Service Branches (SSB's), out-of-town depots concentrating on service to the motor trade alone. To Brown Brother's surprise, profitability at the SSB's was far superior to the main branches.

In 1977, in a move symbolic of the shift from town center to out-of-town locations, Brown Brothe left its Central London headquarters for Harlow. With a Distribution Center established at Milton Keynes, Brown Brother's era of specialized distribution had truly begun.

Hayes Dana

In 1960, morale at Hayes Steel, Dana's majority-owned Canadian affiliate, was at an all time low. Over-staffed, over-diversified and wi six years of successive losses, Hayes Steel was such a drain on Dana resources that Dana CEO Jack Martin decided to give it one last chance to get its act together, or close down.

Martin knew it was a tough task -- which made it an ideal posting to test out the new generation of Dana people. He duly sent up a your manager named Ren McPherson, who had done exciting things at Auburn Clutch, and gave him two years to turn Hayes Steel around

McPherson arrived in Canada enthusiastic to revitalize the business, but at first, people at Haye Dana were unimpressed with McPherson's bold ideas. He was just a kid who didn't understand how things were done in Canada. Sure, things were bad, but they had been bad before and Hayes Steel had always pulled through.

A glance at the history of the company showed that.

Founded in St. Catherines in 1922 by C.B. Hayes as Hayes Wheel Company of Canada Ltd., Hayes produced wheels for Durant, Essex, Willys and Grey-Dort, Chrysler and Chevrolet. Desp early success, the company faced financial trouble in 1927. Charles Dana acquired a small stak in the company, whose name was changed to Hayes Wheel & Forgings Ltd. Hayes launched a drive for new products and markets, and it started to manufacture Spicer universal joints, drill bi grinding balls and other mining products.

In 1936, the Depression forced a second reorganization. Re-christened Hayes Steel Products, t company revived and played its role in the Allied war effort, supplying parts for airplanes, tanks and other military hardware. Then, after good times in the early fifties, the company had fallen ir another downturn. Business was cyclical, Hayes Steel people figured, and there was nothing to but shrug and wait it out.

But McPherson had other ideas. Determined to try out some of the Discussion Group ideas fron nearly a decade before, he told his new colleagues about their two-year deadline and suggeste that if they wanted to be around after that, they start solving their problems at once. Hearing grumbles that he was too new to know his job, McPherson moved his top twenty people into ne jobs, so that they were all learning together. Forty-two percent of jobs were cut. Non-automotive operations were sold or closed, causing total sales to plummet. Broken machines were chucked out, and the equipment was reorganized with the help and suggestions of the people who worke them. People took to meeting Saturday afternoons in a local restaurant, Lorenzo's Spaghetti House, to trade ideas and discuss improvements that were put into practice with a tremendous impact on costs and quality.

As the Canadian economy began to boom, work shifts at Hayes started to compete with each

other to see who could produce the best and the most. Salespeople got back on the road, enthusiastic about their product. Demand surged and profits returned, as the sluggish everyday grind was transformed into an exciting chance to achieve.

In 1963, Gerry Mitchell took over as Hayes Steel president and completed the remarkable comeback. By 1966, Dana acquired complete control of Hayes Steel, and rechristened it Hayes Dana. It was the beginning of the new Dana Style.

Ren McPherson

Ren McPherson, Harvard MBA and World War II bomber pilot, joined Dana in 1952 as a sales engineer for Auburn Clutch. Always enthusiastic about Dana's future, he was a key member of t discussion groups. Appointed to Hayes Steel in 1960, he returned to Toledo in 1963, became President of Dana in 1968 and Chairman and CEO in 1972.

"The single most unused asset in our country today," McPherson believed, "is the ability, the knowledge, and the ideas we have but don't use or haven't tapped because of the walls we buil between people." He took this message on the road, visiting Dana plants around the world. Realizing that the "expert in any job is the person performing it," he asked Dana people what th thought, listened intently to their answers -- then acted upon them.

McPherson was committed to profit sharing and stock purchase plans, and took every opportun to encourage Dana people to participate fully in the life of their company. Retiring as Dana CEO 1979, McPherson pursued his passion for education as Dean of Stanford University.

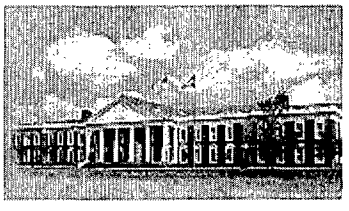
The Scanlon Plan

Conceived in 1938 by Joseph Scanlon, union president at a small Ohio company, the Scanlon plan differed from most incentive schemes in that it rewarded everyone for productivity improvements, whoever was responsible for them. Designed to foster a sense of teamwork and enthusiasm, the plan certainly worked for Scanlon, helping save his company from bankruptcy.

Dana became the first major U.S. corporation to encourage the plan, and in 1969, Perfect Circle plant at St. Thomas, Ontario became the first Dana company to try it. Voted in by more than six out of every seven people working at plant, the experiment worked well, and the plan was re-adopted a year later by an even greater majority.

As more and more Dana plants voted in the Scanlon Plan, so it was refined and adapted to suit Dana's belief that the achievement of common goals is best achieved through the participation c all.

Dorr Street



By 1967, Dana was barely recognizable as the compact company that had come to Toledo nearly forty years earlier. Yet although Dana had become a world class corporation with seven autonomous divisions and annual sales of over $500 million, Dana's worldwide operations were still headquartered alongside Spicer manufacturing operations in the increasingly cramped and inappropriate Bennett Road offices.

While most people agreed that Dana needed a new flagship headquarters to reflect Dana's size diversity and prosperity, there was still some debate about where it should be located. In the en Dana decided not to build a standard town center high rise, but to take the opportunity to build a world headquarters that would suit the emerging Dana style -- a building that all Dana people could look to with pride, as equal partners.

