



2040 LRTP Tier One Project Priority Evaluation

July, 2013

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Introduction

This report has been prepared to provide an evaluation tool for prioritizing the Tier One projects listed in the MMMPO 2040 Long Range Transportation Plan. It is meant to inform committee members with fact-based data, to facilitate decision making.

The prioritization of these projects will advise the WV Department of Transportation on project programming for the area. MPO staff will evaluate each project in the LRTP in the order established by this prioritization.

Each corridor improvement project is accompanied with a corridor priority evaluation information sheet, which provides detailed traffic and accident information for the subject corridor. Those projects include:

- #7 Van Voorhis Road Improvements
- #8 Beechurst Avenue Improvements
- #11 West Run Improvements – Western Section
- #13 West Run Improvements – Eastern Section
- #18 Greenbag Road Improvements

Numbers and scores shown in the evaluation matrix and information sheets are intended to serve only as advisory elements, providing background information for the decision making process. They should not dictate the final priority score and ranking of projects.

LRTP Tier One Project Priority Evaluation Matrix

Tier ⁽¹⁾	Project Number	Project Name	Estimated Cost	Accident Rate ⁽²⁾⁽³⁾⁽⁴⁾ (Injury Crash Rate)	LOS ⁽⁵⁾	Record Your Score Here From 1 (least/lowest) to 10 (most/highest)			
						Feasibility	Mobility	Preference	Priority Score
1	2	ADA Connectivity Initiative	\$2 million						
	6	New Bridge over Monongahela River and Roadway Connection to I-79 (<i>map is provided on page 5</i>)	\$45 million						
	7	Van Voorhis Road Improvements	\$10 million	270 (96)	D				
	8	Beechurst Avenue Improvements	\$7 million	1127 (315)	F				
	11	West Run Improvements – Western Section	\$12 million	382 (95)	C				
	13	West Run Improvements – Eastern Section	\$3 million	171 (26)	C				
	18	Greenbag Road Improvements	\$15 million	136 (62)	C				
	26	North-side Connector Bus Rapid Transit (<i>map is provided on page 6</i>)	\$1 million						
	27	Grant Avenue Bicycle / Pedestrian Connector (<i>map is provided on page 7</i>)	\$0.9 million						
	28	White Park / Caperton Trail Connection (<i>map is provided on page 8</i>)	\$50,000						
	38	Intersection Capacity and Safety Improvement Program (<i>more information coming</i>)	\$31 million						
	40	Regional Bikeway Plan Implementation Program	\$5 million						
	43	School Route Improvements (K-8)	\$2 million						
45	Downtown Morgantown Signalization and Street Changes	\$2 million							

⁽¹⁾Listed projects are tier 1 projects in the MMMPO Long Range Transportation Plan (2013-2040). They are recommended for funding with forecasted available state and federal funds.

