

Introduction

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) required a financial plan as a part of a Metropolitan Planning Organization's (MPO) Long Range Transportation Plan. The Moving Ahead for Progress in the 21st Century Act (MAP-21), the subsequent surface transportation funding and authorization bill passed on June 29, 2012, makes no substantive changes to this requirement. The financial plan shows proposed investments that are realistic in the context of reasonably anticipated future revenues over the life of the plan and for future network years, set for the purpose of the *KYOVA 2040 Metropolitan Transportation Plan* (KYOVA 2040 MTP) as 2030 and 2040. Meeting this test is referred to as "financial constraint." The mix of transportation recommendations proposed to meet metropolitan transportation needs over the next 27 years is consistent with revenue forecasts. The Financial Plan details both proposed investments toward these recommendations and revenue forecasts over the life of the plan.

Financial Plan Development

The proposed recommendations were developed in collaboration with the KYOVA MPO, Cabell, Wayne, and Lawrence Counties, WVDOT, ODOT, the Tri-State Transit Authority (TTA), Wayne Express, and the Lawrence County Port Authority (LCPA). These projects include roadway, freight, bicycle, pedestrian, and transit facilities and services for the life of this plan. The financial plan also reflects existing and committed projects, the Transportation Improvement Program (TIP), and the future plans of KYOVA, WVDOT, ODOT, TTA, Wayne Express, and LCPA. These recommendations also reflect travel demand benefits and socioeconomic impacts studied using the evaluation matrix process detailed in **Chapter 3**. Finally, these projects result from an extensive public participation process that included public workshops (two workshop series in multiple venues), stakeholder interviews, and the participation of a Steering Committee. More information on the public outreach efforts can be found in **Chapter 1**.

Revenue forecasts were developed after a review of previous state and local expenditures, current funding trends, and likely future funding levels. The revenue forecasts involved consultation with KYOVA, WVDOT, ODOT, TTA, Wayne Express, and LCPA. All dollar figures discussed in this section initially were analyzed in current year dollars (i.e. 2012) and then inflated to reflect projected year of funding or implementation. Based on current national standards and applicable local forecasts, an annual inflation rate of 3% was used to forecast costs and revenues.

This chapter provides an overview of revenue assumptions, probable cost estimates, and financial strategies along with the detailed research results used to derive these values. Since this is a planning level funding exercise, all funding programs, projects, and assumptions will have to be re-evaluated in subsequent plan updates.



Financial Planning Scenarios

The KYOVA MPO obtains funding for its projects through a combination of local, state, and federal sources. Cabell and Wayne counties receive 5.8% of West Virginia's statewide improvement funds. Lawrence County's federal funding includes Garvee bonds and state funding includes state bonds. These low funding levels will not be adequate to implement many of the projects identified as a part of this study, thereby leaving many deficiencies unaddressed across all modes of transportation.

These tables indicate that using current funding level estimates, total projected overall revenue during the planning period for the West Virginia and Ohio portions of KYOVA would be approximately \$2.3 billion and \$713 million respectively. After considering the estimated costs for all modes, the total cost over the planning period would be approximately \$2.3 billion and \$679 million respectively.

System Costs and Revenues

Tables 9.1 and 9.2 show the forecasted revenues and costs for Cabell and Wayne Counties for the *KYOVA 2040 MTP*, assuming the continuation of current state and federal funding levels.

Tables 9.3 and 9.4 show the forecasted revenues and costs for Lawrence County for the *KYOVA 2040 MTP*, assuming the continuation of current state and federal funding levels. Funding is divided to reflect a 2030 interim year and a 2040 final plan year. Highway capital projects, highway maintenance projects, bicycle and pedestrian, transit operations, and transit capital each are divided into individual costs and revenues.

Table 9.1 - 2040 L RTP Revenue Forecast (Cabell and Wayne Counties, in Thousands)

Period	Highway	Transit Capital	Transit Operations	Pedestrian/Bicycle	Maintenance	Total
2012-2030	\$215,660	\$39,400	\$155,440	\$7,630	\$799,810	\$1,217,930
2031-2040	\$173,910	\$31,300	\$125,360	\$6,110	\$750,890	\$1,087,570
Total	\$389,570	\$70,690	\$280,800	\$13,740	\$1,550,710	\$2,305,500

Table 9.2 - 2040 L RTP Costs (Cabell and Wayne Counties, in Thousands)

Period	Highway	Transit Capital	Transit Operations	Pedestrian/Bicycle	Maintenance	Total
2012-2030	\$214,660	\$39,400	\$155,440	\$7,630	\$799,810	\$1,216,930
2031-2040	\$173,880	\$31,300	\$125,360	\$6,110	\$750,890	\$1,087,540
Total	\$388,540	\$70,690	\$280,800	\$13,740	\$1,550,710	\$2,304,470

Table 9.3 - 2040 L RTP Revenue Forecast (Lawrence County, in Thousands)

Period	Highway	Transit Capital	Transit Operations	Pedestrian/Bicycle	Maintenance	Total
2012-2030	\$326,360	\$4,580	\$18,090	\$16,560	\$84,700	\$450,290
2031-2040	\$170,870	\$3,670	\$14,760	\$13,260	\$59,800	\$262,350
Totals	\$497,230	\$8,250	\$32,850	\$29,820	\$144,500	\$712,650

Table 9.4 - 2040 L RTP Costs (Lawrence County, in Thousands)

Period	Highway	Transit Capital	Transit Operations	Pedestrian/Bicycle	Maintenance	Total
2012-2030	\$293,930	\$4,580	\$18,090	\$16,560	\$84,700	\$417,860
2031-2040	\$169,760	\$3,670	\$14,760	\$13,260	\$59,800	\$261,240
Totals	\$463,680	\$8,250	\$32,850	\$29,820	\$144,500	\$679,100



Highway Funding

Tables 9.5 and 9.6 reflect the proposed costs and revenues for highway projects with current funding sources. The costs and revenues are broken up between highway capital projects and maintenance. An estimated \$1.9 billion and \$642 million will be available for highway capital and maintenance projects within the West Virginia and Ohio portions of the KYOVA area, respectively, in the funded plan.

Maintenance Funding

Maintenance funding in the KYOVA region primarily is used for roadway maintenance and paving of dirt roads, though pedestrian and bicycle facilities also are maintained with these funds. This funding source is not expected to increase. Instead, it is shown here as keeping pace with inflation. Projecting these funding sources through the 2040 horizon year of the MTP, the total maintenance funding available for Cabell and Wayne Counties is approximately \$1.6 billion. Maintenance funding available for Lawrence County totals approximately \$145 million. The maintenance costs generated annually are assumed to equal the revenue available.

