

## 4.2 Implementation and Funding Schedules

### Planning Time Periods

The recommended plan encompasses all projects selected as part of the Erie LRTP's Decision Lens evaluation and screening process, all projects currently included on the 2011-2014 TIP, and additional interstate maintenance, transit, and airport projects that are funded or programmed through other Federal sources. In order to maintain fiscal constraint, the established revenue assumptions (*Exhibit 4.2.1; also Chapter 3.2*) were specifically reviewed with regard to four separate time periods:

- Period "0" = 2011-2012, or the remainder of the ongoing 2011-2012 TIP projects.
- Period "1" = 2013-2018, or the next four-year TIP cycle beginning in 2013 plus two years.
- Period "2" = 2019-2024, or the latter half of the next Twelve Year Program beginning in 2013.
- Period "3" = 2025-2040, or the remaining years through the 2040 plan horizon.

*Exhibit 4.2.1 - Erie LRTP Total Projected Funding (Year of Expenditure \$000's)*

Funding Category	2011-2012	2013-2018	2019 - 2024	2025-2040	Total
NHS	\$ 4,508	\$ 25,884	\$ 38,316	\$ 123,920	\$ 192,627
STP	\$ 11,874	\$ 24,978	\$ 36,975	\$ 119,583	\$ 193,409
State Hwy	\$ 4,739	\$ 8,472	\$ 12,541	\$ 40,560	\$ 66,312
Federal Bridge	\$ 8,808	\$ 27,592	\$ 40,843	\$ 132,096	\$ 209,339
State Bridge	\$ 5,690	\$ 6,786	\$ 9,815	\$ 31,744	\$ 54,036
Safety	\$ 2,076	\$ 7,863	\$ 11,640	\$ 37,645	\$ 59,224
CMAQ	\$ 5,705	\$ 19,365	\$ 28,665	\$ 92,709	\$ 146,444
Rail	\$ 699	\$ 2,918	\$ 4,320	\$ 13,970	\$ 21,907
Enhancements	\$ 1,005	\$ 3,601	\$ 5,331	\$ 17,241	\$ 27,178
Act 44	\$ 4,964	\$ 14,334	\$ 14,334	\$ 38,224	\$ 71,856
Bridge Bond	\$ 2,835	\$ -	\$ -	\$ -	\$ 2,835
TFAC	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 52,903</b>	<b>\$ 141,792</b>	<b>\$ 202,779</b>	<b>\$ 647,692</b>	<b>\$ 1,045,167</b>



Selected projects were initially allocated to one or more of the applicable time periods based upon project priorities, their corresponding cost estimates, and revenue availability in terms of net present values of all associated dollars. Once all project scheduling and period-specific funding constraints were balanced, the initial cost estimates were inflated to a corresponding year of expenditure cost at an assumed 3% per year inflation rate. In this manner, fiscal constraint was maintained throughout all periods of the plan, and all anticipated revenues were realistically allocated over the 2011-2040 time frame.

### **Maintenance Line-Items**

Maintenance line-item cost assumptions that should also be noted with regard to the funding schedules are summarized as follows:

- *State Bridge Line-Item* – was assumed to include 100% of the applicable Federal Bridge, State Bridge, Act 44, and Bridge Bond revenue categories, minus any existing bridge maintenance projects on the 2011-2014 TIP, and minus the annual Local Bridge Reserve. State bridge project priorities will be coordinated through PennDOT.
- *Local Bridge Reserve* – was assumed as \$1.5 million annually, including \$1.2 million federal, \$225,000 state, and \$75,000 local shares each year. Local bridge priorities will be coordinated through the Erie MPO; a list of local bridges that may be eligible for this funding is included in Appendix B.
- *State Route Maintenance Line-Item* – was assumed to include over 75-90% of the applicable NHS, STP, and State Highway revenue categories, minus any existing highway maintenance projects on the 2011-2014 TIP, and minus the proposed Local Federal Aid Route Maintenance Reserve.

- *Local Federal Aid Route Maintenance Reserve* – was assumed as \$700,000 annually, including \$560,000 federal and \$140,000 local shares each year. A list of local federal aid routes that may be eligible for this funding is included in Appendix C.
- *Interstate Program Line-Item* – was assumed to be allocated and programmed centrally by PennDOT; specific line-item dollars for future years have not been shown.

