NDOT Transportation System Projects

Projects Ready for Construction in Six Months

Highway / Location	Project Location	Jurisdiction	Project Length (mi.)	Type of Improvement	Estimate Total
US-75	Murray - Plattsmouth	NDOT	6.80	Expand US-75 Expressway from two to four lanes	$43,000,000
US-385	L62A North	NDOT	14.20	Expand North-South Federal High Priority Corridor US-385 from two to four lanes	$34,000,000
156th St	West Dodge - Corby St.	Omaha	2.40	Construct Four Lane Urban Roadway	$16,000,000

Projects Ready for Construction in One Year

Highway / Location	Project Location	Jurisdiction	Project Length (mi.)	Type of Improvement	Estimate Total
I-80	Brule - Ogallala	NDOT	10.2	Replace 4 lanes of Interstate-80 pavement on the national freight corridor	$58,000,000
I-80	Big Springs West	NDOT	7.4	Replace 4 lanes of Interstate pavement and the Interchange at Interstate 76 on the national freight corridor	$55,000,000
I-80	Chappell - N-27	NDOT	9.6	Replace 4 lanes of concrete pavement on the national freight corridor	$54,000,000
180th St	W Dodge - W Maple	Omaha	2.00	Expand urban corridor to 4 lanes includes roads and bridges	$40,000,000
I-80	Dawson Co Line - Odessa	NDOT	9.25	Replace 4 lanes of Interstate concrete pavement on the national freight corridor	$41,000,000
Q St	Bridge from 26th St to 27th St	Omaha	0.20	Replace a vehicle viaduct	$17,700,000
12th Ave	12th Ave over UPRR	Columbus	0.50	Construct a new vehicle Viaduct	$16,200,000
108th	Madison to Q St	Omaha	1.00	Expand urban corridor to 4 lanes	$8,000,000

[Date]

Project Proponent	Project Type	Project Name
Papio-Missouri River NRD	Infrastructure Protection	Flood Control Reservoir WP1, 180th and Fort Streets, Omaha, NE
Lower Platte North NRD	Infrastructure Protection	Wahoo Creek Flood Detention Sites 26 and 27

Papio-Missouri River NRD	Infrastructure Protection	Bellevue/Offutt Air Force Base Levee
Lower Platte South NRD	Infrastructure Protection	Salt Creek Flood Control Project (Deadmans Run)
Archer Daniels Midland Company (ADM), Lower Loup NRD, City of Columbus	Water Supply Infrastructure	ADM Groundwater Recharge and Supply Project
Papio-Missouri River NRD	Infrastructure Protection	Flood Control Reservoir WP4, 204th and Schram Road, Gretna, NE

Middle Niobrara NRD	Infrastructure Protection	Long-Pine Creek Restoration
Papio-Missouri River NRD	Infrastructure Protection	Flood Control Reservoir WP2, 180th and Giles Road, Sarpy County, NE
Clay County Sanitary Improvement District No. 1	Water Supply Infrastructure	Naval Ammunition Depot Groundwater Enhancement and Preservation Project
Nebraska Bostwick Irrigation District, Nebrasaka Public Power District, and other Nebraska Irrigation Districts	Water Supply Infrastructure	Irrigation Water Supply Infrastrure Improvements

City of Clarkson, Colfax County, USACE, and NEMA	Infrastructure Protection	Levee and bridge project
City of Fairbury, Jefferson County, NE, Union Pacific Railroad, and NEMA	Infrastructure Protection	Flood gates for levee system