Capital Highway Funding

The available capital highway funding for Cabell and Wayne counties totals approximately \$388 million and the available capital highway funding for Lawrence County totals approximately \$464 million.

Once the funding levels have been established, the next step is to consider what needs to be filled within the two horizon year periods of the plan. To do this, the evaluation matrix and recommendations shown in Chapter 3 have been consulted. Proposed project recommendations were analyzed to determine social and environmental conditions as well as public feedback and transportation network effects. While it would be ideal to implement all of these projects, only a portion can be accommodated in the funded plan. As a result, higher rated projects were considered for implementation prior to lower rated projects.

The following tables and figures divide the projects in the evaluation matrix into 2030 and 2040 funded horizon years and a vision plan. Tables 9.7, 9.8, and 9.9 show projects for each of these three horizons. The map displayed as Figure 9.1 shows the highway projects organized by funding horizon year. Figure 9.2 shows the projected congestion in the KYOVA area with all of the financially constrained projects in place.

The cost of unfunded capital highway projects (referred to as the Vision Plan) is \$11.6 billion for the West Virginia portion of the KYOVA area and \$264 million for the Ohio portion of the KYOVA area (in 2041 dollars).

Table 9.5 - Highway Costs and Revenues (Cabell and Wayne Counties, in Thousands)

Period	Costs			Revenue			Difference
	Highway	Maintenance	Total	Highway	Maintenance	Total	
2012-2030	\$214,660	\$799,810	\$1,014,470	\$215,660	\$799,810	\$1,015,470	\$1,000
2031-2040	\$173,880	\$750,890	\$924,770	\$173,910	\$750,890	\$924,800	\$30
Total	\$388,540	\$1,550,710	\$1,939,240	\$389,570	\$1,550,710	\$1,940,270	\$1,030

Table 9.6 - Highway Costs and Revenues (Lawrence County, in Thousands)

Period	Costs			Revenue			Difference
	Highway	Maintenance	Total	Highway	Maintenance	Total	
2012-2030	\$293,930	\$84,700	\$378,630	\$326,360	\$84,700	\$411,060	\$32,430
2031-2040	\$169,760	\$59,800	\$229,560	\$170,870	\$59,800	\$230,670	\$1,110
Totals	\$463,680	\$144,500	\$608,190	\$497,230	\$144,500	\$641,730	\$33,540

Table 9.7 - Roadway Project Cost Estimates (2030 Horizon)

ID	Project Facility	Project Location	Funding Year	Cost
West Virginia				
Roadway Widening				
CR 10	8th Avenue	Huntington, WV	2018	\$17,911,000
Roadway New Location				
WR 1	Access Road	Prichard, WV	2015	\$3,278,000
Roadway Multimodal/Downtown and Operations Improvements				
CR 19a	WV 2	Cabell County, WV	2018	\$4,179,000
-	Downtown Huntington Signal System - Phase III	Huntington, WV	2018	\$1,813,000
-	Downtown Huntington Signal System - Phase IV	Huntington, WV	2020	\$2,383,000
Bridge/Viaduct Construction/Replacement				
CB 2	W 17th Street Bridge (Phase 1)	Huntington, WV	2025	\$60,210,000
CN17	8th Street & Railroad	Huntington, WV	2020	\$443,000
CN19	Hal Greer Boulevard & Railroad	Huntington, WV	2025	\$16,154,000
Intersection Beautification and Multimodal/Downtown Improvements				
CN2	16th Street & Washington Boulevard	Huntington, WV	2026	\$227,000
CN5	8th Avenue & 8th Street	Huntington, WV	2030	\$255,000
CN20	Hal Greer Boulevard & 11th Avenue	Huntington, WV	2028	\$241,000
CN21	Hal Greer Boulevard & 13th Avenue	Huntington, WV	2022	\$202,000
Intersection Safety Improvements				
CN9	5th Avenue & 31st Street	Huntington, WV	2020	\$317,000
CN10	5th Avenue & 16th Street	Huntington, WV	2022	\$336,000
CN12	US 60 & East Pea Ridge Road	Barboursville, WV	2014	\$1,080,000
WN1	US 60 & 21st Street	Kenova, WV	2022	\$336,000
WN2	WV 152 & WV 75	Lavalette, WV	2024	\$356,000
WN3	8th Street (CR 11) & WV 152 Connector	Lavalette, WV	2022	\$336,000
WN10	Spring Valley Road & Goodwill Road	Wayne County, WV	2025	\$367,000
Interchange Improvements				
CN14	I-64 & Benedict Road (CR 60/21)	Culloden, WV	2018	\$8,478,000
WN4	I-64 & US 52	Kenova, WV	2028	\$16,047,000
Intermodal Facilities				
-	Prichard Intermodal Terminal	Prichard, WV	2015	\$31,722,000

Table 9.7 - Roadway Project Cost Estimates (2030 Horizon) - continued

ID	Project Facility	Project Location	Funding Year	Cost
Ohio				
Roadway Widening				
LR 2	Park Avenue (SR 93)	Ironton, OH	2018	\$25,075,000
Roadway New Location				
LR 1	Chesapeake Bypass	Lawrence County, OH	2018	\$83,584,000
Roadway Operations Improvements				
LR 3	Walmart Way	Burlington, OH	2025	\$23,056,000
Bridge/Viaduct Construction/Replacement				
CB 2	W 17th Street Bridge (Phase 1)	Huntington, WV	2025	\$10,573,000
Intersection Operations Improvements				
LN8	Park Avenue & 6th Street	Ironton, OH	2020	\$168,000
LN9	Park Avenue & 5th Street	Ironton, OH	2020	\$162,000
LN10	Park Avenue & 4th Street	Ironton, OH	2020	\$162,000
LN11	Park Avenue & 3rd Street	Ironton, OH	2020	\$170,000
LN12	Adams Street & 2nd Street	Ironton, OH	2020	\$203,000
LN13	Adams Street & 3rd Street	Ironton, OH	2020	\$183,000
LN20	US 52 & Solida Road (CR 18)	South Point, OH	2018	\$209,000
LN23	SR 775 & Chesapeake Bypass	Proctorville, OH	2018	\$1,194,000
LN24	SR 775 & Irene Road	Proctorville, OH	2022	\$134,000
LN26	SR 775 & Old SR 7	Proctorville, OH	2023	\$1,384,000
Intersection Safety Improvements				
LN1	US 52 & CR 144	Burlington, OH	2018	\$29,000
LN2	US 52 & CR 276	Burlington, OH	2018	\$29,000
LN3	US 52 & CR 410	Burlington, OH	2020	\$30,000
LN4	US 52 & CR 120	Burlington, OH	2020	\$30,000
Interchange Improvements				
LN14	US 52 & Old US 52 (CR 1A)	Hanging Rock, OH	2022	\$5,510,000
LN15	US 52 & Park Drive (SR 93)	Ironton, OH	2020	\$8,696,000
Intermodal Facilities				
-	South Point Intermodal Facility	South Point, OH	2025	\$37,125,000



