
Technical Advisory Committee

Monday, October 17, 2016

Regular Session

Item H2

Approval Recommendation of Final Draft Long Range Transportation Plan (LRTP) Amendment No. 1

In April 2016, the GIAMPO Policy Board approved the Journey 2040, the Grand Island metropolitan region's Long Range Transportation Plan (LRTP). It is a blueprint that describes how the region will invest in its multimodal transportation system over the next 25 years. The GIAMPO amends the LRTP to accommodate changes to projects in the LRTP. The proposed Amendment No. 1 to the LRTP adjusts the anticipated project costs for one (1) Nebraska Department of Roads project and adjusts the fiscal constraint of the plan to include additional anticipated federal revenue. This project adjustment will modify the programming of two (2) Grand Island projects. Amendment No.1 requires modifications (shown in red) in Chapter 7 – Financial Plan and Chapter 9 – Recommended Plan of the LRTP.

Staff Contact: Allan Zafft, MPO Program Manager

Table 7-1: Total Available Roadway Funds (2016-2040)

Total Available Roadway Funds (\$1,000)				
Time Period	Federal	State	Local	Total Revenues
2016-2025	\$24,836	\$109,366	\$42,430	\$176,632
2026-2040	TBD ⁹	\$169,495	\$89,952	\$259,447
Total	\$24,836	\$278,861	\$132,382	\$436,079

Table 7-2 on the following page shows the amount of funding available for constructing new projects after the costs for personnel, operations, maintenance, reconstruction, and equipment, plus projects that have already been programmed, are subtracted. This funding balance is assumed to be available to construct new projects in the GIAMPO Area based upon a conservative forecast of future operations and maintenance costs and revenue generation. Assumptions relating to the forecasts and detailed tables are shown in Appendix C.

⁹ *To Be determined (TBD): Federal revenue estimates for NDOR projects in the GIAMPO planning area will be determined as the MPO's needs are assessed and funding targets are established. At this time, NDOR is still assessing the need for specific projects of regional significance in the Grand Island Area MPO planning area for the period of 2020-2040. NDOR has established revenue projections within the timeframe of the NDOR Surface Transportation Program Book, a six-year document that outlines NDOR's projects and future expenditures. NDOR recognizes an ongoing and long-term need to monitor, evaluate and upgrade the state highway and interstate highway system in the Grand Island Area MPO planning area as well as the State of Nebraska at large. NDOR will continue to monitor the existing conditions and proposed future changes to the state highway system with the continuing cooperation, coordination and assistance of GIAMPO and local partners. As future needs are identified with regard to infrastructure condition, safety, roadway capacity or transit service, NDOR will work to address these needs and include them through update or amendment in the GIAMPO Long Range Plan, TIP and the NDOR Surface Transportation Program Book and STIP as required by State and Federal regulation.*

Table 7-2: Funds Available for New Roadway Projects

New Roadway Project Revenue (\$1,000)			
Time Period	Federal	Local / State	Total Revenues
2016-2025	\$0	\$55,117	\$55,117
2026-2040	TBD ¹⁰	\$113,236	\$113,236
Total	\$0	\$168,353	\$168,353

Funding for transit service was also examined through the 2040 horizon year. Transit service in the GIAMPO area is expected to continue but will be subject to the availability of local matching funds. A detailed breakdown of transit funding sources, assumptions and year-to-year forecasts for available revenue is shown in Appendix C. It is assumed that Grand Island will provide service only up to the budget that is available through a combination of Federal Transit funding and local matching dollars. A summary of the available transit revenue is shown below in Table 7-3.

Table 7-3: Transit Revenue and Expenditures (2016-2040)

Transit Revenue/Expenditure (\$1,000)			
Time Period	Federal	Local / State	Total Revenue
2016-2025	\$5,762	\$2,839	\$8,602
2026-2040	\$11,193	\$5,765	\$16,958
Total	\$16,956	\$8,604	\$25,560

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Total	\$24,836	\$278,861	\$132,382	\$436,079

Committed Costs

Committed projects are defined to include those projects currently programmed or now under construction. The first step in identifying the amount of funds available for new construction was to subtract the cost of these projects from the estimated total revenues from 2016 through 2040. A number of major projects have been programmed for the Grand Island area. Many of the committed projects are being completed by NDOR utilizing federal funding from a number of sources. The specific construction year and funding by source can be found in the GIAMPO Transportation Improvement Program (TIP) 2016-20.