### **Targeted Program Line-Items**

Targeted programs and related line-item cost assumptions that should also be noted with regard to the funding schedules are summarized as follows:

- *Safety Line-Item* – was assumed to include 100% of the applicable Safety revenues, minus any existing safety projects on the 2011-2014 TIP.
- *Operational Improvements Line Item* – was assumed as approximately \$6 million per cycle over the course of a repeating three-year cycle (i.e., Preliminary Engineering in Year 1, Final Design in Year 2, and Construction in Year 3), with the exception of an initial \$3 million “start-up” cycle in Period “1” to kick-off the program and an early round of related improvements. This line-item was introduced as an outcome of the scenario planning efforts in which the Preferred Scenario included an intentional focus on targeted intersection improvements (e.g., turn lane additions, intersection control modifications, limited through-lane additions, etc.). Initial candidates for this line-item were identified by using the updated Travel Demand Model to review several of the most congested intersections throughout the county and related opportunities for smaller-scale operational improvements to have a beneficial impact. Initial candidate possibilities are listed in *Exhibit 4.2.2*, with the acknowledgement that any/all of these locations require further screening and analysis before direct project selection and programming should occur.
- *Erie County Traffic Signal Preemption Program* – was assumed as approximately a \$4.5 million effort that could span multiple phases over the course of 3-6 years. The goal of this program would be a concerted effort toward the installation, upgrade, or replacement of emergency vehicle traffic signal preemption equipment or systems along priority corridors throughout Erie County.
- *Erie County Traffic Signal Program* – was assumed as approximately \$2 million per cycle over the course of a repeating three-year cycle (i.e. Preliminary Engineering

Exhibit 4.2.2 – Initial Candidates for Operational Improvement Line Item

Municipality	Operational Improvement Candidate
Erie	Bayfront Pkwy / State St
Erie	US 20 (26th St) / State St
Erie	PA 8 (Parade St) / US 20 (26th St)
Erie	Broad St / Buffalo Rd
Erie	Bayfront Pkwy / 8th St
Lawrence Park	PA 5 / PA 955 / Lawrence Pkwy
Millcreek	West 38th St / Zuck Rd
Millcreek	PA 5 / PA 832
Millcreek	US 19 / Peach St / Interchange Rd
Millcreek	PA 99 / Edinboro Rd @ Interchange Rd
Millcreek	Sterretania Rd / Grubb Rd / McCreary Rd
Millcreek	PA 8 / Wattsburg Rd / Norcross Rd
Summit	US 19 / Peach St / Summit Town Center
Summit	US 19 / Peach St / Oliver Rd
Wesleyville	US 20 (Buffalo Rd) / Water St

in Year 1, Final Design in Year 2, and Construction/Implementation in Year 3), with the exception of an initial \$1.5 million “start-up” cycle in Period “1” to kick-off the program and an early round of related improvements. Like the Operational Improvements Line Item, the signal program was introduced as an outcome of the scenario planning efforts. The Preferred Scenario included an intentional focus on traffic signal improvements at congested intersections or along congested corridors, with the intent of rapidly and efficiently implementing improvements primarily through signal re-timing and coordination efforts, as well as targeted equipment additions or upgrades (i.e., as opposed to complete signal reconstruction). In order for such a program to succeed, the specific program details and responsibilities will need to be finalized through coordination between the Erie MPO, PennDOT, and affected municipalities. Based on a cursory review of the updated Travel Demand Model results and other data contained within this report (e.g., crash data, traffic volumes), initial program candidate possibilities are listed in *Exhibit 4.2.3*.

- *TE Line- Item* – was assumed to include 100% of the applicable TE revenues, minus any existing TE projects on the 2011-2014 TIP. All TE projects must relate to surface transportation within one or more of the 12 eligible activities listed below.
  - A. Provision of facilities for pedestrians and bicycles.
  - B. Provision of safety and educational activities for pedestrians and bicyclists.
  - C. Acquisition of scenic easements and scenic or historic sites (including historic battlefields).
  - D. Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
  - E. Landscaping and other scenic beautification.
  - F. Historic preservation.
  - G. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).
  - H. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails).
  - I. Inventory, control, and removal of outdoor advertising.
  - J. Archaeological planning and research.
  - K. Environmental mitigation
    - a. To address water pollution due to highway runoff; or
    - b. Reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
  - L. Establishment of transportation museums.



- *RR Line-Item* – was assumed to include 100% of the applicable railroad revenues, minus any existing highway-rail crossing projects on the 2011-2014 TIP. The focus of this particular line item is on improvements for at-grade highway-rail crossings that will be prioritized through PennDOT.
  - Additional rail funding (not detailed as part of this plan) may also be available through PennDOT’s Rail Freight Assistance Program (RFAP). The RFAP is a competitive funding source aimed at providing financial assistance for investment in rail freight infrastructure to preserve essential rail freight service where economically feasible, and to preserve or stimulate economic development through the generation of new or expanded rail freight service. Specific program guidance and requirements may found on PennDOT’s Rail Freight website (<http://www.dot.state.pa.us/Internet/Bureaus/pdBRF.nsf>).
- *Transit and Airport Projects* – are shown as submitted by the transit authority and PennDOT; specific line-item dollars for future years have not been shown.
- *TIP Discretionary Line-Item* – was assumed as a placeholder for future discretionary project allocations or unanticipated needs mostly in Period “3”. The primary intent of this placeholder was to reserve funds in advance to address additional capital projects or improvements that may be recommended by any of the future study possibilities detailed below.