Table 9.8 - Roadway Project Cost Estimates (2040 Horizon)

ID	Project Facility	Project Location	Funding Year	Cost
West Virginia				
Roadway Widening				
CR 7	1st Street	Huntington, WV	2034	\$13,030,000
CR 15	Johns Branch Road/Mason Road	Milton, WV	2032	\$13,907,000
WR 11	Darling Lane	Wayne County, WV	2031	\$12,450,000
Roadway Multimodal/Downtown and Operations Improvements				
CR 1	Bridge Street	Guyandotte, WV	2031	\$9,118,000
CR 2	Main Street	Guyandotte, WV	2031	\$3,156,000
CR 12	Hal Greer Boulevard	Huntington, WV	2031	\$27,179,000
CR 16	US 60	Barboursville, WV	2033	\$4,651,000
CR 17	US 60	Huntington, WV	2035	\$3,552,000
CR 20	WV 527	Huntington, WV	2037	\$6,281,000
Bridge/Viaduct Construction/Replacement				
CB 2	W 17th Street Bridge (Phase 2)	Huntington, WV	2031	\$62,249,000
CN18	10th Street & Railroad	Huntington, WV	2035	\$691,000
Intersection Beautification and Multimodal/Downtown Improvements				
CN1	5th Street & Miller Road	Huntington, WV	2035	\$296,000
CN3	3rd Avenue & 31st Street	Huntington, WV	2036	\$305,000
CN6	8th Avenue & 5th Street	Huntington, WV	2037	\$314,000
CN7	5th Street & 4th Avenue	Huntington, WV	2038	\$323,000
CN8	14th Street West & Adams Avenue	Huntington, WV	2039	\$333,000
CN16	3rd Avenue & 13th Street	Huntington, WV	2033	\$1,860,000
Intersection Safety Improvements				
CN4	8th Avenue & 31st Street	Huntington, WV	2032	\$722,000
CN11	1st Street & 7th Avenue	Huntington, WV	2035	\$493,000
CN13	1st Street & 5th Avenue	Huntington, WV	2037	\$523,000
Interchange Improvements				
CN15	US 52 & Washington Avenue	Huntington, WV	2031	\$12,450,000



Table 9.8 - Roadway Project Cost Estimates (2040 Horizon) - continued

ID	Project Facility	Project Location	Funding Year	Cost
Ohio				
Roadway New Location				
LR 4	SR 7/US 35 Connector (Phase 1)	Lawrence County, OH	2038	\$95,968,000
Bridge/Viaduct Construction/Replacement				
CB 2	W 17th Street Bridge (Phase 2)	Huntington, WV	2031	\$11,047,000
Intersection Operations Improvements				
LN18	US 52 & Ashland Bridge (US 60)	Coal Grove, OH	2031	\$6,839,000
LN21	3rd Avenue & 6th Street Bridge (SR 7)	Chesapeake, OH	2035	\$789,000
LN22	SR 7 & SR 243	Proctorville, OH	2031	\$1,368,000
LN25	SR 775 & East End Bridge	Proctorville, OH	2031	\$1,754,000
Intersection Safety Improvements				
LN5	US 52 & CR 1	Perry, OH	2035	\$493,000
LN6	US 52 & CR 15	Perry, OH	2033	\$24,184,000
LN7	SR 7 & CR 15	Burlington, OH	2035	\$493,000
Interchange Improvements				
LN16	US 52 & Campbell Drive (SR 141)	Ironton, OH	2032	\$1,084,000
LN17	US 52 & Marion Pike (SR 243)	Coal Grove, OH	2035	\$839,000
LN19	US 52 & Grandview Avenue	South Point, OH	2031	\$24,900,000

Table 9.9 - Roadway Project Cost Estimates (Vision Plan)

ID	Project Facility	Project Location	Funding Year	Cost
West Virginia				
Roadway Widening				
CR 11	College Avenue/Martha Road (CR 30/2)	Barboursville, WV	2041	\$88,371,000
CR 13	I-64	Cabell County, WV	2041	\$395,903,000
CR 14	I-64	Cabell County, WV	2041	\$351,128,000
CR 18	WV 10	Cabell County, WV	2041	\$1,712,516,000
CR 19b	WV 2	Cabell County, WV	2041	\$916,704,000
WR 2	Centerville-Prichard Rd. (CR 20) / Lynn Creek Rd.	Wayne County, WV	2041	\$608,701,000
WR 3	Spring Valley Road	Wayne County, WV	2041	\$464,715,000
WR 5	US 52	Wayne County, WV	2041	\$2,945,471,000
WR 6	US 52	Wayne County, WV	2041	\$662,666,000
WR 7	US 52	Wayne County, WV	2041	\$246,497,000
WR 8	US 52	Wayne County, WV	2041	\$519,623,000
WR 9	US 52	Wayne County, WV	2041	\$175,093,000
WR 10	Docks Creek Road (CR 8)	Wayne County, WV	2041	\$182,163,000
WR 12	WV 152	Wayne and Cabell Counties, WV	2041	\$592,912,000
WR 13	WV 152	Wayne County, WV	2041	\$538,947,000
WR 14	Walkers Branch Road (CR 3)	Ceredo, WV	2041	\$419,940,000
WR 16	Goodwill Road	Wayne County, WV	2041	\$49,959,000
Roadway New Location				
WR 4	Spring Valley Road Connector	Wayne County, WV	2041	\$170,851,000
WR 15	Airport Road Connector	Wayne County, WV	2041	\$41,947,000