Project Description	Total Estimated Project Costs
The WP1 flood control reservoir is identified in both the original NRCS Work Plan and the Partnership's Papillion Creek Watershed Management Plan as an essential site with the primary purpose of managing excess water (flooding). Due to the continued and rapid urbanization of the watershed, the project is needed to reduce the risk of loss of human life and significant damage to infrastructure, utilities, property as well as improvement of the stream water quality and wildlife habitat. This structure is located on a tributary to the West Papillion Creek which is a flood prone creek in the Omaha metro area. Downstream on the West Papillion Creek are levees that are no longer functioning as designed because of increased flows from development. Implementation of the proposed WP1 structure along with other flood control structures in the watershed reduce the flood risk through a large portion of the Omaha metropolitan area. The existing benefit data available is a benefit-to-cost ratio for the existing NRCS Papillion Creek Work Plan. This shows the B/C of the overall plan (which includes this structure) to be 1.7, comprised of average annual benefits that are primarily agricultural flood damage and damage to rural communities. The watershed has urbanized since this last analysis of the work plan and although costs to construct these projects have increased dramatically, the land and infrastructure protected by the structures has increased dramatically as well. A recent analysis completed in July 2017 for the PMRNRD calculated the quantifiable benefits provided by existing and proposed flood control dams in the Papillion Creek Watershed Plan. In urban areas, the quantifiable benefits of these structures include flood damage reduction, flood insurance premium reduction, recreation benefits and property tax increases. These benefits assessed on an average annual benefit show over a 100 year project life show the flood control reservoirs in the Partnerships Watershed Management Plan to be cost effective.	$15,788,000
The LPNNRD is proposing construction of two regional detention basins within the Wahoo Creek Watershed. Sites 26 and 27 were identified in the Plan/EIS (LPNNRD 1998) to provide a reduction in flood damages, reduce the threat of loss of life, reduce sedimentation, erosion, and scour, and to improve wildlife and stream habitat quality within the watershed. This was developed to address a long history of flooding within the watershed, which consists of approximately 430 square miles in Saunders County, NE. The Plan/EIS (LPNNRD 1998) includes sixteen (16) storm water detention basins and one multi-purpose dam and provides detailed information on the alternatives studied and their feasibility. Sites 26 and 27 will attenuate flood flows and assist in protecting lives, property, and infrastructure. This project will also provide extensive benefits in the form of reduced erosion, reduced sedimentation, enhanced fish habitat, wetland and upland wildlife habitat, and enhanced stream and water quality.	$5,281,990

This project includes modifications to two (2) Federal Levee Systems located in Sarpy County, Nebraska; R-613 and R-616-613. These urban levee systems are approximately 18.6 miles in total length and protect over 6,700 acres including some of the most critical infrastructure in the State of Nebraska. This critical infrastructure is as follows; (1) Offutt Air Force Base; (2) Papillion Creek Wastewater Treatment Plant; (3) City of Bellevue and Sarpy County current and planned developments; (4) U.S. Highways 75 and 34; (5) Union Pacific (UPRR) and Burlington-Northern Santa Fe Railroads (BNSF). Due to the urban setting, potential loss-of-life and financial consequences of the project's failure, the project risk is determined to be high. The modifications to these levee systems can be defined as work which is necessary to meet FEMA accreditation requirements, as is set forth in 44 CFR 65.10, and all current design and floodplain management standards.	$30,200,000
This project is located in the Salt Creek watershed and is located east of 56th Street north of Cornhusker Highway in Lincoln. There has been frequent property flooding in the past in this area after minor storm events. The City of Lincoln in coordination with the NRD is seeking to rehabilitate the existing channel to prevent future major property flooding. This project includes widening a portion of the channel, replacing the box culvert at Fletcher Avenue, and stabilizing a portion of the bank to prevent erosion from threatening existing structures. The design is complete and ROW is being finalized. The design was 75% funded by FEMA and the City is currently working to obtain a 75% FEMA cost share for construction. The total estimated costs for completion of the project is $4 million.	$4,000,000
The southeast portion of Columbus, NE is experiencing significant groundwater level declines. The Lower Loup NRD is charged with managing groundwater resources in the Columbus area. The proposed project utilizes available surface water coupled with a groundwater recharge system that will provide a sustainable water resource, all while working with local government and industry partners to augment water supplies and maintain an efficient/economical balance between current users and future demands. The project will recycle an equivalent amount of ADM discharge water into Lost Creek Channel and Christopher's Cove. Check structures will regulate the water and pond it in the channel. Feasibility study results suggests the project will increase groundwater levels more than 10 feet and local lakes will recover to their planned elevations. The Lower Loup NRD, City of Columbus, homeowners, and ADM are all contributing financing and technically to the project to help find solutions aimed at ensuring adequate water resources exist for the various municipal and industrial demands in the area.	$2,040,000
The WP4 flood control reservoir provides immediate flood protection for two subdivisions, Forest Run and Lyman Hylands. The residents have a history of flooding issues due to upstream development and culvert sizing. Additional development in the drainage area is planned. The ultimate solution to relieve the existing flooding is the installation of the WP4 flood control structure. This structure has a drainage area of 563 acres. The annual benefits of these urban area projects include flood damage reduction to property, infrastructure and utilities, flood insurance premium reduction, recreation and property tax increase.	$11,720,000