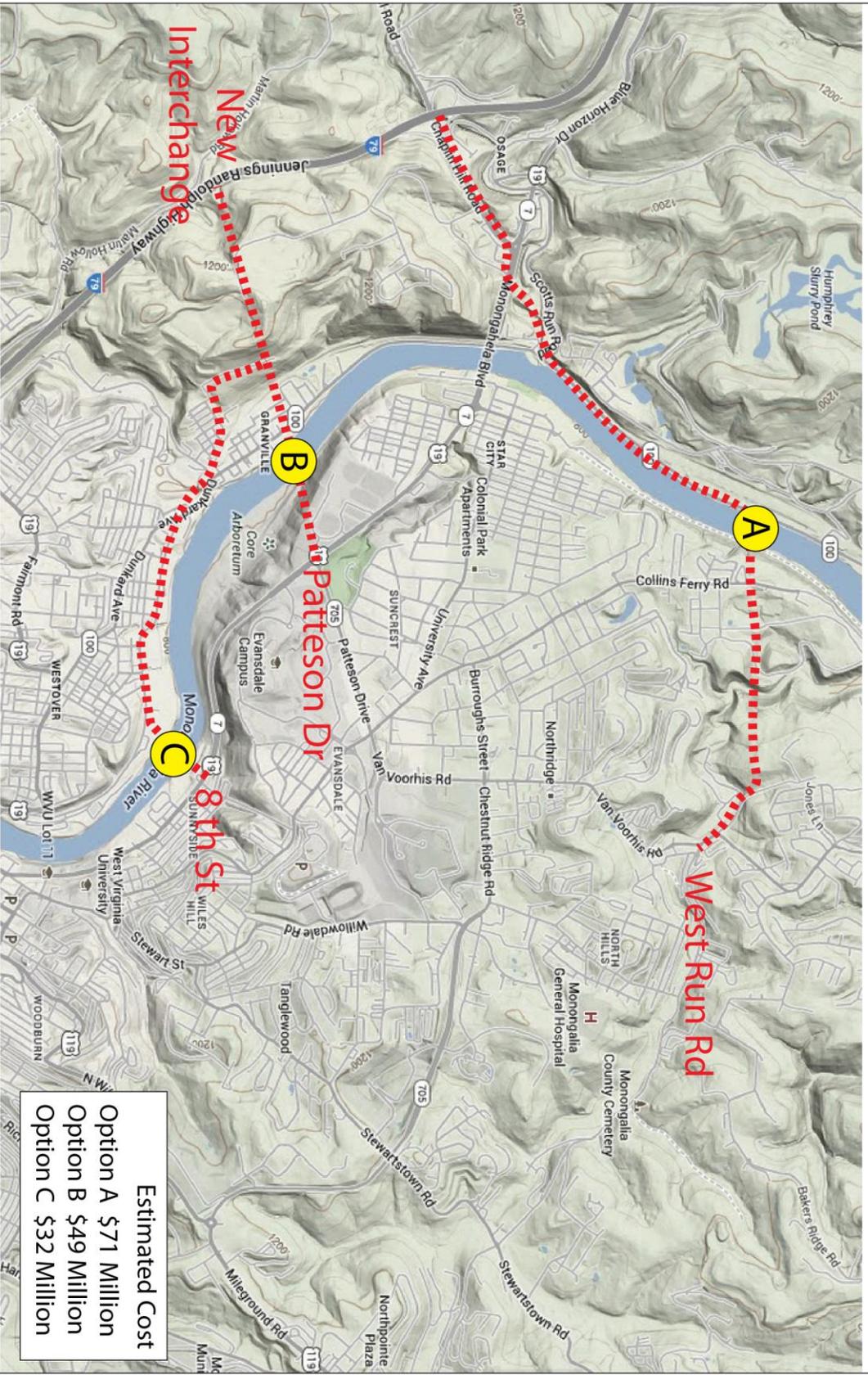
⁽²⁾ Accident data is geocoded from WV DOH Crash Data Base (09-11).

⁽³⁾Accident data does not include accidents for the intersection at either end of the corridor.

⁽⁴⁾The AADT data used in the calculation of accident rate is based on traffic count in April, 10, 2013, when the WV 705 segment between Stewartstown Rd and Mileground is under construction.

⁽⁵⁾Level of Service (LOS) is based on the existing transportation system report from the LRTP (2013-2040)