Table 9.9 - Roadway Project Cost Estimates (Vision Plan) - continued

ID	Project Facility	Project Location	Funding Year	Cost
West Virginia - continued				
Roadway Multimodal/Downtown and Operations Improvements				
CR 3	Buffington Street	Guyandotte, WV	2041	\$5,420,000
CR 4	5th Avenue	Guyandotte, WV	2041	\$12,490,000
CR 5	Guyan Street	Guyandotte, WV	2041	\$4,242,000
CR 6	Short Street	Guyandotte, WV	2041	\$2,828,000
CR 8	3rd Avenue	Huntington, WV	2041	\$14,139,000
CR 9	5th Avenue	Huntington, WV	2041	\$14,139,000
Bridge/Viaduct Construction/Replacement				
CB 1	Ohio River Bridge	Lesage, WV	2041	\$200,308,000
WB 1	I-73/74 Bridge	Ceredo, WV	2041	\$180,277,000
Interchange Improvements				
WN5	US 52 & WV 75	Wayne County, WV	2041	\$16,732,000
WN6	US 52 & Docks Creek Road (CR 8)	Wayne County, WV	2041	\$16,732,000
WN7	US 52 & Whites Creek Road (CR 19)	Wayne County, WV	2041	\$16,732,000
WN8	US 52 & Centerville-Prichard Road (CR 20)	Prichard, WV	2041	\$16,732,000
WN9	US 52 & Old US 52	Prichard, WV	2041	\$16,732,000
Intermodal Facilities				
-	Huntington Tri-State Airport Intermodal Facility	Huntington, WV	2041	\$35,348,000
Ohio				
Roadway New Location				
LR 4	SR 7/US 35 Connector (Phase 2)	Lawrence County, OH	2041	\$197,245,000
Bridge/Viaduct Construction/Replacement				
CB 1	Ohio River Bridge	Lesage, WV	2041	\$35,348,000
WB 1	I-73/74 Bridge	Ceredo, WV	2041	\$31,814,000



This page intentionally left blank.

Figure 9.1

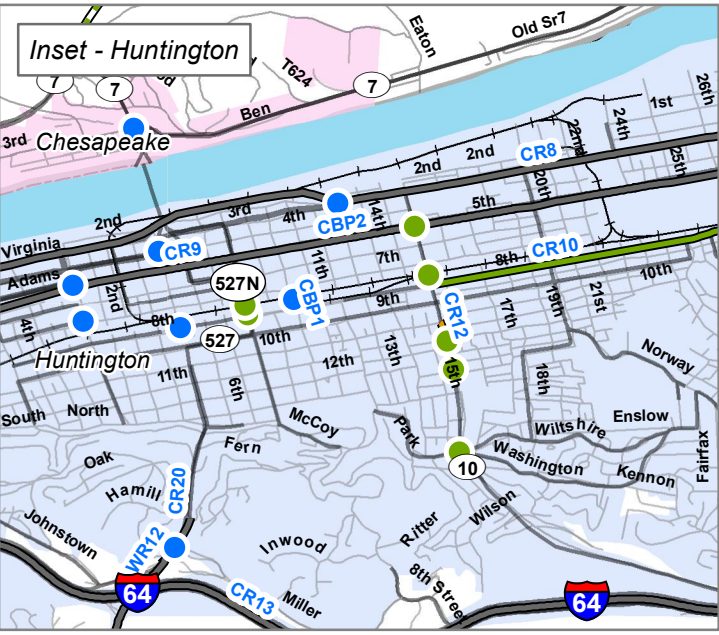
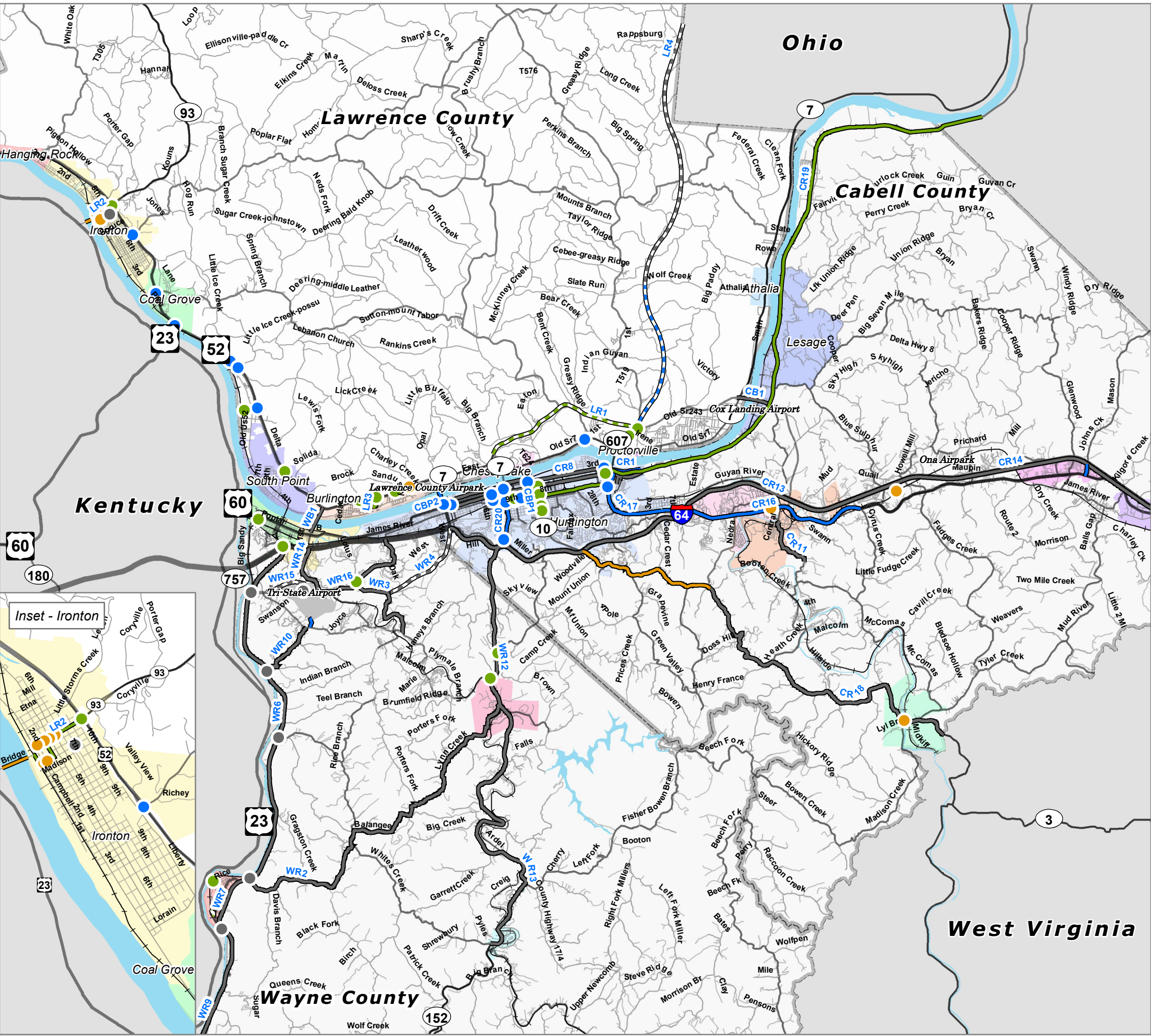
Financially Constrained Roadway Recommendations