The Long Pine Creek Watershed Plan and associated Sand Draw Creek Restoration Plan evaluated 13 sub-watersheds and identified the causes of potential infrasture related issues and water quality impairments in the area. The plans outline a long term, comprehensive, and phased approach at addressing the causes of watershed problems. The design plans were finalized in 2016; and through a robust public engagement process the following four sub-watersheds were identified as high priority; Sand Draw Creek, Middle Bone Creek, Willow Creek, and Middle Long Pine Creek. Priority locations for restoration practices and grade control structures were identified along the lower reach of Sand Draw Creek. These actions will improve grade control, enhance stream bank stability, reduce down cutting, improve water quality, and enhance aquatic habitat in an area that supports flows and habitats in the National Park Service scenic river reach. . Grade stabilization and restoration structures have been designed and will be installed on a stretch of Sand Draw Creek facing serious erosion from ongoing stream bed degradation. This degradation damages aquatic habitat, causes groundwater levels to decline, degrades water quality, threatens the stability of the entire stream network, and will eventually threaten critical infrastructure systems. Design of the structures is complete and a pre-application meeting has been held with the USACE to obtain guidance in receiving a Section 404 permit. Installation of these structures are critical to watershed health. The certified engineering cost for the three priority structures has been determined at $3,347,000. Estimated total watershed management cost exceed $30,000,000.	$3,347,000
The WP2 flood control reservoir is a location where a NRCS grade stabilization structure was built to protect from stream erosion and was identified as a critical location for flood control in the Papillion Creek Watershed Management Plan. This site also is in a rapidly developing basin and is needed to provide flood control and water quality downstream through the West Papillion Basin. The drainage area to this structure is 679 acres. Annual benefits include flood damage reduction to property, infrastructure and utilities, flood insurance premium reductions, recreation benefits and property tax increases.	$11,409,000
Sanitary improvement District No. 1 in Clay County, Nebraska intends to reconstruct the water supply infrastructure that was originally constructed in the early 1940's to provide water service to the then newly-constructed Naval Ammunition Depot and which now provides water service to municipal and industrial customers, including approximately 25 businesses employing approximately 300 people. With the planned water supply improvements adjacent business and potential new business would be connected to the water supply system. The funds would provide the costs for construction of the water supply system containing approximately 6.3 miles of transit pipe and provide reliable water supply for fire-fighting capacity to the municipal and industrial customers that are served.	$1,750,000
Reliable irrigation water supply infrastructure is critical to maintaining the agricultural economy of Nebraska. Much of irrigation water supply infrastructure is aging and in need of upgrades to allow improved efficiency of the water and continued agricultural production. This key infrastructure also contributes to multiple water supply goals including enhanced groundwater recharge, stream augmentation, flood control, sustained crop production, preservation of wildlife habitat, and assisting with interstate compact compliance. Several shovel-ready projects exist for improving diversion structures, operational gates, and canal efficiency improvements (lining, distribution, etc.). This project would focus the distribution of funds into areas where water supplies are most vulnerable due to decreases supplies or increasing federal requirements for streamflow protection.	$5,500,000

Dangerous tonage and levee accredidation at stake	$3,700,000
City floods without operable gate- gate shuts down Union Pacific RR main line, currently the community puts logs in manaually to close hole	$400,000
Total	**$95,135,990**

CLEAN WATER STATE REVOLVING FUND (CWSRF)

Shovel ready - Omaha Projects - Combi

Community	Pop.	Project	Est. Cost
Omaha	446,970	Riverview Lift Station Facilities/Blake Street Lift Station	$18,130,000

Omaha	446,970	Burt Izard Lift Station Improvements (OPW 52472)	$16,000,000
Omaha	446,970	Saddle Creek Retention Treatment Basin (OPW 52049)	$85,000,000
Omaha	446,970	42nd & Q Street Sewer Separation	$2,500,000
Omaha	446,970	Lake James to Fontenelle Park	$8,000,000