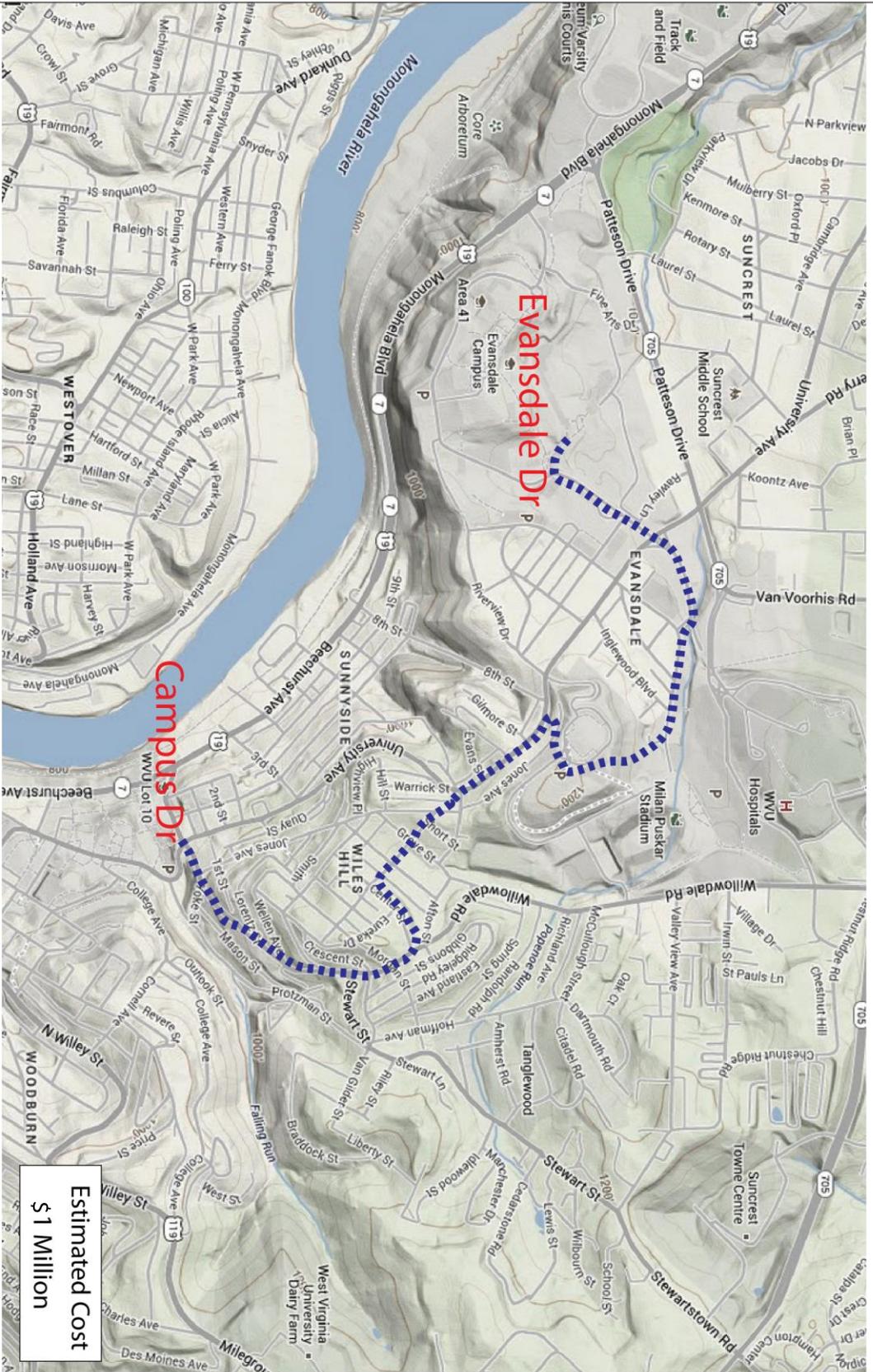
L RTP Project 6: New Bridge over Monongahela River and Roadway Connection to I-79