Intersection Projects

- Committed
- 2030 Interim Year
- 2040 Horizon Year
- Vision Plan

Roadway Projects

- Committed
- 2030 Interim Year
- 2030 Interim Year, New Location
- 2040 Horizon Year
- 2040 Horizon Year, New Location
- Vision Plan
- Vision Plan, New Location





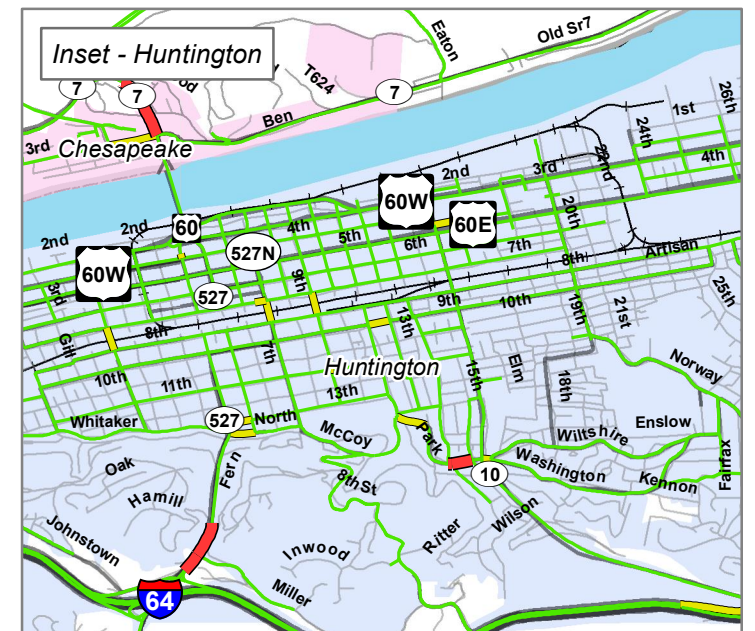
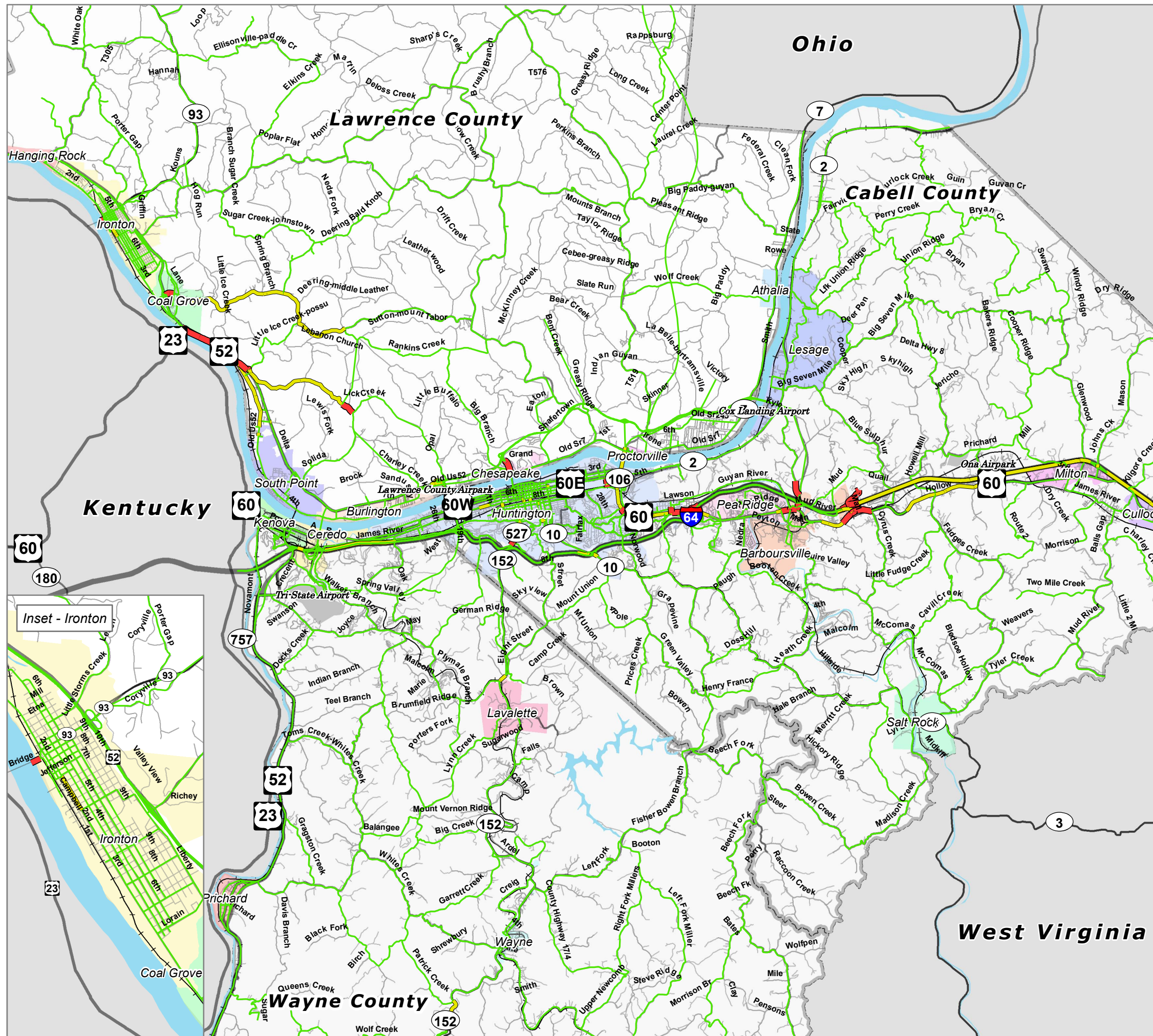
This page intentionally left blank.

Figure 9.2

Financially Constrained Congestion (2040)

2040 Financially Constrained Volume-to-Capacity Ratio

- Below Capacity ($v/c < 0.80$)
- At Capacity ($0.8 < v/c < 1.0$)
- Above Capacity ($v/c > 1.0$)





This page intentionally left blank.