Omaha	446,970	Forest Lawn Inflow Reduction Project	$19,000,000
Omaha	446,970	Hanscom Park Green Infrastructure	$3,600,000
Omaha	446,970	City of Omaha Flood Protection, Levee Certification, Relief Well Improvements	$6,300,000
Omaha	446,970	26th Street Bridge	$13,662,000
Omaha	446,970	156th Street	$16,514,000
Total			**$188,706,000**
		Shovel ready - Working	
Community	**Pop.**	**Project**	**Est. Cost**
Deweese	67	Clean and video collection system	$238,100
Cairo	785	Add two lagoon cells	$1,218,000
Lynch	245	Replace lift stations - Repair lagoon cell	$1,045,700

Ainsworth	1728	Sliplining and meter replacements	$1,700,000
Kearney	30,789	Solids dewatering	$4,075,100
Gothenburg	3,475	Sewer industrial are of town	$500,000
Comstock	92	New lift station and video remaining collection system	$407,100
Sutherland	1,286	RR Undercrossing repair	$325,374
Marquette	229	Lagoon rehabilitation	$354,200
Superior	857	Repairs and rehabilitation of several items at an aging WWTF	$241,000
Scotia	318	Treated wastewater land	$875,000
Total			**$10,979,574**
		Shovel ready - May need additional subsi	
Community	**Pop.**	**Project**	**Est. Cost**
Haigler	150	Reapair lagoons - slip line sewer	$682,350
Amherst	253	New lagoons	$1,000,000
Long Pine	305	Treated wastewater land application.	$1,051,900
Davenport	286	Sliplining	$175,470
Randolph	928	Repair oxidation ditch - WWTF	$340,000

Total		

~ Projects are listed in priority order by category ~

	$3,249,720

ned Sewer Overflows (CSO)
Comments
The existing Riverview Lift Station was constructed in the early 1960's and has been in continuous use for approximately 45 years. The existing lift station will be replaced with a new lift station to maximize conveyance of wet weather flows to the Missouri River Waste Water Treatment Plant, accommodate current and future dry weather flows from the Henry Doorly Zoo, and provide reliable conveyance for dry weather flow from the Martha Street, Spring Street, Grover Street, and Riverview Park subbasins. The Riverview Lift Station Replacement Project (RLSR) will have a firm capacity of 7 mgd and consists of the construction of the lift station, lift station site improvements, and the miscellaneous remote site improvements including the Lauritzen Gardens Diversion Structure flow meter install and modification, the existing Grover Diversion Structure modification, the existing Riverview Diversion Structure modification, the new Riverview Diversion Structure, the new Grover Street Diversion Structure, and the 42 inch conveyance sewer between the two new diversion structures. To facilitate conveyance of sewer flows from the Martha Street subbasin, a sewer upstream of the RLSR Project was planned and denoted as Martha to Riverview Phase II Sewer Project. To reduce cost and project risk, this sewer project has been replaced with the Blake Street Lift Station Project. The Blake Street Lift Station project consists of the construction of a small lift station, force man, influent gravity sewer, and site improvements. The Blake Street Lift Station will pump flow to the existing Grover Street Sewer. This existing sewer and associated new infrastructure constructed as part of the RLSR Project will convey sewer flows to the Riverview Lift Station.