Between 2016 and 2020, NDOR will complete a major reconstruction on I-80 in the GIAMPO study area, the reconstruction of U.S.-281 between U.S.-30 and Broadwell, and replacement of three bridges on U.S.-30. NDOR has also committed to construct a U.S.-30 west bypass from west of US-281 to near County Road 20 and then also install automated gates at I-80 interchanges. The total cost of these projects, shown in Table 9-2, is estimated at \$59 million.

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Table 9-2: Committed Project Cost

Committed Project Cost (\$1,000)				
Time Period	Federal	State	Local	Total Costs
2016-2025	\$24,836	\$29,823	\$4,647	\$59,306

Note: Project Costs have been inflated to Year of Expenditure by sponsoring jurisdictions at a 4 percent increase per year per US DOT recommendations.

Operation & Maintenance & Reconstruction Costs

The City of Grand Island and Hall County in the GIAMPO study area have an annual Operation and Maintenance budget to maintain the existing transportation infrastructure. It includes personnel, equipment, and materials cost of maintenance. It also includes funds for more extensive maintenance projects such as resurfacing, replacing curbs, signs, signal maintenance, and other similar activities.

NDOR contracts with the local governments to complete routine maintenance. Table 9-3 presents the combined local and state maintenance costs. Operation and Maintenance costs, also presented in Table 9-3, were projected for the next 25 years. These costs are shown on an annual basis in Appendix C. In addition, a general estimate of reconstruction costs for projects not yet determined was included in these cost estimates. The funds for operations, maintenance, and reconstruction are shown in Table 9-3. The inflation rate for the future year of expenditure is based upon past trends for each specific line item. These assumptions and rates are documented in Appendix C.

Table 9-3: Operation and Maintenance Budget

Operation & Maintenance Expenditures (\$1,000)	
Time Period	Local Operation & Maintenance
2016-2025	\$62,209
2026-2040	\$146,211
Total	\$208,420

Table 9-4 on the following page shows the remaining funds available after committed project costs, operations and maintenance costs are subtracted from the total revenues. In summary, the table shows anticipated revenues for available for programming new construction projects in the GIAMPO area for the remaining portion of the plan.

Table 9-4: Available Roadway Revenue

Available New Project Revenue (\$1,000)			
Time Period	Federal	Local / State	Total Revenue
2016-2025	\$0	\$55,117	\$55,117
2026-2040	TBD ¹⁵	\$113,236	\$113,236
Total	\$0	\$168,353	\$168,353

9.2 Project Priority Process

The projects were evaluated and prioritized based upon the funds and in what time period the project would be proposed. This process took three steps: project evaluation, public input, and MPO Technical Committee review.

Project Evaluation

Each of the proposed projects presented in the Long-Range Transportation Plan was evaluated based on the GIAMPO 2040 project goals and evaluation criteria presented in Chapter 3. Each criterion was transparent. Base factors and criteria were developed for each project goal. A composite score was calculated for each project based on the goal score multiplied by the goal weight, which was developed as part of the public involvement process. The priorities are discussed in Chapter 5, with detailed project scoring shown in the Appendices.

Public Input

Public input was sought on project priorities. As part of the second public meeting, participants scored a high, medium, or low prioritization to each project type. They also provided input on specific projects

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NDOR will continue to monitor the existing conditions and proposed future changes to the state highway system with the continuing cooperation, coordination and assistance of GIAMPO and local partners. As future needs are identified with regard to infrastructure condition, safety, roadway capacity or transit service, NDOR will work to address these needs and include them through update or amendment in the GIAMPO Long Range Plan, TIP and the NDOR Surface Transportation Program Book and STIP as required by State and Federal regulation.

Table 9-5: Fiscally Constrained Project Plan

Grand Island Area MPO Transportation Improvement Program FY 2016-2020										
State ID	Project Name	Project Description	A/Q Status	Length (SLM)	Total Project Est.	Phase	YOE	Fund Type	Fund Description	TIP Estimate by Phase Amount (\$1,000)
41704	US-281 West, Grand Island	Construct 4-Lane Divided Highway US-30, from US 281 in Grand Island West to City Limits - Beg RP 309.15	Exempt	3.5 mi	\$25,978	PE	2016	City	Grand Island	\$115
						PE	2016	State	Build Nebraska	\$1,735
						ROW	2018	City	Grand Island	\$10
						ROW	2018	State	Build Nebraska	\$2,129
						Const/CE	2020	City	Grand Island	\$1,262
						Const/CE	2020	State	Build Nebraska	\$20,727
42674	Platte River - Phillips	Mill, Concrete repair, resurface 4-lane dual Roadway and Shoulders, Bridge repair I-80 from Platte River west of Grand to Phillips, Beginning RP 310.88	Exempt	7.7 mi	\$8,144	PE	2017	State	NDOR	\$31
						ROW	2018	State	NDOR	\$1
						Const/CE	2019	NHPP	National Highway Performance Program	\$7,300
						Const/CE	2019	State	NDOR	\$812