*Exhibit 4.2.3 – Initial Candidates for Erie County Traffic Signal Program*

Municipality	Signal Program Candidate
Erie	Parade Street (E 6th St to E 28th St)
Erie	Ash Street (E 6th St to E 28th St)
Erie	French Street (E 6th St to E 26th St)
Erie	State Street (Bayfront Pkwy to E 26th St)
Erie / Millcreek	PA 8 (E 28th St to Wager Rd)
Erie / Millcreek / Summit	PA 97 (US 20 to Robison Rd)
Millcreek	PA 832 / Peninsula Drive (W 6th St to US 20)
Millcreek	PA 832 / Sterrettania Road
Millcreek	Zuck Rd (US 20 to Zimmerly Rd)
Lawrence Park / Wesleyville	Lawrence Parkway (PA 5 to Buffalo Rd)
Lawrence Park / Harborcreek	PA 955 / Iroquois Avenue (PA 5 to Walbridge Rd)
Girard	US 20 (Girard)
Northeast	US 20 (Northeast Boro)

***Future Study Possibilities***

In addition to the specific projects and line-item programs detailed herein, a number of future transportation-related study recommendations have also been identified throughout the planning process for the 2040 LRTP. Many of these possibilities originated from the initial rounds of public and stakeholder engagement and/or the initial list of project candidates. In some cases, it was deemed necessary to conduct a more formal review of potentially valid issues or concepts (e.g., area-specific land use and transportation plans) before dedicated funds can be programmed. Other study candidates aim to compile and prioritize numerous competing interests into a more unified plan of action (e.g., ped/bike prioritization plans), and still others are proposed for to analyze larger-scale issues to a higher level of detail than possible as part of the 2040 LRTP (e.g., design guidelines or detailed freight/passenger rail improvement studies). Future studies may be eligible for funding under the Erie MPO’s Unified Planning Work Program (UPWP), other special / discretionary funding sources, or other public / private independent sources. Initial candidates identified as part of this 2040 LRTP are listed in *Exhibit 4.2.4*.

## Project Programming Summary

The final project programming summary for the 2040 LRTP is reflected by Exhibits 4.2.5 through 4.2.14. All cost estimates listed in the project programming summary tables are displayed in terms of year-of-expenditure dollar values. Where applicable, the estimates have been broken out by phase for Study (STU), Preliminary Engineering (PE), Final Design (FD), Utilities (UTL), Right of Way (ROW), and Construction (CON) activities.

*Exhibit 4.2.4 – Initial Candidates for Future Transportation-Related Studies*

Municipality	Future Study Candidate	Project Description
Millcreek	Millcreek Area Land Use & Transportation Study	Land Use & Transportation Study w/ a focus on West 38th Street, Zuck Rd, and surrounding areas
Girard	US 20 / Girard Land Use & Transportation Study	Land Use & Transportation Study along US 20 through Girard Twp / Girard Boro
Erie	City of Erie Traffic Operations Prioritization Plan	Review and prioritization of citywide signal or infrastructure improvements for future funding consideration
Erie	Ped / Bike Prioritization Program / Bayfront Trails	Establish a prioritized ped / bike / trail network along the Bayfront Parkway and study the feasibility of existing and future improvements, key corridors, special facility design, and maintenance
Multi-municipal	Ped / Bike Prioritization Program / Erie Metro Area	Establish a prioritized ped / bike / trail network within the Erie Metro Area and study the feasibility of existing and future improvements, key corridors, special facility design, and maintenance
Countywide	Ped / Bike Prioritization Program / Erie County	Establish a prioritized ped / bike / trail network for Erie County's outlying municipalities and study the feasibility of existing and future improvements, key corridors, special facility design, and maintenance
Countywide	Freight Rail Improvements Study	Study feasibility of freight service improvements, including intermodal rail ramp, new and existing rail-served industrial property development, rail access to Port of Erie, rail sidings, freight transfer, etc.
Countywide	Passenger Rail Improvements Study	Study feasibility of passenger service improvements, including Amtrak service to Cleveland, new service to Pittsburgh, high-speed rail between Chicago and NY, and local Amtrak station amenities
Countywide	Seaway Trail Design Guidelines and Construction Programming Study	Establish a design theme for the Seaway Trail road infrastructure including bridge parapets, guide rails, signage, etc., and refine, advance, and prioritize projects from the 2005 Seaway Trail Mgmt Plan
Multi-municipal	US 6 Bike Route Improvements	Feasibility study to improve safety and facilities for bicycle travel along US 6 entering Corry, including potential local route realignment from US 6 to SR 2018 (Elgin Rd / Lovell Rd)