Estimated Cost
Option A \$71 Million
Option B \$49 Million
Option C \$32 Million

A = Potential Bridge Location and Option Number - - - - - Connection to I-79

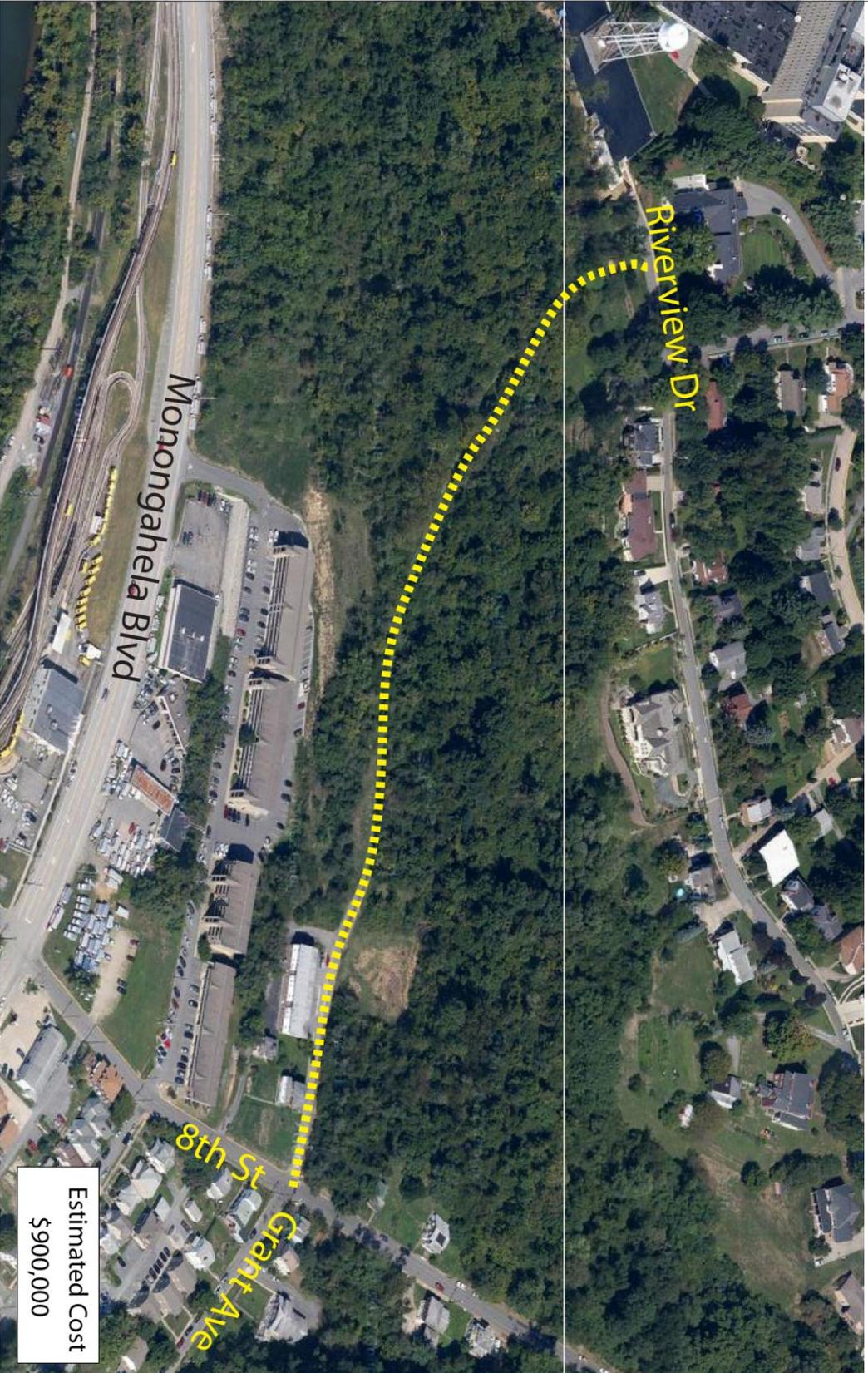
L RTP Project 26: North-side Connector Bus Rapid Transit