State ID	Project Name	Project Description	A/Q Status	Length (SLM)	Total Project Est.	Phase	YOE	Fund Type	Fund Description	TIP Estimate by Phase Amount (\$1,000)
42690	In Grand Island & North	Resurf existing roadway & US-281/N-2 ramps, concrete repair, brdge repair, add subdrains US-281 from Old US-30 Viaduct over UPRR, North to 1.8 mi South of Howard County Line Beginning RP - 68.90	Exempt	9.6 mi	\$18,707	PE	2015	State	NDOR	\$779
						Const/CE	2017	City	Grand Island	\$3,126
						Const/CE	2017	NHPP	National Highway Performance Program	\$11,450
						Const/CE	2017	SFTY	Nation Safety Improve. Program	\$585
Const/CE	2017	State	NDOR	\$2,767						
42773	Grand Island - WACO	Deploy automated gate systems and COTV Cameras Several I-80 interchanges in District 4	Exempt	0	\$1,094	PE	2016	State	NDOR	\$39
						Const/CE	2017	ITS	Intelligent Transportation Systems	\$949
						Const/CE	2017	State	NDOR	\$106
42776	In Grand Island Bridges	Bridge repair/overlay,sealing, approach slabs Three Bridges in Grand Island Beginning NP 312.93	Exempt	0	\$2,924	Const/CE	2018	NHPP	National Highway Performance Program	\$2,339
						Const/CE	2018	State	NDOR	\$585

State ID	Project Name	Project Description	A/Q Status	Length (SLM)	Total Project Est.	Phase	YOE	Fund Type	Fund Description	TIP Estimate by Phase Amount (\$1,000)
42812	Grand Island-Stolley Park Reconfiguration	Reconfigure Stolley Park Road to 3,4 and 5 lane sections - FHWA Road Diet Initiative From Webb Road to S. Locust St	Exempt	2.04 mi	\$1,349	PE	2016	SFTY	Nation Safety Improve. Program	\$100
						PE	2016	Local	Grand Island Nation Safety Improve. Program	\$10
						Const./CE	2017	SFTY	Nation Safety Improve. Program	\$1,115
						Const./CE	2017	Local	Grand Island	\$124
42828	District 4 - Districtwide striping	Install durable pavement markings	Exempt	0	\$1,110	PE	2016	State	NDOR	\$1
						Const/CE	2016	State	NDOR	\$111
						Const/CE	2016	SFTY	Nation Safety Improve. Program	\$998
	Transit Needs Analysis	Feasibility Study to identify Transit Needs	Exempt		\$125			FTA	Sec. 5307	\$100
							2016	Local	Grand Island	\$25
Total									\$59,431	

Table 9-5: Fiscally Constrained Project Plan (Continued)

GIAMPO Project Listing 2021-2025								
Project ID	Project Name	Project Description	From	To	Jurisdiction	Total Cost (\$1,000) Current Year	Total Cost (\$1,000) Future Year	Available Fiscal Constrained (\$1,000)
2016 - 2025								\$55,117
	Intersection Improvements	Improvements at various intersections	Various	Various	Grand Island	\$3,500	\$4,606	\$50,511
B-3a	Stuhr Road	Widen to 3 lanes	US-30	BNSF RR	Grand Island	\$9,656	\$12,707	\$37,804
B-2a	Old Potash Highway	Widen to 5 lanes	Claude Road	Webb Road	Grand Island	\$4,307	\$5,668	\$32,136
B-8	Husker Highway	Widen to 3 lanes	US-281	North Road	Grand Island	\$4,947	\$6,510	\$25,626
B-7	Stolley Park Road	Widen to 3 lanes	Fair Ground Entrance	Stuhr Road	Grand Island	\$2,183	\$2,872	\$22,754
B-1a	Capital Avenue	Widen to 5 lanes	Broadwell Avenue	BNSF RR/Oak Street	Grand Island	\$3,438	\$4,524	\$18,230
B-6	13th Street	Widen to 3 lanes	West of US-281	Independence Avenue	Grand Island	\$4,193	\$5,517	\$12,713
Total 2021-2025						\$32,224	\$42,404	\$12,713