*Exhibit 4.2.5 – Project Programming Summary / State Bridge*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>STATE BRIDGE</b>													
5	84025	PA 5 / Turkey Ck Trib #2	0						60		16	388	464
5	1167	E. Lake Rd. / Four Mile Ck	0								10	830	840
5	72420	East Lake Road Br / PA 5	0						120		52	379	550
5	82972	E. Lake Rd. / Twelve Mile Ck	0								10	930	940
5	90025	PA 5 Over Trib Lake Erie	0					50				328	378
5	82970	West Lake Rd Br / Walnut Ck	0								10	1,200	1,210
5	82970	West Lake Rd Br / Walnut Ck		1								485	485
8	74590	PA 8 Bridge over Mill Creek	0					52	54		54		160
8	74590	PA 8 Bridge over Mill Creek		1								540	540
8	88594	PA 8: Wattsburg Rd. Bridge	0					104	54		54		212
8	88594	PA 8: Wattsburg Rd. Bridge		1								606	606
18	89114	SR 18 over Conneaut Creek East Branch	0					160	150	50	50	500	910
98	88596	PA 98 over Cussewago Ck	0					250					250
98	88596	PA 98 over Cussewago Ck		1					110		55	675	840
98	649	Avonia Rd over I-90	0					400					400
98	649	Avonia Rd over I-90		1					375		55	4,500	4,930
197	88600	SR 197 / French Ck South Branch	0					108					108
197	88600	SR 197 / French Ck South Branch		1					110		55	900	1,065
832	990	Sterretania / Walnut Bridge	0						45			4,500	4,545
955	82918	Iroquois Avenue Arch	0									85	85
955	72621	SR 955 over Rachel Run #1	0							38			38
955	84026	PA 955 Iroquois Ave Br #2	0						150		52	474	676
1008	72623	Twelve Mile Ck Br / SR 1008	0									1,000	1,000
2010	58227	SR 2010 over Pine Run	0									15	15
2011	721	Bridge St / Bentley Run	0									175	175
2020	72639	French Ck South Br / SR 2020	0						106		54	379	539
2024	72640	Bear Ck / SR 2024	0								26	364	390
3014	1293	East Park Road Bridge	0					250			55		305
3014	1293	East Park Road Bridge		1					220	27		1,125	1,372
3014	82120	SR 3014 / Little Elk Ck	0					150					150
3014	82120	SR 3014 / Little Elk Ck		1					115		111	525	751
3103	82925	Sanford Road / I-90	0					300					300
3103	82925	Sanford Road / I-90		1					425	25	110	4,500	5,060
3104	82926	SR 3104 McKee Rd / I-90	0					260				1,700	1,960
3104	82926	SR 3104 McKee Rd / I-90		1					400		110	3,650	4,160
4016	1296	W. 38th St over I-79	0					212					212
4016	1296	W. 38th St over I-79		1					245		55	2,025	2,325
4016	88716	Millfair Rd Bridge	0						433				433
4016	88716	Millfair Rd Bridge		1					541	506	985	9,360	11,392
4024	78834	SR 4024 over Walnut Ck	0					148				383	531
4024	78834	SR 4024 over Walnut Ck		1					108	25	52	158	343
-	-	State Bridge Line Item	0									343	343
-	-	State Bridge Line Item		1								6,003	6,003
-	-	State Bridge Line Item			2							42,109	42,109
-	-	State Bridge Line Item				3						141,040	141,040

Exhibit 4.2.6 – Project Programming Summary / Local Bridge

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>LOCAL BRIDGE</b>													
7302	58233	Norman Way Br over Mill Creek	0								33		33
-	946	Reichert Road Bridge #1	0						19		5	632	656
-	1020	Reichert Road Bridge #2	0						33		5	941	979
-	58232	McBride Viaduct - East Br	0				700						700
-	76904	State St Br ov Cnal Basin	0									1,591	1,591
-	76904	State St Br ov Cnal Basin		1								404	404
-	-	Local Bridge Reserve	0									74	74
-	-	Local Bridge Reserve		1								7,645	7,645
-	-	Local Bridge Reserve			2							8,550	8,550
-	-	Local Bridge Reserve				3						22,800	22,800