Estimated Cost
\$1 Million

Potential Bus Rapid Transit Route

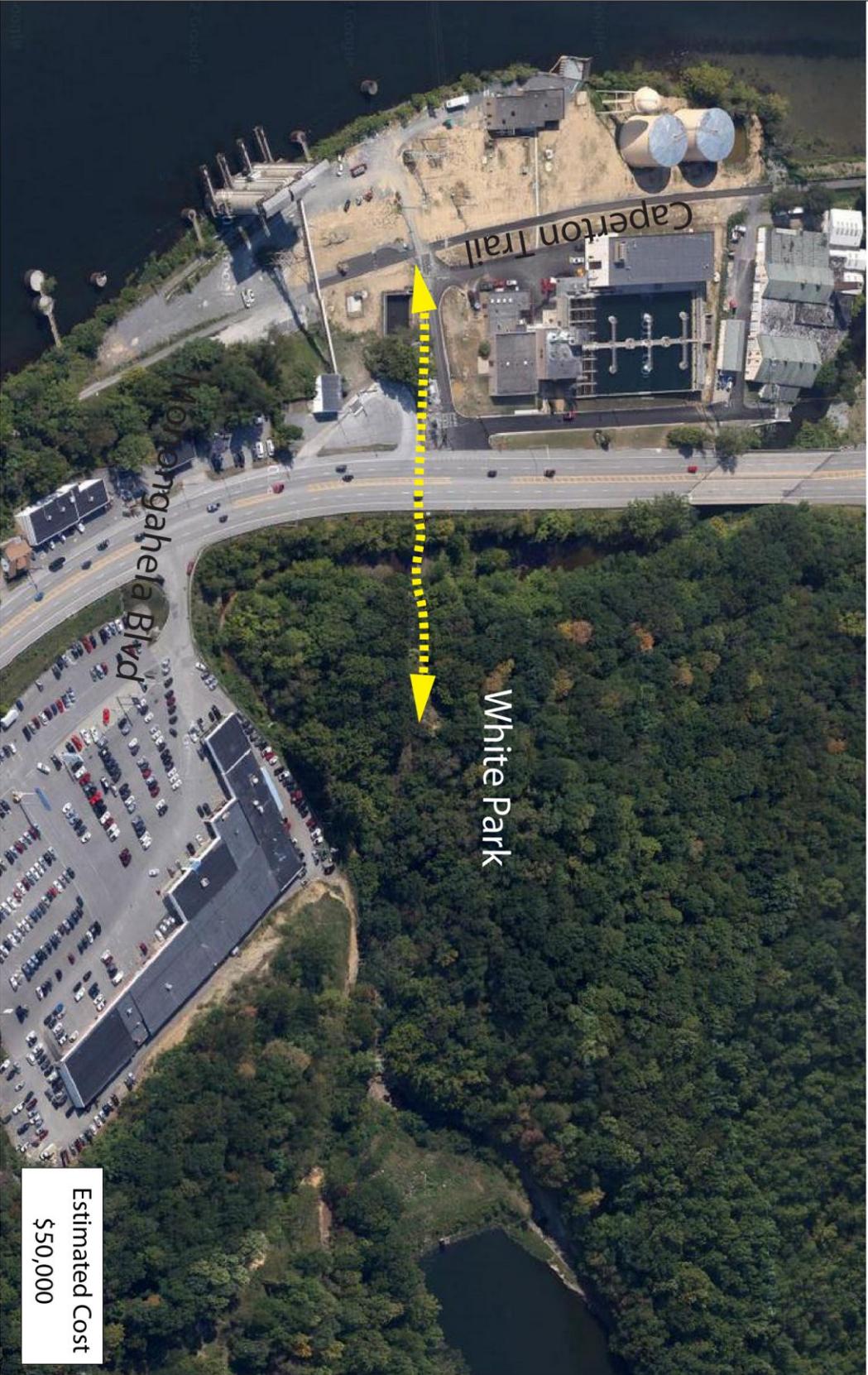
L RTP Project 27: Grant Avenue Bicycle / Pedestrian Connector



Potential Bicycle / Pedestrian Connector Route

Estimated Cost
\$900,000

L RTP Project 27: Grant Avenue Bicycle / Pedestrian Connector



Estimated Cost
\$50,000



Potential Trail Connection Route

Corridor Priority Evaluation Information Sheet

Project Name: Van Voorhis Road Improvement

L RTP	Tier	Project #	Cost Estimate	LRTP Project Evaluation (maximum score = 5)			
	1	7	\$10 million	Goals	Mobility	Feasibility	Preference
				3	4	2	4