Dana therefore acquired eighty four acres of suburban, greenfield land on Dorr Street, opposite Toledo's famous Inverness Country Club, and began to design the new headquarters.

The 84 acres of undeveloped land at Dorr Street was an empty sheet of paper that offered Dana people an opportunity to address a growing problem. Despite the divisionalization, Dana simply had too many people at corporate level. Instead of improving the decision-making process, over staffing meant that responsibilities had became blurred.

With the move to Dorr Street, then, layers of corporate management were cut out, and people a Dana plants were encouraged to supervise themselves. Twenty inches of Dana policy and procedure manuals were dumped in the trash can and replaced with a single sheet of paper tha articulated Dana's ambitions, attitudes, ideas and philosophy.

A closed-circuit information system was developed and installed in the new headquarters. Instea of having a stack of unreadable, out of date reports on their desks, decision-makers now had a screen from which they could view up-to-the-minute production and financial figures. More detailed information was available behind the doors of the company's "War Room."

As part of the campaign to give Dana people more autonomy and responsibility, a new management reporting system was introduced. Discussion and approval of budgets for all Dana operations was condensed into one week, when emphasis was placed on trends rather than numbers. It was an opportunity for managers to report the results of the previous year, and present their plans and forecasts for the future. Managers were told not to prepare reams of paper, but simply to be prepared to answer any questions. The climax of Hell Week was a mass meeting held in "The Pit," a multi-tiered auditorium modeled after a lecture room at Harvard Business School. Known as the Ottawa meeting, it was an opportunity for Dana leaders to address their managers, reward outstanding performance, encourage internal competition and build team spirit.

Along with the Pit, Dorr Street was built with one other feature not found at too many corporate headquarters. A University.

Stock purchase plans

In the early 1960s, Dana people were encouraged for the first time to buy Dana stock. And as their responses increased, the program was intensified. Owning Dana stock made Dana people concerned with Dana's progress, and showed their interest in the Dana's future.

In 1969, the first corporate-wide Employee Stock Purchase Plan was announced, through which 28 percent of Dana people signed up for a payroll-deduction purchase of Dana stock. Dana assumed all brokerage and administration costs, and plant managers handed out stock certificates in person twice a year. When the program started, two percent of Dana people owne stock. By 1980, 80 percent of Dana people owned Dana stock.

Inverness, and 1979 US Open advertising.

The Inverness Club of Toledo, site of the 1920 US Open, was chosen as the site of the 1979 US Open. Frank Voss, Dana's Director of Communications, was appointed General Chairman of the event, and Dana marked the historic occasion by launching a series of print and television corporate advertisements.

These advertisements were the first time Dana had shown the public the Dana Style. Using Dar adages like "Talk Back To The Boss" and "The Only Dumb Questions Are The Ones You Don't Ask," the campaign attracted attention throughout the tournament (which, incidentally, was won Hale Irwin).

Dana University

The Dana Style gave Dana people the power, desire, tools, and opportunity to contribute to the success of their company.

Power was coming from the new autonomous operating style, which acknowledged Dana peopl as the experts at what they did. Desire was being built through schemes like the Stock Purchas Plan and the Scanlon Plan, which encouraged Dana people to own a piece of their rock. Tools were being provided through investment in new products, plant and equipment. Opportunity wa being created through a commitment to promote from within.

One element was still required -- the training and education that would give Dana people the ski to maximize their contribution to their company.

Education was nothing new at Dana. In the 1920s, Charles Dana introduced management seminars, and many of the resources of the Foundation he founded were dedicated to educatio In 1948, Dana training programs were organized, and an Industrial Supervision Institute was established with the University of Toledo to educate Dana people for prospective supervisory positions.

But Dana's education program was transformed in 1966, when Dana worked closely with faculty members at the Harvard Graduate School, Hillsdale College and Earlham College. Together the established a range of programs specifically designed to help Dana people achieve their corporate goals.

In 1969, Dana University was founded, offering courses in management, sales, cost control and other subjects. Taught by both professional educators and qualified Dana people, courses often ran 12 to 14 hours a day for a week. "Dana U" met with great success. Programs were expande and curriculums were adapted according to demand. Like all Dana operations, Dana U was self financing. Tuition and travel costs were paid for by the divisions for which the students worked, and students were expected to return from their courses with skills that would improve their wor

In 1978, the Dana U Technical School facility was completed at Ottawa Lake, Michigan. Design to increase Dana people's understanding of and control over the physical processes of manufacturing, the Technical Center included a 1.75-mile, three-lane test track and 3.5 miles of off-highway surface.

The Dana Foundation

Charles Dana was a substantial benefactor of education as early as 1950, when he established 1950 the Dana Foundation to help those "who accept and discharge responsibility for a better future." Concentrating on education, health, welfare and religion, the Dana Foundation philosop was to provide substantial funds for organizations with plans for growth. The Dana Foundation contributions would then act as a stimulus to challenge other donors. Early gifts helped build a Law Library at Stetson University, accommodations at Berry College and a science building at Indiana Technical College. In 1957, the Dana Foundation presented a gift to the Engineering Science Development Fund at the University of Toledo.

Later, Dana Corporation established its own foundation. Using a matching gift program, the Dar Corporation Foundation continued Dana's tradition of supporting education. The program was designed "to encourage individual financial support of educational institutions," by matching any donations made by Dana people.

Hillsdale College

Hillsdale College, Michigan, was an ideal partner in developing Dana's management skills. Conveniently located in the heart of motor country, Hillsdale made it a policy never to accept government subsidies, and to finance itself entirely from private funds. As a consequence of this Hillsdale people understood the pressures and dynamics of business, and recognized that any education programs would have to provide Dana people with a tangible benefit.