Exhibit 4.2.7 – Project Programming Summary / Transit

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>TRANSIT</b>													
4034	87067	Bayfront Mobility (Park & Ride)	0									325	325
-	77126	Replace Fixed Route Buses	0									3,006	3,006
-	77126	Replace Fixed Route Buses		1								3,190	3,190
-	77127	Purchase Spare Parts / ACM	0									154	154
-	77127	Purchase Spare Parts / ACM		1								156	156
-	77128	Engines / Transmissions	0									283	283
-	77128	Engines / Transmissions		1								298	298
-	77129	Replace Paratransit Buses	0									1,359	1,359
-	77129	Replace Paratransit Buses		1								1,442	1,442
-	77131	Acquire Shop Equipment	0									150	150
-	77131	Acquire Shop Equipment		1								150	150
-	77132	Acquire Misc. Equipment	0									150	150
-	77132	Acquire Misc. Equipment		1								150	150
-	77135	Technology Upgrades	0									100	100
-	77135	Technology Upgrades		1								100	100
-	77136	Const. Operating Facility		1								9,017	9,017
-	83750	Replace Radio System	0									677	677
-	90075	Replace Fareboxes		1								725	725
-	-	Transit Line-Item (Future Funding)			2							*	*
-	-	Transit Line-Item (Future Funding)				3						*	*

\* All applicable funds programmed centrally by PennDOT, EMTA, or FAA as appropriate



*Exhibit 4.2.8 – Project Programming Summary / Enhancements*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>ENHANCEMENTS</b>													
-	72860	Asbury Road Bike Lanes	0									379	379
-	77166	Girard Main Street	0									188	188
-	77178	Concord St. Sidewalk Project	0									34	34
-	85771	Erie ADA Group 1-09	0									20	20
-	87194	Perry Square Streetscape	0									356	356
-	92387	Erie Inland Port PCTI Study	0				300						300
-	92389	NE Smart Trans Study	0				300						300
-	92864	Perry Square Streetscape Ph 3	0									370	370
-	92865	School Zone Safety Enhancement		1								88	88
-	92867	Great Lakes Seaway Trail Signs		1								10	10
-	92869	Lakeside Drive Sidewalk		1								90	90
-	92870	Corry Trail Ph 3	0									35	35
-	92870	Corry Trail Ph 3		1								85	85
-	-	TE Line Item		1								3,328	3,328
-	-	TE Line Item			2							5,331	5,331
-	-	TE Line Item				3						17,241	17,241

*Exhibit 4.2.9 – Project Programming Summary / Interstate*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>INTERSTATE</b>													
79	-	I-79 Section 7: MP 153.5 to MP 165.0		1								11,500	11,500
79	-	I-79 Section 8: MP 165.0 to MP 172.0		1								8,800	8,800
79	-	I-79 Section 9: MP 172.0 to MP 178.0		1								7,500	7,500
79	-	I-79 Section 10: MP 178.0 to MP 182.2			2							3,800	3,800
79	-	I-79 Section 11: MP 182.2 to MP 182.9			2							1,500	1,500
79	-	I-79 Section 11A: MP 182.5 to 182.8			2							2,000	2,000
86	-	I-86 Section 1: MP 1EB to MP 7EB		1								5,000	5,000
86	-	I-86 Section 2: MP 1WB to MP 7WB			2							8,800	8,800
90	-	I-90 Section 1: MP 0 to MP 18		1								162,000	162,000
90	-	I-90 Section 2: MP 18 to MP 25		1								7,500	7,500
90	-	I-90 Section 2A: MP 25 to MP 28.3		1								10,000	10,000
90	-	I-90 Section 2B: MP 28.3 to MP 30		1								5,000	5,000
90	-	I-90 Section 3: MP 30 to MP 35		1								10,000	10,000
90	-	I-90 Section 4: MP 35 to MP 46			2							11,000	11,000
-	-	Interstate Program Line-Item		1								*	*
-	-	Interstate Program Line-Item			2							*	*
-	-	Interstate Program Line-Item				3						*	*