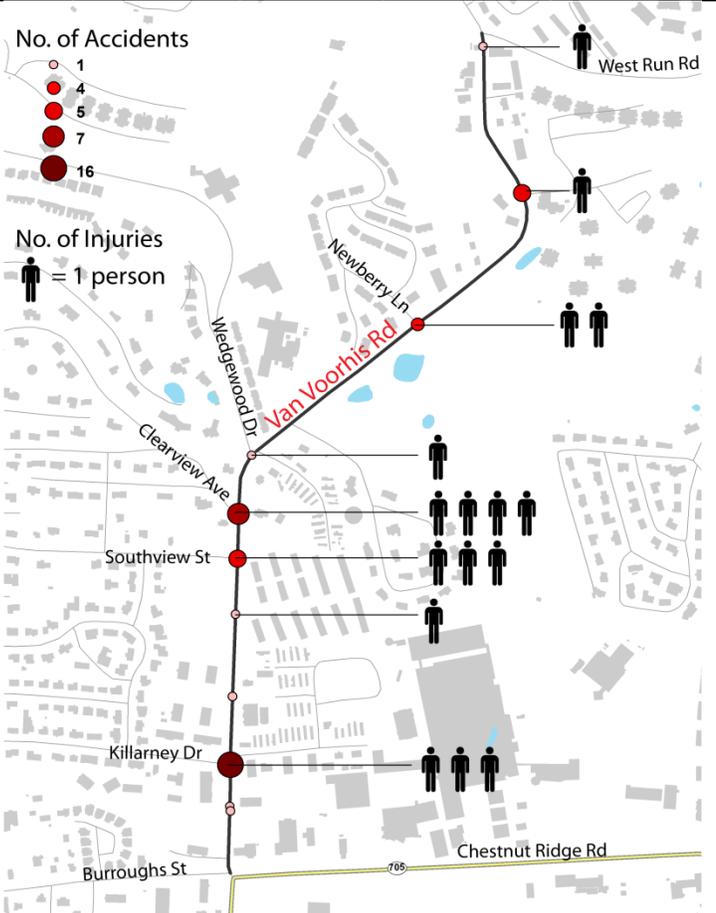
Road Info	Segment Interval	Length	AADT(2013)	Lanes	Road Type	Bus Lines
	West Run / Chestnut Ridge	1.0 Mile	14,683	2 lanes, Undivided	Collector	6,7

Motor Vehicle Crash	Injury	Fatality	Accident Rate ⁽¹⁾ (S Ave. ⁽²⁾)	Injury Crash Rate ⁽³⁾ (S Ave. ⁽²⁾)	Top 3 Collision Types		
					Rear End	Right Angle	Head On
43	16	0	267 (543)	80 (247)	19 (44%)	10 (23%)	3 (7%)

Accident Summary (09-11)

Key Findings:

- Most accidents occur at the intersection of Killarney Dr. and the intersection of Clearview Ave.
- Most accidents with high injury rate occur between Southview St and Clearview Ave.
- Number of accidents is declining by year between 2009 and 2011.
- 9 out of 43 (21%) accidents occurred on wet or snow road surface.



Notes

⁽¹⁾The accident rate per 100 million vehicles is calculated by $(\text{Number of Accidents} / 1,000,000) / (\text{Number of years} / 365) \times \text{AADT} \times \text{Segment Length}$

⁽²⁾Statewide average accident/injury rate is based on the 2003 West Virginia Crash Data—General Crash Statistics.

⁽³⁾The injury rate per 100 million vehicles, which is calculated by $(\text{Number of injury} / 1,000,000) / (\text{Number of years} / 365) \times \text{AADT} \times \text{Segment Length}$