Pedestrian and Bicycle Funding

Tables 9.10 and 9.11 reflect the proposed costs and revenues for bicycle and pedestrian projects. Currently, new bicycle and pedestrian facilities in the KYOVA region are primarily funded using federal programs including Safe Routes to School, the Congestion Mitigation and Air Quality Improvement Program, and the Surface Transportation Program. Although many likely sources of bicycle and pedestrian project funds have been combined into the Transportation Alternatives (TA) funding source, the KYOVA region's funding levels are assumed to remain the same. To be conservative, these funds are assumed to rise with inflation but not to outpace it. The available bicycle and pedestrian funding for the duration of the 2040 MTP totals \$13.7 million for Cabell and Wayne counties and \$29.8 million for Lawrence County.

Transit Funding

Tables 9.12 and 9.13 reflect the proposed costs and revenues for transit capital and operations projects. To better understand the dynamics of transit funding, capital funding is considered separately from operations and maintenance funding.

Table 9.10 - Pedestrian & Bicycle Costs and Revenues*
(Cabell and Wayne Counties, in Thousands)

Period	Costs	Revenues	Difference
2012-2030	\$7,630	\$7,630	\$0
2031-2040	\$6,110	\$6,110	\$0
Total	\$13,740	\$13,740	\$0

* Maintenance expenses accounted for under roadways.

Table 9.11 - Pedestrian & Bicycle Costs and Revenues*
(Lawrence County, in Thousands)

Period	Costs	Revenues	Difference
2012-2030	\$16,560	\$16,560	\$0
2031-2040	\$13,260	\$13,260	\$0
Totals	\$29,820	\$29,820	\$0

* Maintenance expenses accounted for under roadways.

Table 9.12 - Transit Costs and Revenues (TTA and Wayne Express, in Thousands)

Period	Costs			Revenue			Difference
	Capital	Operations	Total	Capital	Operations	Total	
2012-2030	\$39,400	\$155,440	\$194,840	\$39,400	\$155,440	\$194,840	\$0
2031-2040	\$31,300	\$125,360	\$156,660	\$31,300	\$125,360	\$156,660	\$0
Total	\$70,690	\$280,800	\$351,500	\$70,690	\$280,800	\$351,500	\$0

Table 9.13 - Transit Costs and Revenues (Lawrence County Port Authority, in Thousands)

Period	Costs			Revenue			Difference
	Capital	Operations	Total	Capital	Operations	Total	
2012-2030	\$4,580	\$18,090	\$22,670	\$4,580	\$18,090	\$22,670	\$0
2031-2040	\$3,670	\$14,760	\$18,430	\$3,670	\$14,760	\$18,430	\$0
Totals	\$8,250	\$32,850	\$41,100	\$8,250	\$32,850	\$41,100	\$0



Capital Transit Costs and Revenues

In the current TIP, capital funding is designated for TTA and LCPA between 2012 and 2015. Capital funding for Wayne Express was based on the ratio of operating revenues between Wayne Express and TTA. To project future capital funding amounts, a 3% inflation rate was applied to the TIP funding, beginning in 2016. As with bicycle and pedestrian funds, locally available transit funding sources may have changed due to MAP-21 and the Huntington urbanized area's Transportation Management Area (TMA) status. Since new projections are not available for these modified programs, current funding levels are assumed to continue. Approximately \$63.4 million, \$7.3 million, and \$8.3 million will be available in capital revenues for TTA, Wayne Express, and LCPA respectively. The desired fleet expansion and replacement schedule currently outpaces the revenues available. As a result, transit capital and operating costs are assumed equal to available revenue levels.

Transit Operations Funding

Transit operations funds are anticipated to increase with inflation. Over the planning period, a total of \$252.7 million in maintenance and operations costs are assumed for the TTA system, \$28.1 million for Wayne Express, and \$32.9 million for LCPA. For more information on these transit agencies, visit: www.tta-wv.com and www.waynexpress.com.

Transportation Funding Sources

KYOVA MPO Funding

The KYOVA MPO receives federal funds for transportation related projects for its area. Transportation-related projects funded by federal dollars for the area must be considered and approved by the KYOVA Policy Board. The Policy Board consists of representatives and elected officials from the counties and municipalities in the area. All transportation related projects, presented to the Policy Board are first examined by the KYOVA Technical Advisory Committee for recommendation. The Technical Advisory Committee consists of technical representatives

from various agencies and departments in the area as well as state and federal resource agencies. Projects approved by the Policy Board are then presented to WVDOT and ODOT for final approval. The approved projects must be listed in the KYOVA TIP, which is updated biannually. In addition, these projects are listed in the corresponding State TIPs.

Federal law requires each state to establish a fiscally constrained STIP. Projects located on a federally-eligible highway must be placed in the STIP to protect their federal eligibility. Before any project in the STIP can move forward to construction, federal law requires that it must undergo extensive review. Besides engineering concerns, the plans for each project must consider environmental mitigation, national security, safety, bicycle and pedestrian needs, and consistency with planned growth and development plans.

Transit Funding

TTA, Wayne Express, and LCPA receive federal funds through the FTA programs. As authorized by the Moving Ahead for Progress in the 21st Century Act (MAP-21), the FTA provides stewardship of combined formula and discretionary programs totaling more than \$10 billion each year to support a variety of locally planned, constructed, and operated public transportation systems throughout the United States. Transportation systems typically include buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways, or people movers.

Federal funds awarded to the three transit agencies are listed in the KYOVA TIP. Providing planning assistance to these transit providers in the KYOVA area helps the efficiency of the current transportation network by promoting transportation choice and by potentially removing traffic from area roadways.

Rail Funding

The Department of Homeland Security (DHS) has provided roughly \$18 billion in awards to state and local governments for programs and equipment that help to manage security. Through the Transit



Security Grants Program (TSGP), DHS has provided \$374.7 million to date to 60 of the country's rail mass transit, ferry, and intra-city bus systems in 25 states and the District of Columbia. In addition to this funding, under certain conditions states and localities can tap into other Homeland Security Grant Program and Urban Area Security Initiative funds for rail security projects and initiatives. The majority of railroads—regionally and nationally—are private entities. While regulated at the federal level, these private entities determine the use or abandonment of railroad right-of-way. As a result, public-private partnership is essential.

Airport Funding

The Federal Aviation Administration (FAA) is an agency of the United States Department of Transportation with authority to regulate and oversee all aspects of civil aviation in the U.S. Federal grant funds or federal property transfers for airport purposes are obtained through the FAA. The FAA enforces certain obligations to fund recipients through its Airport Compliance Program.