Exhibit 4.2.10 – Project Programming Summary / Highway

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>HIGHWAY</b>													
6	75973	Mill Village RR Underpass		1						135	300	1,350	1,785
6	-	US 6 / Sciota St Access Improvements			2			67	67	23	46	457	659
6	-	PA 8 / Pine Ave / Parade St & 28th St Improvements				3		43	44			304	391
18	82999	PA 18 - RT 6N to SR 20	0									2,400	2,400
19	68138	Peach St / US 19: Kuntz-Cherry	0						780	1,040	2,040	2,138	5,998
19	68138	Peach St / US 19: Kuntz-Cherry		1								900	900
19	786	Peach St @ I-90 Interchange	0							1,040	500	8,375	9,915
19	786	Peach St @ I-90 Interchange		1								5,634	5,634
19	76191	South Waterford Improvements	0						100	703			803
19	76191	South Waterford Improvements		1								2,675	2,675
19	83185	US 19: Townhall Road Improvements	0						270				270
19	83185	US 19: Townhall Road Improvements		1						160	160	2,025	2,345
19	-	US 19 Corridor Improvements			2			180	185	278	278	364	1,284
19	-	US 19 Corridor Improvements				3						2,485	2,485
19	629	US 19 / Peach Street Widening: Section A06 / Robison Rd to Oliver Rd				3			675		417	7,381	8,473
19	-	US 19 Access Management				3	539					7,070	7,609
20	92826	SR 20: Moorehead to Cemetery	0									215	215
20	92826	SR 20: Moorehead to Cemetery		1								4,572	4,572
97	91488	SR 97: Perry Hwy - Old French Rd	0									2,125	2,125
99	-	US 6N Study Improvements / PA 99 / Chestnut St / Waterford St Roundabout			2			187	192	132	264	2,643	3,419
430	92506	Erie SR 430	0									1,706	1,706
3006	91406	SR 3006: SR 98 - SR 99/699	0									2,175	2,175
3006	88711	SR 3006: Fry Rd	0						104	108	270		483
3006	88711	SR 3006: Fry Rd		1								1,850	1,850
3006	-	US 6N Study Improvements / US 6N Fry Rd to Angling Rd		1				180	185	254	254	2,545	3,419
3006	-	US 6N Study Improvements / US 6N & Angling Rd Roundabout		1				157	161	111	221	2,214	2,864
3006	-	US 6N Study Improvements / US 6N Angling Rd to Maple Dr			2			144	144	102	102	1,015	1,505
3006	-	US 6N Study Improvements / US 6N & PA 99 Intersection			2			121	124	85	85	852	1,267
3006	-	US 6N Springfield Twp RR Underpass			2			126	130	92	92	1,834	2,273
3006	-	US 6N & PA 98 Improvements				3		38	39			270	347
4034	-	Bayfront Parkway Prioritization Study / At-Grade Pedestrian Crossings		1				331	341	173	173	2,251	3,269
4034	-	Bayfront Parkway Prioritization Study / Roundabout Improvement			2			260	268	294	294	3,719	4,835
-	87514	Group 1-11-AWPM	0									400	400
-	-	Wesleyville Boro Traffic Operations Study			2		317	174	179			2,607	3,276
-	-	Corry Interstate Connectivity				3						15,126	15,126



*Exhibit 4.2.10 – Project Programming Summary / Highway (cont'd)*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>HIGHWAY (Continued)</b>													
-	-	Erie Act 44 Funds		1								13,865	13,865
-	-	Erie Act 44 Funds			2							14,334	14,334
-	-	Erie Act 44 Funds				3						38,224	38,224
-	-	State Route Maintenance Line Item	0									1,052	1,052
-	-	State Route Maintenance Line Item		1								26,361	26,361
-	-	State Route Maintenance Line Item			2							69,649	69,649
-	-	State Route Maintenance Line Item				3						191,297	191,297
-	-	Local Federal Aid Route Line Item		1								2,850	2,850
-	-	Local Federal Aid Route Line Item			2							2,850	2,850
-	-	Local Federal Aid Route Line Item				3						7,600	7,600
-	-	Safety Line Item	0									204	204
-	-	Safety Line Item		1								5,745	5,745
-	-	Safety Line Item			2							11,640	11,640
-	-	Safety Line Item				3						37,645	37,645
-	-	Operational Improvements Line Item		1								3,500	3,500
-	-	Operational Improvements Line Item			2							12,000	12,000
-	-	Operational Improvements Line Item				3						30,500	30,500
-	-	TIP Discretionary Line Item		1								250	250
-	-	TIP Discretionary Line Item			2							500	500
-	-	TIP Discretionary Line Item				3						64,000	64,000

*Exhibit 4.2.11 – Project Programming Summary / Highway-Rail Crossings*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>HIGHWAY-RAIL CROSSINGS</b>													
-	35742	Avenue A RRX - 2003	0									150	150
-	67028	Summer St. RRX - 2003	0									143	143
-	87332	O'Neil Road RR Xing	0									150	150
-	-	RR Line Item	0									256	256
-	-	RR Line Item		1								2,918	2,918
-	-	RR Line Item			2							4,320	4,320
-	-	RR Line Item				3						13,970	13,970

Exhibit 4.2.12 – Project Programming Summary / Signals & ITS

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>SIGNALS &amp; ITS</b>													
5	-	City of Erie Traffic Signals Project (PA 5)		1				57	39			252	349
19	-	City of Erie Traffic Signals Project (US 19 / Peach St)			2			182	125			805	1,113
20	-	City of Erie Traffic Signals Project (US 20 / 26th St)			2			182	125			805	1,113
290	-	City of Erie Traffic Signals Project (PA 290 / 12th St)		1				51	35			225	311
4016	-	City of Erie Traffic Signals Project (SR 4016 / 38th St)			2			114	78			504	696
-	-	I-90 and I-79 Traffic Surveillance Project		1				86	86			589	760
-	-	City of Erie DMS Project			2			92	92			632	816
-	-	Erie County Traffic Signal Pre-emption Program		1								664	664
-	-	Erie County Traffic Signal Pre-emption Program			2							5,273	5,273
-	-	Erie County Traffic Signal Program		1								3,500	3,500
-	-	Erie County Traffic Signal Program			2							4,000	4,000
-	-	Erie County Traffic Signal Program				3						12,000	12,000