Reporting Date: 12/31/2011

Project Name: Beechurst Avenue Improvement								
L RTP	Tier	Project #	Cost Estimate	LRTP Project Evaluation (maximum score = 5)				
	1	8	\$7 million	Goals	Mobility	Feasibility	Preference	
				3	4	3	4	
Road Info	Segment Interval	Length	AADT(2013)	Lanes	Road Type	Bus Lines		
	8 th St. / Foundry St.	1.2 Mile	24,091 (N/O Fayette St)	4 lanes, divided + 5 lanes (downtown)	Arterial (US 19)	4, 38 (except downtown)		
Accident Summary (09-11)	Motor Vehicle Crash	Injury	Fatality	Accident Rate ⁽¹⁾ (S Ave. ⁽²⁾)	Injury Crash Rate ⁽³⁾ (S Ave. ⁽²⁾)	Top 3 Collision Types		
						Rear End	Right Angle	Sideswipe S. Direction
	322	96	0	1,017 (543)	271 (247)	117(36%)	65 (20%)	42 (13%)
	<p>Key Findings:</p> <ul style="list-style-type: none"> The intersections of Beechurst St and Pleasant St and Fayette St have highest number of accidents in this corridor. Non-motorist injuries are concentrated in downtown area. 87 out of 322 (27%) accidents occur when the road surface is wet, snow, slush, or icy. 							
Notes	<p>⁽¹⁾The accident rate per 100 million vehicles is calculated by $(\text{Number of Accidents}) (1,000,000) / (\text{Number of years}) (365) (\text{AADT}) (\text{Segment Length})$</p> <p>⁽²⁾Statewide average accident/injury rate is based on the 2003 West Virginia Crash Data—General Crash Statistics.</p> <p>⁽³⁾The injury rate per 100 million vehicles, which is calculated by $(\text{Number of Injury}) (1,000,000) / (\text{Number of years}) (365) (\text{AADT}) (\text{Segment Length})$</p>							
Reporting Data: 12/31/2011								

Project Name: West Run Improvement – Western Section								
L RTP	Tier	Project #	Cost Estimate	L RTP Project Evaluation (maximum score = 5)				
	1	11	\$12 million	Goals	Mobility	Feasibility	Preference	
				3	3	4	4	
Road Info	Segment Interval		Length	AADT(2013)	Lanes	Road Type	Transit	
	Van Voorhis / Stewartstown		1.8 Mile	5,837 (W/O Riddle St)	2 lanes, undivided	Collector	6	
Accident Summary (09-11)	Motor Vehicle Crash	Injury	Fatality	Accident Rate ⁽¹⁾ (S Ave. ⁽²⁾)	Injury Crash Rate ⁽³⁾ (S Ave. ⁽²⁾)	Top 3 Collision Types		
						Single Vehicle	Angle O. Direction	Head On
	44	15	0	382 (543)	112 (247)	22 (50%)	7 (16%)	4 (9%)
	Key Findings:							
	<ul style="list-style-type: none"> Majority of accidents in this corridor are single vehicle crashes. 30 out of 44 (68%) accidents occur when road surface is wet, slush, or icy. 							
	<p>● = 1 accident ● = 9 accident ♀ = 1 injury 🚗 = Single Vehicle Crash</p>							
	<p>⁽¹⁾The accident rate per 100 million vehicles is calculated by <i>(Number of Accidents) (1,000,000) / (Number of years) (365) (AADT) (Segment Length)</i></p> <p>⁽²⁾Statewide average accident/injury rate is based on the 2003 West Virginia Crash Data—General Crash Statistics.</p> <p>⁽³⁾The injury rate per 100 million vehicles, which is calculated by <i>(Number of Injury) (1,000,000) / (Number of years) (365) (AADT) (Segment Length)</i></p>							
	Reporting Data: 12/31/2011							

Project Name: West Run Improvement – Eastern Section									
L RTP	Tier	Project #	Cost Estimate	L RTP Project Evaluation (maximum score = 5)					
	1	13	\$3 million	Goals	Mobility	Feasibility	Preference		
				3	3	4	4		
Road Info	Segment Interval		Length	AADT(2013)	Lanes	Road Type	Transit		
	Stewartstown / Point Marion		0.9 Mile	10,107	2 lanes undivided	Collector	30		
Accident Summary (09-11)	Accident	Injury	Fatality	Accident Rate ⁽¹⁾ (S Ave. ⁽²⁾)	Injury Crash Rate ⁽³⁾ (S Ave. ⁽²⁾)	Top 3 Collision Types			
						Single Vehicle	Angle O. Direction	Head On	
	13	2	0	130(543)	20(247)	6 (46%)	2(15%)	2(15%)	
	Key Findings:								
	<ul style="list-style-type: none"> Majority of accidents in this corridor are single vehicle crashes. 9 out of 13 (69%) accidents occur when road surface is wet, slush, or icy. 								
	<p>Collision Types</p> <ul style="list-style-type: none"> ● Single Vehicle Crash ● Rear End ● Head-On ● Sideswipe, Opposite Direction ● Angle - Direction Not Specified 👤 = 1 injury 								
	<p>⁽¹⁾The accident rate per 100 million vehicles is calculated by $(\text{Number of Accidents}) (1,000,000) / (\text{Number of years}) (365) (\text{AADT}) (\text{Segment Length})$</p> <p>⁽²⁾Statewide average accident/injury rate is based on the 2003 West Virginia Crash Data—General Crash Statistics.</p> <p>⁽³⁾The injury rate per 100 million vehicles, which is calculated by $(\text{Number of Injury}) (1,000,000) / (\text{Number of years}) (365) (\text{AADT}) (\text{Segment Length})$</p>								
	Notes	<p>Reporting Data: 12/31/2011</p>							