Called the Dana-Hillsdale Management development Program, each course was open to 16 or Dana people. In place of lectures, everyone engaged in managed discussions. Leadership skills were learned by participation and practice, not by discourse. Communication, perception,

management philosophy, delegation and motivation were all covered, as were the conduct of meetings, public speaking, problem analysis and decision making. Headed by Hillsdale Presidei J. Donald Phillips and Mike Kolivosky, the program had a dramatic impact on many Dana peopl

Beating the cycle

In 1979, the economy was booming, the automotive market was growing, and Dana was outperforming both. Dana's investments in education, communication and diversification were paying off. New plants were being opened worldwide, and Dana employed 30,000 people in the United States alone. Total sales were at $2.8 billion, an all-time high. The only problem was producing enough to meet demand.

Then the bottom fell out of the automotive industry. Demand for Dana's core product lines fell by half. Dana people fought for all the business they could get, becoming market-oriented rather th product-oriented. Productivity and quality at many Dana plants rose. When European manufacturers made deeper inroads into the North American heavy truck market, Dana responded by designing clutch models for Renault, Volvo and Hino trucks.

But still, plants were closed and jobs lost. Dana did what it could to relocate its people to other divisions, while helping others through outplacement programs. Dana also took opportunities foi growth whenever possible, acquiring Boston Industrial Products and Gresen in 1981.

New CEO Gerry Mitchell and President Stan Gustafson undertook a furious schedule of visiting Dana plants. Docking bays were transformed into conference halls, equipped with chairs for all Dana people, so that they could ask questions and be kept informed. Times were tough, but Da people proved their mettle. Through the recession, while many American automotive companies reported staggering losses, Dana stayed in the black.

The economy began to revive in 1983, and Dana determined to make itself less vulnerable to future recessions by becoming invaluable to customers. That meant designing proprietary products with a distinct advantage, then delivering them with unmatched service.

A capital spending initiative was launched in 1984, with a record investment of $200 million. In t same year, Project 90 was introduced, as Dana people committed to become leaders in technology, quality and low production costs. Patent applications reached an all-time high. Total Quality programs set ambitious goals for Dana people, while Dana placed greater emphasis on education and training than ever before.

The thrust to diversify continued. Acquisitions were made overseas and in the aftermarket, while the Venture Group took Dana into leasing, real estate, building systems, insurance and savings loans. Meanwhile, Dana continued to run lean. In place of the twelve layers of management tha had been standard in 1970, there were now just five or six. And the number of supervisory positions was constantly being pared.

In place of the large, centralized manufacturing facilities, Dana kept plants small, flexible and technically advanced, and located them near customers. Excellence in Manufacturing and Excellence in Distribution objectives were introduced, emphasizing continuous improvement in quality and productivity. Just In Time delivery schedules were introduced, so that Dana custome wouldn't need to warehouse expensive inventory.

The results of these programs spoke from themselves, as Dana sales rose from $2.5 billion in 1980 to $4.85 billion in 1989.

Gerry Mitchell

Gerald B. Mitchell would be the perfect example of the American dream -- if he weren't Canadia After joining Hayes as a machine operator in 1944, his infectious enthusiasm marked him out fo rapid advancement. Appointed President of Hayes Steel in 1963, he moved to Toledo in 1972, a an executive Vice President.

Appointed CEO of Dana in 1979, Mitchell's energy helped Dana through the recession, and his vision enabled Dana to make the most of the subsequent boom. His dedication to competitive products, quality control and customer service encouraged Dana to keep its plant sizes small, a adopt Just in Time policies long before they became popular.

Mitchell was dedicated to the belief that people were Dana's most important asset. He visited some 50 Dana plants every year, and once spent 36 hours talking to every single one of 1,800 employees at a North Carolina plant.

Nothing Venture, Nothing Lose

The General Ohio Savings & Loan Corporation (renamed Diamond Savings & Loan) was acquir by Dana in 1981 as an extension of the Venture Group, Dana's shelter & security division. The Venture Group offered services to Dana operations, but most of its business, which included insurance, reinsurance, leasing and personal finance, was done outside of Dana.

The troubles of the whole savings & loan industry became more and more apparant through the 1980s, finally provoking a national crisis. Biting the bullet in typical fashion, Dana made provisio against reserves and sold Diamond Savings & Loan's assets, as well as its mortgage banking business.

Gresen

Founded in St. Paul, Minnesota, in 1945 by Gordon Jensen and Leo Grzesowski, Gresen's first major order was for 2,000 pump-and-valve combinations for Sears, Roebuck front-end loaders. 1947, the company introduced the Model C Power Pack, which both improved the pump-valve combinations and represented the start of Gresen's hydraulic business. The Model C was later adapted into the Model KJ, a three-gear hydraulic pump designed for power take-off application The KJ also concentrated on separate hydraulic components, leaving pump-valve combinations the competition.

In 1948, Gresen extended its services to include bronze agricultural spraying pumps. And as business expanded, so did the company's need for space. In 1957, it built a new facility. But tho weren't the only transformations the company experienced. In 1963, Gresen was bought by Tor Corporation, and in 1981 it was acquired by Dana.

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People Finding A Better Way®

History

SECTION 3: Moving into the Future

SCENE SETTER

The key to continuing prosperity is to move with the times. History is littered with the bones of those who tried to prevent progress, and failed. As the world leader in steam propulsion during t 1860s, for example, Britain might have expected to pioneer many of the automotive advances th in fact were made on continental Europe and in America over the following decades. But British railroad and stage-coach companies recognized that the automobile was a threat to their future, and lobbied for the notorious red flag laws. These prohibitive laws, which insisted every self-propelled vehicle be preceded by a pedestrian waving a red flag, were on the statute books for : years. By the time they were repealed, Britain had missed a huge opportunity.

In America, on the other hand, threatened transport companies became automobile companies, adapting their existing know-how to the challenges of the new industry. As a result, the America automotive industry boomed.