The BILS was constructed in the 1960's as part of the South Interceptor Sewer Project. The existing lift station has grit removal basins, bar screens, and three pumps. The lift station is designed for a firm capacity of 50 mgd with two pumps in operation; however, currently only one pump is used at a time due to limitations with grit removal and screening to protect the pumps and downstream force main. The recommended lift station improvements consist of upgrades to the Grit Building, Bar Screen Room, and Lift Station, which will require electrical, structural, architectural, instrumentation, heating, ventilation, air conditioning, and process improvements. The facility will be designed to provide a reliable 50 mgd pumping system with redundancy for operations, including 2 bar screens capable of each handling 50 mgd and a pumping system with two duty pumps and one standby pump each provided with a variable frequency drive (VFD). The pump station will pump to the new South Interceptor Forcemain
The Saddle Creek RTB Facility is identified in the Omaha CSO Control Long Term Control Plan (LTCP) to provide for the treatment of combined sewer overflow discharges at CSO 205 – 64th and Dupont with 160 MGD capacity. The RTB will fully provide retention, primary treatment, and disinfection of up to 160 MGD. This capacity will provide a percent capture of 89% of flow, meeting the requirements of the permit (85% minimum). Flow between 160 MGD and 320 MGD will receive disinfection but not 30 minutes of detention time, equivalent to primary treatment. Combined sewage flow greater than 320 MGD will bypass the RTB resulting in a combined sewer overflow. The facility will include fine screening, grit removal, retention treatment basin,), disinfection/dechlorination, and effluent discharge to Little Papillion Creek. Combined sewage remaining in the basin will be pumped after a storm event to the combined sewer system for treatment at the Papillion Creek Wastewater Treatment Plant.
This project located in the Papillion Creek South Basin provides sewer separation to reduce basement back-ups in the residential areas and eliminate two Combined Sewer Overflows (CSO 207/208) that currently discharge overflows to the Papillion Creek system.
This sewer separation project in the Paxton Basin will provide partial sewer separation to reduce basement back-ups in the area and to direct separated stormwater to the expanded and renovated Fontenelle Park Pond. The Fontenelle Park Pond will provide attenuation of stormwater flows that will result in reduced CSO volume of overflows to the Missouri River. The renovated Fontenelle Park Pond will provide enhanced amenities around the pond for use by the neighborhood.

This sewer separation project will provide partial sewer separation in the Minne Lusa Basin to eliminate the perennial stream flow from entering the combined sewers and being treated at the Missouri River Wastewater Treatment Plant. The project will also provide sewer separation to reduce the potential of basement back-ups in the residential and commercial areas. Green Infrastructure is incorporated into the design to reduce the peak flows in the system and to provide enhancements to the residential areas.
Renovations to the Hanscom Park Pond will provide additional storage for attenuation of flows, reduction of peak flows downstream of the pond, and a reduction of the volume of overflows to the Missouri River. Upstream sewer separation was accomplished to direct stormwater to these green infrastructure projects in Hanscom Park.
The relief wells along the City of Omaha Missouri River Levee provide needed underseepage pressure relief during periods of high river levels or flood events to maintain the levee integrity. The relief wells were constructed in the 1950s and do not meet current USACE criteria. For this phase, the relief wells in Areas A and D1 (along the Missouri River North Levee and adjacent to the Eppley Airfield) are proposed to be replaced, the existing wells abandoned in place, and the collector piping replaced. This project will be accomplished in two phases.
This project will remove the existing pin and girder bridge which has reached the end of its useful life and replace it with a new low maintenance bridge. The intersection of 26th Street with Q Street will also be improved to provide channelized left turn lanes thereby improving safety for users at that intersection.
This project will widen the existing two lane section of 156th Street to a four-lane divided section with turn lanes at the major intersections. Blondo Street between 155th and 160th Street will also be widened from a two-lane section to a four-lane divided section, tying into the recently completed improvements to Blondo Street between 155th and Eldorado Drive (Phase 1). The project also includes the installation of a trail and storm sewers, ADA curb ramps, and street lighting.

; on funding

Comments
Clean and video collection system; reline, repair and install rip-rap on cell #1; convert cell #2 to a rapid infiltration basin.
Project will make the system into a complete retention.
The agency has been working with the community to make the project more affordable.

The project would include the reconstruction of Lift Station #7 and modification of Lift Station #4 and portable backup power installation. These improvements are needed for redundancy and to reduce chance of sewage backup. Sliplining work will preserve the integrity of the sanitary sewer system and minimize root intrusion. The meter replacements will update the system to radio read meters and assist the City in finding the source of the high water loss percentages found from water produced versus water sold.
The project would replace their old 1986 vintage Belt Filter Press with two new Screw Presses.

An extension of approximately 3,200 feet of 8 inch sanitary sewer will be constructed. In addition, 4 and 6 inch service lines will be constructed along with a lift station and 400 foot force main connecting to the existing collection system.