Exhibit 4.2.13 – Project Programming Summary / Airport (Corry-Lawrence)

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>AIRPORT (CORRY-LAWRENCE)</b>													
-	71307	Rehab RW MIRL & TW MITL		1								300	300
-	80380	Rehab RW MIRL & MITL, Ph 1		1								150	150
-	80381	Rehab Airport Pavement		1								130	130
-	86526	Improve Fuel Farm		1								100	100
-	86527	Rehabilitate Parallel Tax		1								750	750
-	89865	Remove Obstructions		1								200	200
-	-	Construct New Hangars		1								1,000	1,000
-	-	Construct New Terminal Bldg		1								500	500
-	-	EA for RW Extension		1								250	250
-	-	Install GVGI RW 14-32		1								170	170
-	-	Land Acquisition & Aerial Ease		1								450	450
-	-	Land Acquisition for RW Ext		1								300	300
-	-	Parking / Entrance Road		1								125	125
-	-	Rehabilitate Terminal Apron		1								500	500
-	-	Remove Obstructions in RPZ's		1								35	35
-	-	RW 14-32 Extension Ph 1		1								200	200
-	-	RW 14-32 Extension Ph 2		1								1,000	1,000
-	-	Stewart Rd / Center St Ph 1		1								150	150
-	-	Stewart Rd / Center St Ph 2		1								600	600
-	-	Airport Line-Item (Future Funding)			2							*	*
-	-	Airport Line-Item (Future Funding)				3						*	*

\* All applicable funds programmed centrally by PennDOT, EMTA, or FAA as appropriate



*Exhibit 4.2.14 – Project Programming Summary / Airport (Erie International)*

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>AIRPORT (ERIE INTERNATIONAL)</b>													
-	-	Air Cargo Facility										2,688	2,688
-	-	ATC										9,407	9,407
-	-	Maintenance and Firefighting										1,747	1,747
-	-	Parking										672	672
-	-	Terminal Expansion										2,688	2,688
-	-	Conduct Wildlife Management Plan	0									121	121
-	-	Acquire SRE and other airport improvements and equipment	0									150	150
-	-	Acquire (upgrade) portable Company and Fire Radios and Repeater Frequency	0									100	100
-	-	Extend Runway 6-24	0									11,365	11,365
-	-	Extend Runway 6-24		1								4,709	4,709
-	-	Construct Oil Water Separator Phase II		1								50	50
-	-	Acquire Hoses (400 ft. 1 3/4 inch)		1								5	5
-	-	Rehabilitate (replace) Access Control System		1								237	237
-	-	Conduct Airport Master Plan Study		1								500	500
-	-	Acquire Multi-Function Snow Removal Equipment		1								800	800
-	-	Acquire (replace) Fingerprint Machine		1								25	25
-	-	Rehabilitate Ramp (Apron) Pavement Project		1								15	15
-	-	Acquire Tractor and mowing deck		1								125	125
-	-	Rehabilitate (replace) Terminal Building Windows		1								50	50
-	-	Acquire (replace) Fire alarm/emergency notification system		1								100	100
-	-	Acquire Chemical De-icing truck R/W		1								160	160
-	-	Acquire Incident Reporting Software		1								15	15
-	-	Rehabilitate (renovate) Communications Center		1								40	40
-	-	Acquire Runway Closure Signs (Illuminated)		1								25	25
-	-	Acquire Public Safety Misc. Equipment		1								10	10
-	-	Acquire Backhoe		1								95	95

Exhibit 4.2.14 – Project Programming Summary / Airport (Erie International) (cont'd)