The world's going to change, whatever we do. The key is to be prepared for that change, whenever and however it comes. The electric car, for example, has been debated and promote for more than a hundred years. But never before has a government insisted on zero emissions, California's has. Similarly, the greatest market in the world within the next thirty years may well prove to be in the Asia-Pacific rim, rather than in North America. We have to be ready for these and other changes. We have to embrace them, and work with them, before others do.

Companies that don't progress, that simply watch their products or service mentalities become obsolete, will themselves soon become obsolete. That won't happen at Dana. We're not invincit but we're strong. I say this with confidence, because strength comes from people, and Dana people are the best.

Fall and rise

In the 1960s and 1970s, when the Dana Style first emerged, some skeptics believed that giving people responsibility and power was fine in theory, but that it couldn't actually work for the botto line. Now barely a week passes without some self-appointed management guru"discovering" wh Dana has been proving for decades.

It's people that count. Numbers are just there to be counted.

The incontrovertible truth of this was finally brought home to the leaders of the American automotive industry by the heavy losses they incurred through the recession of the early 1990s. For too many years, the Big Three had been competing against each other, focusing on annual model changes and horsepower, while ignoring the trend toward small cars.

At the same time the dollar was growing too strong against the German mark and Japanese yer Imports were consequently getting cheaper and cheaper, until finally they were out-performing domestic cars on quality, design and cost. Things got so bad in the United States that sales wer

being made on habit and loyalty, not merit.

Forgetting that quality controls had been introduced by Cadillac, Big Three managers shrugged their problems away. Instead of trying to improve their own processes, they simply muttered tha the strict company ethic and dedication to quality they saw in Japan and Germany could not be imposed on their work-force.

Then Honda and Toyota opened up transplant facilities in the United States. Using American labor, they still they out-performed the Big Three. It was time to think again.

When Detroit began to study its Japanese competition, it got a surprise. Instead of unthinking, soulless hierarchies, it found groups of enthusiasts motivated by a desire to do well -- people proud of their company and their product, and excited by the opportunity to contribute.

Detroit had been imposing its ideas from the top down. Now, it gave its front-line people power and responsibility, decentralizing decision-making and making its people want to achieve. Detro boomed, producing exciting, reliable automobiles that sold at competitive prices and earned the Big Three the quality reputation they had let slide. Confidence rose again, and sales and profits soared.

The irony was that Detroit hadn't needed to look to Japan for the secret of lean production. It wa on display at Dana, all the while.

The Chrysler big dipper

In July 1993, Robert Eaton, Chairman and CEO of Chrysler, gathered together 500 of his top people and announced that the company had just posted the best quarter-results in a decade. H read out loud extracts from newspaper articles, praising the remarkable turnaround at Chrysler. Eaton then informed his people that each of the articles was about past comebacks. They had appeared in 1956, 1965, 1976 and 1983.

Death-bed recovery was becoming a habit at Chrysler, and Eaton was determined to break it."I got a better idea," he told his people."Let's stop getting sick."

Dana Credit Corporation

With the building of new, dedicated offices at the Dorr Street campus, Dana demonstrated its lo term commitment to the Dana Credit Corporation (DCC). The only part of the Venture Group to make an outstanding contribution to Dana, DCC celebrated 1994 by finally selling all discontinu Venture Group assets and winning an unprecedented ninth Dana Gold Star for performance.

By 1995 DCC had become one of the largest leasing companies in the United States. Including operations in Canada and England, DCC had over $1 billion in assets and 450 people. Its prima business was large ticket transactions, whereby DCC bought properties such as Bell Atlantic's H or a KLM 747, and leased them back to their operators. DCC also engaged in joint ventures, sm ticket lease financing, off-lease equipment disposal, asset management and real estate service

Dana, 1990s Style

The recession that hit the automotive world so hard in the early 1990s was inevitably felt by Dar even though Dana was better prepared than most for a downturn. Dana's overseas and aftermarket sales helped buffer the drop in demand for original equipment, as did Dana's dedication to continuous improvement, lean production, inventory control, just-in-time delivery, idea sharing and total quality assurance.

Southwood J. Morcott, named CEO in August 1989, led a new team of Dana people into the 1990s. One of the teams first acts was to devise and publish a ten-year mission strategy titled Dana 2000, which set out five clear targets for Dana people to hit by the end of the millennium. Along with Dana 2000, a fresh continuous improvement scheme was implemented, asking each

Dana's people to come up with two ideas a month to improve the way Dana did business.

As a result of these initiatives and the endeavors of Dana people, Dana reported operating profi each year of the downturn (although a change in pension accounting procedure led to a reporte loss in 1992). Dana put its financial stability to good effect, continuing to acquire companies worldwide, develop new products, and invest in process and service technology, preparing for better times.

In recognition of Dana people's achievements, and in keeping with Dana's philosophy, Dana adopted a new corporate slogan, which articulated the central principle of the Dana Style. It stated, simply:

People Finding A Better Way.

In 1992, the North American original equipment automotive market bottomed out and began to recover. A surge in the popularity of Sport Utility Vehicles, the growth of modular systems and a string of acquisitions (made in accordance with Dana 2000 strategies) enabled Dana to post a series of impressive results. In 1993 sales rose by almost $600 million. In 1994, sales rose by a astonishing $1.1 billion -- an increase greater than Dana's total 1974 sales. Profits rose even faster. From $56 million in 1992, they rose to $129 million in 1993 and $228 million in 1994.

As in previous booms, the problem was how to meet demand by improving new plants and productivity. Dana built green field facilities and invested heavily in equipment and recruitment. Dana made an equal investment in its people through training and education.

But Dana was not only growing larger, it was also growing complex. As the largest independent supplier of vehicular components in North America and the third largest in the world, Dana's hac more than forty proprietary brand names supplying drive-train, engine, chassis, fluid power, industrial components, parts distribution and leasing. Dana had some brands that many customers didn't realize belonged to Dana. As a result, opportunities to leverage and enhance Dana's reputation were being missed.