Alternative Funding Sources

State revenues alone will not sufficiently fund a systematic program to construct transportation projects in the KYOVA MPO area. Therefore, jurisdictions within the KYOVA region must consider alternative funding measures that could help implement this plan. Alternative funding measures being considered and applied in areas around the state and the nation are included here.

Impact Fees

Developer impact fees and system development charges provide a funding option for communities looking for ways to fund collector streets and associated infrastructure. While most commonly used for water and wastewater system connections or police and fire protection services, impact fees recently have been used to fund school systems and pay for the impacts of increased traffic on existing roads. Impact fees place the costs of new development directly on developers and indirectly on those who buy property in the new

developments. Impact fees free other taxpayers from the obligation to fund costly new public services that do not directly benefit them. Currently, restrictive state law makes the use of impact fees difficult in West Virginia. However, one county in the state has met all the requirements and has implemented an impact fee. The major challenge of using impact fees in the KYOVA area is that enabling legislation is required in all three states: Kentucky, Ohio, and West Virginia. Other incentives to encourage growth would need to be implemented before impact fees will yield success in the region.

Transportation Bonds

Transportation bonds have been instrumental in the strategic implementation of local roadways and non-motorized travel throughout West Virginia and Ohio. Voters in communities both large and small regularly approve the use of bonds to improve their transportation system. Projects that historically have been funded through transportation bonds include sidewalks, road extensions, new road construction, and streetscape enhancements.

Developer Contributions

Through diligent planning and earlier project identification, regulations, policies, and procedures could be developed to protect future arterial corridors and require contributions from developers when the property is subdivided. These measures would reduce the cost of right-of-way and would in some cases require the developer to make improvements to the roadway that would result in a lower cost when the improvement is actually constructed. To accomplish this goal, it will take a cooperative effort between local planning staff, WVDOT and ODOT planning staff, and the development community.

One area where developers can be expected to assist in the implementation of transportation improvements is for new collector streets. Collector streets support the traffic impacts associated with local development. For this reason, developer contributions should be responsible sharing the cost of these improvements.



Oversize Agreement

An oversize agreement provides cost sharing between the city/county and a developer to compensate a developer for constructing a collector street instead of a local street. For example, instead of a developer constructing a 28-foot back-to-back local street, additional funding would be provided by the locality to upgrade the particular cross-section to a 34-foot back-to-back cross section to accommodate bike lanes.

Grant Anticipation Revenue Vehicles (GARVEE) Bonds

GARVEE Bonds can be utilized by a community to implement a desired project more quickly than if they waited to receive state or federal funds. These bonds are let with the anticipation that federal or state funding will be forthcoming. In this manner, the community pays for the project up front, and then receives debt service from the state. Historically, the state of West Virginia has paid for GARVEE bonds. However, it is possible for a community to use GARVEE bonds through their own initiative. GARVEE bonds also are an excellent way to capitalize on lower present-day construction and design costs, thereby finishing a project more quickly and economically than if it was delayed to meet state timelines. GARVEE bonds already are being used in the KYOVA area. For more information, visit:

www.fhwa.dot.gov/innovativefinance/garguid1.htm

Tax Increment Financing

As mentioned in Chapter 7, Tax Increment Financing (TIFs) could enable local businesses to invest in onsite rail infrastructure by offering a tax incentive to developers. Tax Increment Financing uses future gains in taxes resulting from current improvements to fund the implementation of the improvements. In regions that do not have the available funds to pay for improvement projects, Tax Increment Financing allows the region to construct the project and pay back the debt using the increase in tax revenues that results from the project.

Public-Private Partnerships

Public-private partnerships are approved by the State of West Virginia in the §17-21-1 Article 27 Public-Private Transportation Facilities Act. Under a true public-private partnership, the public sector retains ownership, defines the rules of conduct of the partnership under terms of a strict contract, and is able to share the risks and the rewards of the effort. An example of a successful public-private partnership lies within the KYOVA area. A TIGER III grant was awarded to Prichard to construct their Intermodal Transfer Facility. The public-private partnership consists of USDOT, WVDOT, and Norfolk Southern. USDOT and WVDOT are both responsible for funding \$15 million of the project, while Norfolk Southern is responsible for contributing \$5 million.

Bicycle and Pedestrian Funding

Bicycle and pedestrian projects are often eligible for their own funding sources. For instance, the Robert Wood Johnson Foundation funds a grant program called Active Living by Design. The purpose of this program is to provide communities with a small grant to study bicycle, pedestrian, or other healthy living initiatives. There are other such grant programs in existence for bicycle and pedestrian projects, which would help to supplement the funding currently received by these modes. For more information, visit:

www.activelivingbydesign.org

www.walkinginfo.org/funding/sources.cfm

Transportation Alternatives Program Grants

State and federal grants can play an important role in implementing strategic elements of the transportation network. Several grants have multiple applications, including Transportation Alternatives Program (TAP) Grants as well as state and federal transit grants. TAP, established by Congress through MAP-21, combines the Enhancement Grant program, Recreational Trails program, and Safe Routes to School (SRTS) program into one competitive funding source. TAP ensures the implementation of projects not typically associated



with the road-building mindset. While the construction of roads is not the intent of the grant, the construction of bicycle and pedestrian facilities is one of many enhancements that the grant targets.

Tolling

Toll roads are direct “user fees” collected at the point where the vehicle enters the toll facility. The West Virginia Parkways Authority and Ohio Turnpike Commission are the oversight agencies responsible for determining toll facility feasibility. Before tolling is considered to fund a roadway, a toll feasibility study is important to ensure that tolling is a viable and acceptable funding strategy. When implemented strategically and responsibly, tolling can be a successful method of funding roadway construction and maintenance.

Sales Tax

Several MPO’s have successfully implemented sales taxes to generate additional funding for transportation projects. Sales tax revenues can be used to complete strategic regional projects, spot safety improvements, or access management priorities. To successfully enact a sales tax, the public must vote in favor of the tax through the election process. As a result, it is vitally important that a public education process be initiated to explain the benefits that would result from the tax. It is important to note that at this time, West Virginia state law prohibits the use of a local or county sales tax. If this option is considered as a possibility, additional legislation at the statewide level will need to be implemented.

State Infrastructure Bank

The State Infrastructure Bank (SIB) is a revolving loan program that maximizes the use of federal and state funds, making direct loans to eligible projects. The intent of this program is to increase the number of transportation projects completed in the state that would not be considered for traditional financing. The SIB was created with \$87 million in federal funds, \$40 million in general revenue funds, and \$10 million in motor fuel tax funds. The current availability depends on SIB activity and loan repayment. There is no set limit and 100% financing

is available for any highway or transit project eligible under Code of Federal Regulations’ Title 23. Financing terms are 2 to 10 years, with interest rate determined at time of financing.