Table 9-5 Fiscally Constrained Project Plan continued

GIAMPO Project Listing 2026-2040								
Project ID	Project Name	Project Description	From	To	Jurisdiction	Total Cost (\$1,000) Current Year	Total Cost (\$1,000) Future Year	Available Fiscal Constrained (\$1,000)
2026-2040								\$125,949*
B-4	North Road	Widen to 3 lanes	Highway 2	Old Potash Highway	Grand Island	\$11,081	\$14,582	\$111,367
	Intersection Improvements	Improvements at various intersections	Various	Various	Grand Island	\$3,764	\$7,332	\$97,032
2	Stuhr Bridges over BNSF and UPRR	Engineering			Grand Island	\$2,048	\$3,989	\$93,043
B-3b	Stuhr Road	Widen to 3 lanes	BNSF RR	US-34	Grand Island	\$9,656	\$18,809	\$74,234
B-1b	Capital Avenue	Widen to 3 lanes	BNSF RR/Oak Street	St Paul Road	Grand Island	\$1,781	\$3,470	\$70,764
B-1c	Capital Avenue	Widen to 3 lanes	Dairy Queen	Engleman Road	Grand Island	\$5,700	\$11,103	\$59,661
B-2b	Old Potash Highway	Widen to 3 lanes	Engleman Road	Claude Road	Grand Island	\$5,269	\$10,264	\$49,397
B-5	Swift Road	New 2-lane road	Talc Road	Shady Bend Road	Grand Island	\$3,150	\$6,136	\$43,261
4	Broadwell over UPRR and Broadwell Extension	Broadwell Avenue Widening (5-lane)	Faidley Avenue	Third Street	Grand Island	\$3,900	\$7,597	\$35,664
5		Broadwell UPRR bridge				\$13,000	\$25,323	\$10,341
6		Broadwell Extension (3-lane)	Anna Street	Adams Street		\$4,900	\$9,545	\$796
Total 2026-2040						\$53,768	\$104,735	\$796

*Note: includes \$12,713 of FY2016-2025 carryover plus forecast \$113,236.

Table 9-6: Illustrative Project Plan

GIAMPO Illustrative Projects								
Project ID	Project Name	Project Description	From	To	Jurisdiction	Total Cost (\$1,000) Current Year	Total Cost (\$1,000) Future Year	Available Fiscal Constrained (\$1,000)
Illustrative Project 2040+								\$796
11	13th St. – 10th St. Connector	Reconstruct	W 13th Street	10th Street	Grand Island	\$600	\$992	
7	North Road and UPRR Bridge	Widen to 3 lanes; new 2-lane bridge	Old Potash Hwy	Husker Hwy	Grand Island	\$16,200	\$26,776	
9	Broadwell over BNSF	Widen to 5 lanes	Capital Avenue	Airport Road	Grand Island	\$14,300	\$23,636	
		Realign Old Highway 2 to connect Custer Avenue;						
		New 4-lane bridge						
3	Eddy Street Extension	New 2-lane Road	Phoenix Avenue	Locust Street	Grand Island	\$3,300	\$5,454	
12	Alda Road and UPRR Bridge	New 2-lane bridge	Apollo Street	Hwy 30	Grand Island	\$11,300	\$18,677	
15	East Bypass (5-lanes)	5-lane Stolley Park Road *	Locust Street	Stuhr Road	Grand Island	\$2,500	\$4,132	
		5-Lane Stuhr Road / Sky Park Road *	US-34	Capital Avenue		\$11,875	\$19,628	
		5-lane Husker Hwy	US-281	Stuhr Road		\$18,750	\$30,991	
		5-lane Captial Avenue	BNSF RR/Oak Street	Sky Park Road		\$20,375	\$33,677	
16	East Bypass US-281 to I-80	4-lane Expressway	I-80	US 281	Grand Island	\$78,750	\$130,162	
2	Stuhr Road bridge over UPRR	New 4-lane bridges	Highway 30	4th Street	Grand Island	\$15,952	\$26,366	
	Stuhr Road bridge over BNSF	New 4-lane bridge			Grand Island	\$11,000	\$18,181	

*expand 3-lane to 5-lane