In 1995, therefore, Dana cut the number of proprietary brand names and standardized the use c the Dana name and Dana Diamond. Only the core brand names, responsible for 90 percent of Dana sales, remained untouched.

New product development

New products are like babies. At times it seems they're nothing but trouble, taking up all our tim keeping us up at night and requiring unbelievable amounts of cash. Life would be a lot easier without them. So why do we bother?

Because they're the future, and we love them.

The Automate-2 and Spicer Solo were two new Dana products that made 1994 a particularly fruitful year. The Automate-2 was an award-winning electronic transmission that shifted automatically between the heavily used top two gears. Reducing strain on driver and drive-train alike, the Automate-2 was named the"Most Significant Product" of 1994 by the Truck Writers of North America.

Dana also proved its sensitivity to consumer needs. Following a survey of 2,500 fleet managers and drivers, Dana developed the break-through Spicer Solo clutch that automatically readjusted prevent slippage, cutting replacement and labor costs.

Dana 2000

- The Dana Style Will Be Fully Implemented.
- Dana Will Be a World Leader in Quality, Service and Technology for Each of Our Products.

- Dana Will Obtain 50 Percent of Our Total Sales from Distribution Markets.
- Dana Will Obtain 50 Percent of Our Total Sales Outside the United States.
- Dana's Financial Performance Will Consistently Exceed the Standard and Poor's 500.

Two ideas a month

The 1990s showed Dana more committed than ever to the concept of continuous improvement through people involvement. Asking for two ideas a months from every Dana person, Dana sou to implement a minimum of 80 percent of all suggestions. The accumulated improvements gave Dana a tremendous competitive boost.

Idea sharing is not new to Dana. This verse appeared in Spicer's Driveshaft magazine, in 1923:

You have a dollar.
I have a dollar.
We swap.
Now you have my dollar.
And I have yours.
We are no better off.
***
You have an idea.
I have an idea.
We swap.
Now you have two ideas.
And I have two ideas.
***
That's the difference

Global Dana

With 40,000 people working in 445 facilities around the world Dana had, by 1995, established itself as a true competitor in the global automotive industry. Which is the way it had to be, becau for a company the size, strength and ambition of Dana, being global was not a luxury -- it was a necessity.

The world market had changed a lot since Clarence Spicer first set up his stall in Plainfield, New Jersey. In place of a multitude of small manufacturing operations in America and Europe, a sele number of independent car giants operated around the globe. Vehicles were so sophisticated, manufacturers could no longer buy standard components. They forged closer and closer relationships with their suppliers, pooling their engineering expertise to develop breakthrough products. Supply had become a team effort, and if Dana hadn't been global, Dana wouldn't have been on the team.

As an added benefit, relationships developed in one market paid back in another market, allowi Dana to grow with its customers. One example was Japan, where Dana first established a presence in 1970. As Japanese car manufacturers prospered worldwide, so Dana's contacts wi them grew more important. For example, in 1994, Dana was contracted to produce frames and shafts for Toyota light trucks in Argentina.

An American company producing components for a Japanese company, in South America. Tha was the nature of the global market.

At the same time as the automotive business was turning global, there was a worldwide trend to free-trading blocks. In Europe, Asia-Pacific and South America, the growth of these regional markets boosted trade, and consequently improved local productivity, pay-packets and purchas power. Companies that aimed to be world class needed to supply not just nations, but whole continents.

As automotive companies expanded geographically, they needed to simplify their structure and

focus on their core business. In-house manufacture was out. Out-sourcing was in. Car compani keen to reduce the thousands of small suppliers they dealt with directly, appointed a series of"First Tier Suppliers," responsible for supplying whole, pre-assembled systems.

Dana's size, experience and commitment made it ideally suited to become a First Tier supplier, and in 1995 the Spicer Modular System Group was formed to maximize Dana's ability to provide customers with this service.

Finally, there was one other excellent reason for Dana to become global. By 1995 Dana was already the largest supplier of automotive components in the United States. Yet it was only the fourth largest worldwide. Put simply, if Dana wanted to be number one in the world, the world w where Dana had to go.

Asia Pacific

Dana's presence in the Asia Pacific dates back to 1972, when a joint venture agreement was signed with the South Korean Shinjin Group. Korea Spicer started as a relatively small operatio while a 50,000-square-foot state-of-the-art facility was being built. Early axle and Driveshaft customers like GM Korea and KIA were soon added to as Korea Spicer gradually extended its product line and began to export. Further expansion in the region over the following few years included acquisitions in Taiwan, Japan, Thailand, Australia and Indonesia.

With half the world's population and half the world's output, Asia Pacific quickly became an integral part of Dana's global market. The future of the region may be even more dynamic. In 1995, five of the region's nations -- China, Indonesia, South Korea, Thailand and Taiwan -- were forecast as likely to become top-ten world economic powers by 2020.

Sport utility vehicles

Market surveys have been done to rationalize it. Anthropologists have been commissioned to explain it. But the recent boom of rugged, four-wheel drive Sport Utility Vehicles like the Jeep Grand Cherokee or Ford Explorer, has not taken place in the countryside, but in America's cities and suburbs. The predominant use of these tough four-by-fours is not off-road bumping and climbing but commuting.

And, according to the experts, America's love affair with Sport Utility Vehicles will continue. Wor leading companies such as Mercedes-Benz, Toyota and Isuzu built a significant presence in the market, convinced that"Sport Utes" would thrive in North America as long as fuel prices remaine low. The market was also expected to grow in South America and Asia Pacific, where the rugge terrain and low fuel costs provided an ideal environment. Which was all good news for Dana people, who have been involved with the Sport Utility Vehicle from its inception.