The Village's collection system, lift station and lagoon were constructed in 1962. The lift station has surpassed design life. 10% of collection system has bee videoed. The Village has seen declining populations.
Emergency loan - The project would replace their 10 inch sanitary sewer undercrossing of Union Pacific Railroad that is deteriorating and prevent a total collaspe of the main outfall to the wastewater lagoon system. The project will also include 3 new manholes.
The project would consist of resealing one of the two cell lagoons and adding riprap to both lagoons interior slopes which are severely eroded.
The project would repair and improve their trickling filter wastewater treatment plant. These are needed to improve secondary treatment efficiency and the ammonia removal capability of the treatment plant.
Land application site purchase and land application piping and equipment.

dy to get project to go through

Comments
Lagoons cells have grassed over and need resealed. Lagoon slopes also need reworked and protected with riprap. They have recently tabled the project due to the cost of project.
The Village has very high sewer flows.
A lift station and a forced main to pump treated wastewater to a storage cell. A storage cell with a pump and pivot irrigation system. Repairs to splitter box at existing lagoons. Drain for perched water at lagoons.
Currently the project is tabled due to cost.
The Village doesn't not qualify for loan forgiveness.

DRINKING WATER STATE REVOLVING FUND (DWSRF)

Shovel ready, priority ranked projec			
Community	**Pop.**	**Project**	**Est. Cost**
Wauneta	568	New wells and replace mains	$1,900,000
O'Neill	3,631	New water tower	$2,800,000
Fairbury	3,714	Water treatment plant and replace mains	$7,250,000
Milford	2,112	New well and replace mains	$1,750,000
Ogallala	4,543	New well and replace mains	$2,100,000
Pierce	1,739	New well	$500,000
Wisner	1,174	New well, replace water tower and replace mains	$4,500,000
Fullerton	1,259	New well	$1,000,000
Kearney	33,520	New water tower	$5,500,000
Grant	1,115	New meters	$500,000
Chadron	5,725	Rehab water tank and replace mains	$1,000,000
Total			**$28,800,000**

Shovel ready, priority ranked projects - May need addi			
Community	**Pop.**	**Project**	**Est. Cost**
Edgar	498	Treatment to address nitrate Administrative Order, replace mains and new meters	$2,500,000
Hadar	293	Interconnect with City of Norfolk due to coliform in shallow private wells	$2,040,000
Nehawka	204	Replace water tank, mains and meters	$1,200,000
Crete	6960	Replace water treatment plant, wells and new water tower	$23,000,000
West Knox Rural Water District	1587	New wellfield with transmission main, storage tank, pump station improvements and meters to supply Villages of Center and Niobrara	$2,426,433

Chadron	5851	New water tower, rehabilitate tank and well, replace mains and meters	$7,945,000
Total			**$39,111,433**

~ Projects are listed in priority order by category ~

:ts - working on funding

Comments
Needed due to arsenic administrative order
Needed to replace an old tower
Treatment needed due to nitrates
Needed due to nitrates
Needed due to nitrates
Needed due to arsenic
Needed due to selenium
To replace wells lost to selenium
Needed for additional water storage
Amendment to existing loan
Needed due the age of the existing infrastructure

tional subsidy to get project to go through

Comments
City with declining population, under enforcement action to address Nitrates, isolated with no realistic chance for consolidation, will be forever burdened with treatment operation costs, additional assistance on the capital improvements would be very helpful.
Located just north of a major Nebraska City, all homes are on private wells, would like to have a public water system with supply from Norfolk, but the major financial impacts with such a large project for a small Village, stop the community from moving forward.
Village's Engineer developed a planning document ~10 years ago. For a small Village, the cost of the project is daunting. It is known that a project will ultimately be needed, but will continue to wait until absolutely necessary. Additional assistance could help start this needed project.
Recently completed $12M wastewater treatment facility upgrade, and the City is paying for on-going upgrades to its' distribution system. Location of a private college, additional assistance would likely help start the necessary remaining major upgrades to the City's water system.
The District is ready, completed a 30% design through the Bureau of Reclamation's rural water supply program. That funding program ceased, no longer receiving any Federal funds. The project will likely remain on hold until some form of increased assistance is provided.

City's Engineer has developed a planning document, the water system is short on storage. Location of a State college, they have made consistent small steps in maintaining system and promoting City growth, will likely continue that small step path unless increased assistance is provided.