Appalachian Development Highway System

The Appalachian Development Highway System (ADHS) was created from the Appalachian Regional Development Act of 1965. The core purpose of this program was to spur economic development in the Appalachia region, which did not have a viable road network to support this necessary growth. The ADHS aimed to create a highway system that would link Appalachia communities to each other and the Interstate system, creating economic growth in the region. The ADHS is currently located in Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

The funding for ADHS roadways, provided by the Appalachian Regional Commission (ARC) and the Federal Highway Administration (FHWA), may be used for the construction, reconstruction, or improvement of highways on the designated 3,090 miles of ADHS highway. In total, 24 corridors are in the ADHS system (Corridor A – X). Corridor B, which travels between Asheville, North Carolina and Portsmouth, Ohio, contains a short portion of US 52 between Wheelersburg and Portsmouth.

Ohio-Specific Alternative Funding Sources

Transportation Review Advisory Council

The Transportation Review Advisory Council (TRAC) selects major new capacity projects to be constructed in a six-year period. Major new capacity projects include those that cost more than \$5 million and accomplishes one of the following objectives: increase mobility, provide connectivity, increase the accessibility of a region for economic development, increase the capacity of a transportation facility, or reduce congestion. ODOT typically determines the amount of money available for major new projects after basic maintenance and operational needs have been met. ODOT has generally allocated \$500 million per year for TRAC projects. Funding may be



used for preliminary engineering, right-of-way acquisition, and construction. Eligible projects include highway lane additions, bypasses, corridor upgrades, and roadway extensions that increase the system's ability to handle more traffic.

ODOT County Local Bridge Program

The ODOT County Local Bridge Program provides federal funds to counties for bridge replacement or rehabilitation. The Local Bridge Program is funded annually at approximately \$32 million. The federal match is typically 90% of construction cost, based on the availability of toll revenue credits. Each county has a \$5 million federal funding limit within a four-year program period. Funding is typically only provided for construction, unless the program manager determines that preliminary engineering and right-of-way costs are warranted. Eligibility is based on several factors:

- The structure must carry vehicular traffic
- The structure must meet the federal definition of a bridge (greater than 20 feet long)
- The structure must be listed in the ODOT bridge management system (sufficiency rating less than 80 for rehabilitation and less than 50 for replacement)
- The structure must be classified as structurally deficient or functionally obsolete
- The structure must have a general appraisal rating less than 7 for rehabilitation and less than 5 for replacement

Counties with the worst bridge conditions (deficiencies greater than the state average) are provided greater opportunities for funding, with up to \$10 million earmarked for these areas. After funding is provided for these bridges, the remaining locations are ranked according to condition and importance to the community. Counties that do not receive funding for six years or more are given priority.

ODOT Local Major Bridge Program

The ODOT Local Major Bridge Program provides federal funding to counties and municipalities for bridge replacement or major bridge rehabilitation project. The program receives approximately \$25 million per year. ODOT provides an 80% match for construction only on selected projects. The county or municipality is responsible for the remaining 20% of construction, as well as all costs for preliminary design, environmental study, final design, and right-of-way. The local match is required to be cash. Eligible projects must be vehicular carrying local major bridges with a deck area greater than 35,000 square feet.

ODOT Municipal Bridge Program

The ODOT Municipal Bridge Program provides federal funding to municipalities for bridge replacement or rehabilitation. The program receives approximately \$8 million per year. ODOT provides an 80% match for construction only on selected projects. The county or municipality is responsible for the remaining 20% of construction, as well as all costs for preliminary design, environmental study, final design, and right-of-way. The local match is required to be cash.

- Eligibility is based on several factors:
- The structure must carry vehicular traffic
- The structure must meet the federal definition of a bridge (greater than 20 feet long)
- The structure must be listed in the ODOT bridge management system (sufficiency rating less than 80 for rehabilitation and less than 50 for replacement)
- The structure must be classified as structurally deficient or functionally obsolete

Credit Bridge Program

The Credit Bridge Program was an ODOT program in place during the 1990s that provided cities and counties "soft match credit" by spending local money on bridge projects that would otherwise



qualify for federal funding. The program was suspended when Toll Revenue Credit balances became too high during the capital expansion of the Ohio Turnpike. ODOT decided to reinstate the program once the Toll Revenue Credit balance started depleting. The Credit Bridge Program is currently available to local governments that use federal funding to replace or rehabilitate bridges. The program allows counties and municipalities to replace or rehabilitate a bridge that is not on a federal-aid highway and receive credit for up to 80% of the construction cost. The credit then serves as the 20% non-federal share for a future federal-aid bridge project. Bridges must meet the eligibility requirements for federal bridge funding to be eligible for the Credit Bridge Program.

ODOT County Surface Transportation Program

The ODOT County Surface Transportation Program is set up to provide funding for eligible roadway improvements and safety studies. The safety study portion of the program is administered by the Ohio Department of Public Safety. The program receives approximately \$20 million per year; of this total, \$750,000 is set aside for safety studies. Federal matching on selected projects is 80% on roadway projects and 100% on safety studies and projects. To receive funding, the project must be on a facility classified at or above an Urban Collector or Rural Major Collector. Eligible projects include new construction, major reconstruction, center line and edge line striping, and raised pavement markers. Eligible safety projects include guardrail reconstruction and construction, center line and edge line striping, raised pavement markers, and traffic signs and signals.

ODOT Metropolitan Planning Organizations and Large Cities Program

The ODOT MPO and Large City Program provide funding for multimodal transportation system improvements. The program provides funding for multimodal maintenance, operational, and new construction projects within urban areas. Enhancement funds are also available for historic, scenic, and bicycle/pedestrian projects. The funding

is sub-allocated from the ODOT County Surface Transportation Program.

ODOT Safety Program

The ODOT Safety Program provides funding for highway safety treatments or corrective measures designed to alleviate safety problems and potentially hazardous situations. The program receives \$64 million per year. ODOT provides a 90% match for preliminary engineering, detailed design, right-of-way, or construction. Project priority is based on crash frequency/density, crash rate, relative severity index, equivalent property damage only rate, percent trucks, and rate of return. Eligible projects include signalization, turn lanes, pavement markings, traffic signs, guardrails, impact attenuators, concrete barrier end treatments, and break away utility poles. Applications are due by April 30 and September 30, and must be approved by the respective District Safety Review Team. Each application must be accompanied by a safety engineering study, unless the application is for funding to perform that study.



This page intentionally left blank.