Dana Distribution

As with its drive to global expansion, Dana's incentive to build a presence in replacement sales owed much to its desire to protect earnings from the violent cycles of original equipment market And as with global expansion, the Dana Style soon proved itself ideally suited to distribution.

The key to the replacement sales market was efficient distribution, and the key to distribution we people -- people well trained in the latest technologies, able to provide specialized engineering support and willing to travel the extra mile to serve their customers.

In short, Dana people.

At first, after the acquisitions of Perfect Circle and Victor in the 1960s, Dana Distribution had delivered a wide range of Dana's proprietary replacement parts to retail outlets in the North American aftermarket. But with the communication and delivery network that Dana Distribution built worldwide, Dana became a sophisticated, independent global distributor, serving other part manufacturers as well as Dana.

The breadth and ambition of Dana's global distribution operations were well demonstrated by th progress of Dana Distribution Europe. Before the emergence of the single European market, the different community countries were separated by language, legislation, trade names and border customs. Parts distribution was necessarily a national business.

But as soon as a single, unrestricted market emerged, a European network became both possit and desirable. Dana was the first company to recognize the opportunity, and assembled a distribution network that covered the United Kingdom, and much of Holland, Portugal and Franc supplying the automotive and truck aftermarkets with paint, parts, accessories, tools and equipment.

The wide range of goods and the geographic scope of the operations demanded exemplary inventory control. Dana therefore invested in a sophisticated satellite communications system a a state-of-the-art Distribution Center. Customers were linked on-line with Dana so that their re-ordering became automatic.

By 1994, the Dana Distribution Center at Milton Keynes, England, was delivering daily to 110 owned Branch outlets, and more than 600 independent customers.

Distribution Technology

Technology is essential to supplying customers and responsively serving them. Dana Distributic Europe shows how committed Dana is to upgrading communications equipment, as new technology becomes proven and available. In 1981, a real time on-line computer system was installed across Dana's branch network. The system controlled inventory, ran point-of-sale transactions, and re-ordered products automatically. In 1989, Counterpart was first sold, offering independent jobbers a computer system that linked them to the Distribution Center.

In 1991, the year that Dana became the UK's largest independent distributor, an EDI program w introduced to improve productivity and speed up the ordering process. By 1994, satellite facilitie had been introduced, giving Dana Distribution Europe an even greater competitive advantage.

FleetTuf

FleetTuf, a new generation of aftermarket chassis parts, was developed in response to custome desire for ball-joints, tie-rod end and idler arms that could withstand an off-road battering in a ful loaded truck. FleetTuf parts, which in standard tests proved twice as durable as the next best brand, were engineered by Dana's Aftermarket Products Division and distributed through Dana's Automotive Distribution Sales and Parts Craft Divisions.

People Finding A Better Way

And the future?

That the future will bring change is certain. But some things at Dana may prove just as certain.

The Dana Style is not something dreamed up out of nowhere by a Policy Committee, and imposed upon Dana People. Companies have personalities, just as surely as people do. The Dana Style has come from Dana people, and its aspects have been visible at Dana for upwards seventy years.

Education, communication, idea sharing, and a hatred for too much management and paper ha been part of the way Dana has done business since 1920. In engineering and manufacturing, tc the Dana Style has been around for generations. From the outset, Dana people were committec to the highest quality products, processes and service.

They were also dedicated to"continuous processes of refinement," that were equivalent to today continuous improvement. They prided themselves at working with the customer, ensuring there

was the "constant cooperation" between Dana and automotive engineers that has ensured Dan products have been market leaders for decades.

So maybe the future won't be so unlike the past.

In 1925, when Dana Corporation was twenty-one years old, Clarence Spicer wrote a brief histor about Dana's coming of age. Called"Our Majority," the story had as an appendix the names of a Spicer people with ten years service or more. Their years of service were also detailed.

The dedication remains as appropriate today as it was some seventy years ago.

"The present success would have been entirely impossible except for the loyal, whole-hearted support of my helpers within the Spicer Organization. These have toiled incessantly, often night as well as days, to make Spicer Universal Joints what it is today both within and without the organization."

Whatever changes the future may bring, there's one phrase that will clearly remain timeless -- a accurate observation of the qualities that make Dana the company it is.

- Introduction
- Section 1: Laying the Foundation
- Section 2: Coming of Age
- Section 3: Moving Into the Future

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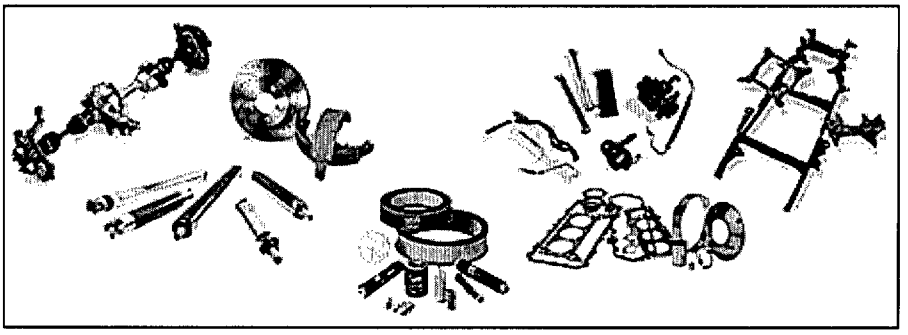
People Finding A Better Way®

Dana's 9 Core Products

Dana's nine core products center on the development, design, and manufacture of axles, drives structures, brake and chassis products, fluid systems, filtration products, and bearings and seal products. Each has a strong market position; provides value-added manufacturing; and is techr advanced, possessing features that are both unique and patented.

These foundation businesses serve the production and service sectors of Dana's three basic m automotive, commercial vehicle, and off-highway; and the components they produce can be co form a wide array of complete modules and systems.



