

DRAFT Long Range Transportation Plan Project Descriptions

11/28/12

MAPPED PROJECTS

Project/Corridor	Description
<p>1 </p> <p>WV-705 Corridor (Patteson/Van Voorhis/ Chestnut Ridge) Improvements</p>	<p>Location: WV-705 from Monongalia Boulevard to Stewartstown Road</p> <p>Purpose: Improve traffic/people carrying capacity in the region's most heavily traveled corridor.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Add one lane of through capacity in each direction – The additional lane could be a High Occupancy Vehicle (HOV) lane that only buses and automobiles with 3 or more occupants could legally use (2 occupants or less would have to use other 2 general purpose lanes). The purpose of the HOV lane is to add vehicular capacity in this overcapacity corridor in a way that also gives a distinct travel time advantage to transit and vanpooling/carpooling to maximize total person trips that can be handled in the corridor. Upgrade existing sidewalks where needed to provide continuous attractive facilities for pedestrian traffic and to create an enhanced environment for transit users. Improved pedestrian crossings Provide improved bike facilities either in the form of bike lanes or shared HOV lanes. Improve access management in areas where currently deficient. Increase automobile capacity at key intersections with priority given to buses/HOV. This could involve improvement to side streets. Provide bus stops and shelters at key locations. <p>First implementation action: A preliminary engineering study of the corridor to comprehensively evaluate the benefits, feasibility and cost of these improvements - Crash data, peak hour traffic forecasts, bike and pedestrian facility needs and options, right-of-way and access impacts, pedestrian crossing locations, and other factors should be evaluated. The study process should engage key stakeholders, property owners, and users (the public) to obtain input and to build local buy-in and support of the recommendations of the study. The study could identify a phased approach where intersection capacity improvements, widening in key areas, key access improvements, signalization improvements, and bus queue jumps could be prioritized and constructed over several years.</p> <p>Key implementation factors: Local acceptance, acceptable property impacts, acceptable impacts to access, pedestrian crossings, and construction feasibility. Careful planning of pedestrian crossings with the widened roadway is a critical consideration. Grade separated options should be considered.</p>
<p>2 </p> <p>ADA Compliance Projects</p>	<p>Location: Region-wide</p> <p>Purpose: To complete accessible walkway connections to provide safer and more convenient routes for pedestrian travel, particularly for those with disabilities.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Repair and replace existing deficient sidewalks Construct sidewalk connections in key locations Improve curb ramps Improve key pedestrian crossings <p>First implementation item: Determine priority locations and apply for funding.</p> <p>Key implementation factors: Local agreement on priority locations.</p>
<p>3 </p> <p>Lazelle Union Road (WV-100) Improvements</p>	<p>Location: US-19 to PA state line.</p> <p>Purpose: To provide a bike commuter and recreational route west of the Monongahela River. To improve roadway for freight movement/truck traffic.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Repair truck damage to pavement

Estimated Cost
\$55,000,000

Primary Travel Modes Improved
Auto
Transit
Bicycle
Pedestrian

L RTP Goals Directly Supported
1,2,3,4,5,7

FHWA Planning Factors Supported
1,2,3,4,5,6,7,8

Estimated Cost
\$2,000,000

Primary Travel Modes Improved
Pedestrian

L RTP Goals Directly Supported
1,3,5,6,7

FHWA Planning Factors Supported
1,2,4,5,6,7,8,

Estimated Cost
\$22,000,000

Primary Travel Modes Improved

- Widen roadway to provide bike lanes or other bike accommodations

First Implementation Action: Detailed engineering review and cost estimates.

Key Implementation Factors: Addition of bike lanes should be achieved as an enhancement to a maintenance project to repair the roadway pavement.

Auto
Bicycle

L RTP Goals
Directly Supported
1,2,3,4,6

FHWA Planning
Factors Supported
1,2,4,5,6,8

4

I-79/Chaplin Hill Road/US-19/Lazzelle Union Road Interchange and Access Improvements

Limits: The system includes:

- the interchange of I-79 and Chaplin Hill Road,
- the intersection of Chaplin Hill Road and University Town Center Boulevard,
- the intersection of Monongahela Boulevard (WV-7/US-19) and Chaplin Hill Road,
- the intersection of Monongahela Boulevard and Boyers Avenue

Purpose: To improve traffic capacity and safety.

Improvements:

- Reconfiguration of the interchange
- Grade separation of Chaplin Hill Road from University Town Center Road
- Lane additions to increase capacity
- Upgrade of intersection of Monongahela Boulevard and Chaplin Hill Road
- Upgrade of the intersection of US-19 and Boyers Avenue
- Signal system coordination and optimization
- Integrate bicycle/pedestrian improvements

First implementation action: Perform comprehensive preliminary engineering study to evaluate alternatives to improve this interchange and access system. New and innovative options for the interchange and connectivity should be explored to minimize construction costs and negative impacts in the study area.