Project			Period				Year of Expenditure Cost (\$000's)						
SR	MPMS	Title	0	1	2	3	STU	PE	FD	UTL	ROW	CON	TOTAL
<b>AIRPORT (ERIE INTERNATIONAL) (Continued)</b>													
-	-	Replace Airline Passenger Lift Device		1								75	75
-	-	Construct Maintenance/ARFF Building		1								5,000	5,000
-	-	Rehabilitate (replace) Terminal Building Roof		1								30	30
-	-	Rehabilitate (replace) Terminal Building Carpet/Tile		1								20	20
-	-	Improve Fuel Farm Hardening		1								10	10
-	-	Rehabilitate (repair) Maintenance Building Apron		1								75	75
-	-	Acquire AA&E Computerized SIDA and AOA Training		1								100	100
-	-	Acquire HVAC Units - Commuter walkway		1								50	50
-	-	Acquire (upgrade) CCTV		1								300	300
-	-	Acquire Multi Purpose Machine		1								190	190
-	-	Acquire (replace) Bucket Truck		1								75	75
-	-	Acquire ARFF Gear		1								15	15
-	-	Acquire Safety Equipment/Training		1								15	15
-	-	Acquire (replace) Public Safety Vehicle		1								100	100
-	-	Acquire Security Software/Hardware Update-Access Control System			2							100	100
-	-	Acquire ARFF turn-out gear			2							26	26
-	-	Rehabilitate (mark) Airport Pavement			2							110	110
-	-	Update Wildlife Assessment Plan			2							133	133
-	-	Acquire Security Equipment (Design Only)			2							150	150
-	-	Improve Runway 2-20 Safety Area			2							2,000	2,000
-	-	Acquire Front End Loader			2							200	200
-	-	Airfield Maintenance Building (New)			2							2,500	2,500
-	-	Rehabilitate (upgrade) Security Equipment			2							2,000	2,000
-	-	Acquire Incident Command Vehicle Replacement			2							100	100
-	-	Airport Line-Item (Future Funding)			2							*	*
-	-	Airport Line-Item (Future Funding)				3						*	*

\* All applicable funds programmed centrally by PennDOT, EMTA, or FAA as appropriate



## **Plan Administration**

The 2040 Long Range Transportation Plan is the guiding document for all transportation investments in Erie County. The Plan sets policy goals and objectives to direct how projects should be selected and where funding should be allocated. It also proposes a Preferred Scenario that identifies specific projects and initiatives that should be pursued over the next 30 years. However, it is critical that the Plan also be responsive to changing conditions and unforeseen developments. To that end, the Plan is continually monitored and updated by the Erie MPO and Erie County Department of Planning through the processes established by the Commonwealth for the Twelve Year Program (TYP) and by Federal Law for the State Transportation Improvement Program (STIP) and regional Transportation Improvement Program (TIP). These programs require biennial updates to the revenue assumptions and project scheduling of transportation investments across the Commonwealth, including Erie County:

- *Twelve Year Transportation Program (TYP)*: PA Act 120 of 1970, as amended, requires that every two years PennDOT prepare and submit to the State Transportation Commission a program of recommended transportation improvements to be undertaken during the next twelve years. Projects included in this biennial program comprise the Twelve Year Program (TYP). With the policy direction of the State Transportation Commission, the TYP is developed to address the transportation concerns of the Commonwealth. Input is solicited from the public and interested parties through regional hearings. Transportation projects include all transportation modes: highway, bridges, aviation, rail freight, public transit and other transportation modes.
- *State Transportation Improvement Program (STIP)*: The first four year segment of the TYP becomes the federally mandated State Transportation

Improvement Program (STIP), which includes the programs developed and proposed by county and regional planning organizations.

- *Transportation Improvement Program (TIP)*: The Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and its subsequent extensions, requires the development of long range plans and transportation improvement programs by Metropolitan Planning Organizations (MPOs). Together with PennDOT, the MPOs help to prioritize the projects that comprise the STIP and the TYP. The Erie MPO is responsible for developing the TIP for Erie County.

These programs act as the delivery mechanism for advancing the goals and objectives of the 2040 LRTP through a continual, cooperative, comprehensive process that identifies current available revenues, establishes accurate projects cost estimates, and engages the public to develop a feasible, fiscally constrained, and locally derived implementation program.

## **Amendment Procedures**

### **LRTP Update**

The 2040 LRTP will be updated every four years. Revenue forecasts, base year assumptions, the travel demand model, horizon year, and scenario projections/project recommendations will be reviewed and amended as necessary during the update process. The update will be consistent with the Erie MPO's Public Participation Plan, with all identified concerns and recommendations presented to the Erie MPO for consideration prior to adoption of the revised plan.

### **LRTP Modifications**

As noted previously, the 2040 LRTP provides goals, objectives, and project recommendations for Erie County transportation investments over the next 30 years, while the TIP acts as the delivery mechanism to implement those recommendations, as feasible, given existing conditions and resources. Therefore, to keep the most current revenue estimates, project costs, and schedules synchronized between the TIP and 2040 LRTP, amendments and administrative changes to the LRTP will follow the 'TIP Modification Procedures' as approved with the current TIP (2011 TIP), and as amended during the biennial TIP updates. As such, all future modifications to the Erie MPO TIP will concurrently modify the 2040 LRTP. These modifications will be noted in Appendix D (Transportation Improvement Program) of the Plan.