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People Finding A Better Way®

News Release

Contact: Gary Corrigan
419-535-4813

Dana Corporation Completes Sale of Non-Core Businesses

Toledo, Ohio -- Nov 18, 2002 --

Dana Corporation (NYSE: DCN) announced today that it has completed the sale of several non-core businesses to The Riverside Company, a leveraged buyout firm.

Proceeds from the sale were approximately $33 million, and the transaction was not material to the company's results of operations. Terms of the transaction were not disclosed.

The businesses involved in the transaction are:

- Tekonsha Engineering Company, located in Tekonsha, Mich.,

a manufacturer of aftermarket electric brake controls and related products for the recreation, agricultural, and trailer markets. This transaction included Dana's SurePull Products facility in Sheridan, Ark., which produces hitches and towing accessories;

- Theodore Bargman Company, located in Albion, Ind.,

a manufacturer of exterior illumination products, electrical accessories, and locks and latches; and

- American Electronic Components, Inc., located in Elkhart,

Ind., a manufacturer of sensors, switches and relays.

The combined operations employ nearly 700 people and had total

sales of $81 million in 2001.

Dana Corporation is one of the world's largest suppliers of components, modules, and complete systems to global vehicle manufacturers and their related aftermarkets. Founded in 1904 and based in Toledo, Ohio, the company operates some 300 major facilities in 34 countries and employs approximately 70,000 people. The company reported sales of $10.3 billion in 2001. Dana's Internet address is www.dana.com.

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People Finding A Better Way

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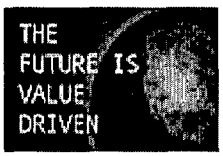
ASG News Room



Core Values

Modules & Systems
Design for Environment
Alternative Fuel Vehicles
Speed to Market
Weight, Strength & Durability
Noise, Vibration & Harshness

Product Groups

Modules & Systems Integration
Axle Products
Brake & Clutch Actuation
Driveshaft Products
Steering & Suspension Products
Structural Solutions

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10/21/02 - Dana Corporation Wins Fourth IndustryWeek 10 Best Plants Award

10/09/02 - Dana Corporation Celebrates Groundbreaking for Automotive Systems Group Technology Center

10/08/02 - Dana Corporation to Supply Driveshafts, Rear Axles for Nissan Frontier and Xterra in Brazil

09/12/02 - Automotive Hall of Fame Names 2002 Young Leadership and Excellence Award Winners

08/29/02 - Dana Corporation Venezuela earns ISO 14001 Certification

08/29/02 - Dana Corporation Acquires European Driveshaft Operation

08/27/02 - Dana Venezuela's Traction Technologies Facility received a recommendation to be certified as ISO-14001

08/09/02 - Dana Executive Advocates Combination of Lean Practices and New Technologies to Move Closer to

08/08/02 - Dana, GKN Win European Hydroforming Business for Land Rover

07/30/02 - Environmental Recognition Award for Structural Solutions Facility

06/19/02 - Dana Corporation Realigns Automotive Systems Businesses

06/17/02 - Dana Corporation to Supply Torque Management, Traction Technologies for Lincoln Aviator

06/10/02 - Dana Corporation to Supply Axles, Driveshafts, & Full Frames for new Generation of GMC Savana, Chevy Express Vans

05/20/02 - Dana Corporation to Supply Independent Rear Suspension Systems for Ford Falcon in Australia

05/20/02 - Dana Europe Facility Obtains QS-9000 Certification

05/10/02 - Dana Begins Providing Technologically Advanced Hydroformed Structural Systems for the 2003 Ford Expedition and Lincoln Navigator

04/30/02 - DANA CORPORATION'S TORQUE MANAGEMENT FACILITY EARNS CCME POLLUTION PREVENTION AWARD

04/19/02 - DANA CORPORATION INTEGRATES LIGHT AXLE, DRIVESHAFT BUSINESSES AS PART OF CUSTOMER-FOCUSED REALIGNMENT

03/28/02 - DANA'S FORT WAYNE FACILITY EARNS ISO 14001 CERTIFICATION

03/18/02 - DANA TO SUPPLY TRACTION AND TORQUE MANAGEMENT TECHNOLOGIES FOR TWO NEW JEEP® MODELS

02/14/02 - DANA CORPORATION'S ADVANCED TRACTION TECHNOLOGIES SAVE SPACE, IMPROVE HANDLING FOR 2002 RANGE ROVER

01/22/02 - DANA TRACTION TECHNOLOGIES GROUP IMPLEMENTS ADVANCED REAL-TIME QUALITY TRACKING SYSTEM TO DOMESTIC AND GLOBAL SUPPLIERS

01/08/02 - DANA CORPORATION TO SUPPORT 2003 DODGE VIPER WITH HIGH-PERFORMANCE, ADVANCED TRACTION TECHNOLOGIES

12/19/01 - DANA CORPORATION'S DRIVESHAFT PRODUCTS GROUP CHANGES NAME TO REFLECT BROADER RANGE OF TECHNOLOGY

12/18/01 - DANA CORPORATION SELECTED AS 4WD SYSTEM SUPPLIER FOR 2002 FORD ESCAPE IN TAIWAN

12/14/01 - DANA CORPORATION DRIVESHAFT, ENGINE PRODUCT FACILITIES EARN COMMONWEALTH OF KENTUCKY'S TOP QUALITY AWARD

12/13/01 - DANA UNIT RELEASES REAL-TIME QUALITY TRACKING SYSTEM TO SUPPLIERS

12/12/01 - DANA TRACTION TECHNOLOGIES GROUP OBTAINS ISO 14001 CERTIFICATION FOR TEN OF ITS GLOBAL FACILITIES

12/11/01 - DANA CORPORATION SELECTED AS 'BEST OF THE BEST' AMONG AXLE SUPPLIERS IN INDUSTRY SURVEY

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11/12/02 - Do you have what it takes to manage a super NASCAR team? You'll get your chance in 2003!