Project Name		Greenbag Road Improvements						
L RTP	Tier	Project #	Cost Estimate	L RTP Project Evaluation (maximum score = 5)				
	1	18	\$15 million	Goals	Mobility	Feasibility	Preference	
				3.5	2	3	4	
Road Info	Segment Interval		Length	AADT(2013)	Lanes	Road Type	Transit	
	University Ave / Earl Core Rd		3.5 Mile	10,512	2 lanes, undivided	Collector	4, 14	
Accident Summary (09-11)	Accident	Injury	Fatality	Accident Rate ⁽¹⁾ (S Ave. ⁽²⁾)	Injury Crash Rate ⁽³⁾ (S Ave. ⁽²⁾)	Top 3 Collision Types		
						Right Angle	Rear End	Angle (O. Direction)
	59	27	0	146(543)	67(247)	11(19%)	10(17%)	5(8%)
<p>Key Findings:</p> <ul style="list-style-type: none"> Most accidents occur at the intersections with Mississippi St, Dorsey Ave, and Deckers Creek Blvd. The intersection with Dorsey Ave has the highest injury rate (8 person were injured in 9 accidents) 								
Notes	<p>⁽¹⁾The accident rate per 100 million vehicles is calculated by <i>(Number of Accidents) (1,000,000) / (Number of years) (365) (AADT) (Segment Length)</i></p> <p>⁽²⁾Statewide average accident/injury rate is based on the 2003 West Virginia Crash Data—General Crash Statistics.</p> <p>⁽³⁾The injury rate per 100 million vehicles, which is calculated by <i>(Number of Injury) (1,000,000) / (Number of years) (365) (AADT) (Segment Length)</i></p> <p style="text-align: right;">Reporting Data: 12/31/2011</p>							

Appendix 1: Comparison Format of Corridor Evaluation Data

Project Number		#7	#8	#11	#13	#18
Major Street		Van Voorhis	Beechurst	West Run (Western)	West Run (Eastern)	Greenbag
Cost Estimation		\$10 million	\$7 million	\$12 million	\$3 million	\$15 million
LRTP Project Evaluation (maximum score = 5)	Goals	3	3	3	3	3.5
	Mobility	4	4	3	3	2
	Feasibility	2	3	4	4	3
	Preference	4	4	4	4	4
AADT (2013)		14,683	24,091	5,837	10,107	10,512
Motor Vehicle Crash		43	322	44	13	59
Injury		16	96	15	2	27
Accident rate per 100 million vehicles		267	1,017	382	130	146
Injury rate per 100 million vehicles		80	271	112	20	67
Corridor Length		1.0 mile	1.2 mile	1.8 mile	0.9 mile	3.5 mile
Number of Intersections		7	16	8	3	19
Estimated Current Pedestrian Activity ⁽³⁾		High	High	Low-Medium	low	Low
Estimated Potential Pedestrian Activity ⁽³⁾		High	High	High	Low	Medium-High
Bicycle Board Plan Rating		Red ⁽¹⁾	Blue ⁽²⁾	Blue	Red	Red
⁽¹⁾ Red = Suitable for experienced and traffic-confident cyclists. ⁽²⁾ Blue = Suitable for riders with some on-road experience. ⁽³⁾ Ranking was decided in cooperation with Morgantown Pedestrian Safety Board.						