11/11/02 - Dana Brake and Chassis Named 2002 Silver Progress Towards Excellence Award Recipient

10/25/02 - Wix Filter Drag Racing Update

10/07/02 - Raybestos® Brand Brakes Receive 2002 Parts Plus "Partner of the Year" Award

09/18/02 - Could Someone You Know be the 2003 Victor Reinz Machinist of the Year?

08/23/02 - Three More Years!

08/22/02 - Greatly Enhanced Late Model Coverage in New Clevite 2002 Master Engine Parts Catalog

08/19/02 - Wix Filters Drag Racing Update

07/23/02 - BWD Awards Scholarship to Woman in Ford/AAA National Auto Repair Championship

07/12/02 - Clevite Engine Builder Showdown to air Sunday on Fox Sports Net

07/01/02 - Borg-Warner Brand Backed With "No Comeback Guarantee" For High Tech Replacement Products

07/01/02 - BWD Automotive Seeking Applicants for Legacy Scholarships

06/21/02 - Wix Awards Scholarships and Funding to FFA Chapters

06/17/02 - Wix Filters Earns Top Supplier Award From Aftermarket Auto Parts Alliance

06/13/02 - Dana Brake Parts Canada, Inc. Honored with 2002 Guelph Environmental Award for Excellence in Waste Management

05/31/02 - Wix Enters Product Sponsorship Agreement with Hendrick Motorsports

05/30/02 - Wix Filtration Products wins the CARQUEST Order Fill Award

05/24/02 - Raybestos® Brand Brakes Signs Indy Driver Sarah Fisher

05/23/02 - Victor Reinz has been named the 2001 CARQUEST Vendor of the Year

05/22/02 - Josh Starcher Advances to Semi-finals at IHRA Summer Nationals

05/08/02 - Wix Filters Drag Racing Update

05/06/02 - DANA BRAKE AND CHASSIS NAMED FEDERATED OUTSTANDING VENDOR OF THE YEAR

05/06/02 - BWD AUTOMOTIVE AND PERFECTION HY-TEST CLUTCH ANNOUNCE NEW ALLIANCE FOR BORG WARNER BRANDED CLUTCHES

05/06/02 - WIX OFFERS DRIVERS A BREATH OF FRESH AIR WITH EXPANDED LINE OF CABIN AIR FILTERS

04/30/02 - FEDERATED AUTO PARTS AWARDS BWD AUTOMOTIVE AS VENDOR OF THE YEAR HONORABLE MENTION

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04/05/02 - ROUND 4 OF CLEVITE ENGINE BUILDER SHOWDOWN USHERS IN NEW CHAMPION AND NEW ENGINE BUILD RECORD

04/03/02 - Dana Engine Management Division Receives ISO-14001 Registration

03/21/02 - ROUND 2 RESULTS OF CLEVITE ENGINE BUILDER SHOWDOWN 2002

03/07/02 - Dana ANCOM Receives Best Supplier Award from General Motors

03/05/02 - TOM O'BRIEN NAMED VICE PRESIDENT OF MARKETING FOR DANA BRAKE AND CHASSIS

03/04/02 - WIX BRAND WEB SITE WINS MERIT AWARD FROM ASSOCIATION FOR WOMEN IN COMMUNICATIONS

02/26/02 - RAYBESTOS® BRAND BRAKES PRESENTED WITH THE 2001 PARTS PLUS PARTNER OF THE YEAR AWARD

02/21/02 - RAYBESTOS® BRAND BRAKES AND MIKE DITKA TEAM UP FOR BRAKE PROMOTION

02/20/02 - CLEVITE NAMED PREFERRED PARTNER BY JASPER ENGINES & TRANSMISSIONS

02/20/02 - WIX FILTERS EARNS VENDOR OF THE YEAR AWARD FROM O'REILLY AUTO PARTS

02/19/02 - GENTLEMEN, BUILD YOUR ENGINES!

02/12/02 - DANA ENGINE MANAGEMENT LEARNING CENTER RECEIVES RE-CERTIFICATION

02/06/02 - BECK/ARNLEY WORLDPARTS EARNS MAGAZINE'S READERS' CHOICE AWARD

02/04/02 - WIX FILTERS DRIVES RACE FANS INTO AUTO PARTS STORES WITH INNOVATIVE NASCAR PROMOTION

01/25/02 - Borg-Warner Brand's New Ignition and Electrical Engine Management Catalog for Late Model Vehicles is Here

01/17/02 - WIX FILTRATION PRODUCTS EARNS ISO 14001 REGISTRATION FOR ALLEN AND OKLAHOMA CITY PLANTS

01/16/02 - CLEVITE ENGINE PARTS AWARDS THE RACE WEEKEND TO END ALL RACE WEEKENDS

01/11/02 - WIX FILTERS EARNS TOP SUPPLIER AWARD FROM AFTERMARKET AUTO PARTS ALLIANCE

01/04/02 - BWD Automotive Revs Up the Holidays for Needy Children

01/03/02 - COULD SOMEONE YOU KNOW BE THE NEXT VICTOR REINZ MACHINIST OF THE YEAR?

12/20/01 - RAYBESTOS® BRAND BRAKES ANNOUNCES PROMOTIONAL CAMPAIGN FOR 100-YEAR ANNIVERSARY IN 2002

12/07/01 - DANA BRAKE AND CHASSIS PRESIDENT TELLS INDUSTRY GROUP THAT AUTOMOTIVE AFTERMARKET IS EXCITING AND DYNAMIC INDUSTRY

12/05/01 - "CEEK" AND YE SHALL FIND CLEVITE ENGINE PARTS BRINGS ENGINE KIT CATALOGING ONLINE

12/03/01 - WIX FILTERS EARNS COUNTERMAN MAGAZINE'S READERS' CHOICE AWARD

01/01/00 - NAPA Echlin Backed By Worry-Free Warranty