Key implementation factors: Optimal solution could vary significantly based on other factors such as potential land use and interchange changes (TIF district improvements) and the related connection from the interchange to Patteson Boulevard.

Estimated Cost
\$22,000,000

Primary Travel
Modes Improved
Auto
Transit

L RTP Goals
Directly Supported
1,3,4,7,8

FHWA Planning
Factors Supported
1,2,3,4,5,6,7,8

5

New I-79 Interchange at Business Park Site and Connecting Roadways

Location: Approximately ½ way between the existing I-79 interchanges at Chaplin Hill Road and Fairmont Road (US-19)

Purpose: To support economic development and to provide an additional point of access to I-79 (reduce demand at current interchanges).

Improvements:

- New interchange in conjunction with the proposed business park development
- Access roadways including a connection to University Town Center
- New access roadway located west of I-79 through new business park connecting to Chapel Hill Road
- Park and ride lot

First implementation action: Interchange Justification Study to evaluate design needs of new interchange and internal roadways.


Key implementation factors: Legislative approval of TIF and coordination with local agencies for roadway connections.

Estimated Cost
\$43,000,000
TIF District

Primary Travel
Modes Improved
Auto
Transit

L RTP Goals
Directly Supported
1,2,3,4,5,8

FHWA Planning
Factors Supported
1,2,3,4,5,6

<p>6  Option A</p> <p>New Bridge over Monongahela River and Roadway Connection to I-79</p> <p><i>West Run Extension and Lazelle Union Road (WV-100) Connection to US 19</i></p>	<p>Location: Extension of West Run Road along a new alignment west from Van Voorhis Road to Lazelle Union Road (WV-100) including a new bridge over the Monongahela River.</p> <p>Purpose: To provide an additional traffic capacity from/to I-79 from/to the heavy employment areas north of WV-705.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • New 4-lane roadway with access limited to 4 locations: at its termini with Van Voorhis Road and Lazelle Union Road, and at two access points spaced approximately 2000' apart between the termini. • Widen Lazelle Union Road to 4-lanes plus turn lanes at key locations between new bridge and US-19. Access limited to 3 full-movement access points approximately 2000 feet apart between US-19 and the proposed West Run Road extension. • Include parallel bike/pedestrian facilities (Potential: multiuse path on one side and sidewalk the other side). <p>First implementation action: A preliminary engineering study to verify the number of needed lanes, to determine the optimal alignment to minimize negative impacts, and to determine optimal intersection types and configurations for peak hour traffic operations. The study could identify a phased approach where, only two lanes and interim intersection types built initially with right-of-way obtained for the ultimate needs in the corridor.</p> <p>Key implementation factors: Local acceptance, acceptable environmental impacts, ability to obtain needed right of way, design of intersection with Lazelle Union Road.</p>	<p><u>Estimated Cost</u> \$71,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,4,5,8</p> <p><u>FHWA Planning Factors Supported</u> 1,2,3,4,5,6</p>
<p>6  Option B</p> <p>New Bridge over Monongahela River and Roadway Connection to I-79</p> <p><i>Direct Roadway Connection from New I-79 Interchange to Monongahela Boulevard</i></p>	<p>Location: From proposed business park access roadway (that connects directly to new interchange) to Monongahela Boulevard at Patteson Boulevard.</p> <p>Purpose: To provide an additional portal into the urban core area to relieve traffic from current portals from I-79 and to reduce traffic on the Monongahela Boulevard and Beechurst Corridors. To provide a multimodal connection to the park and ride at new interchange to reduce vehicular demand into the core.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • New 4-lane roadway • New bridge over Monongahela River • Parallel bike lanes, sidewalks and/or multi use path • Aesthetic gateway design <p>First implementation action: Alignment study to evaluate traffic capacity design needs and to choose an alignment and bridge location that minimizes negative property impacts and environmental impacts.</p> <p>Key implementation factors: Local acceptance of impacts, cost, impacts to WVU property and operations at Coliseum.</p>	<p><u>Estimated Cost</u> \$49,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,4,5,8</p> <p><u>FHWA Planning Factors Supported</u> 1,2,3,4,6</p>
<p>6  Option C</p> <p>New Bridge over Monongahela River and Roadway Connection to I-79</p>	<p>Location: From Beechurst Avenue at 8th Street to new interchange at I-79</p> <p>Purpose: To provide additional connection between I-79 to Morgantown and Campus. To reduce traffic volumes on Beechurst Avenue south of 8th Street and on Westover Bridge, and on Monongahela Boulevard at Patteson Drive.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • New bridge over Monongahela River • Reconstructed intersection at Beechurst Avenue and 8th Street • New intersection at extended 8th Street and Riverside Avenue • Improve roadways including improved intersections, sidewalks, and bike lanes <ul style="list-style-type: none"> ○ Riverside Avenue from new intersection with 8th Street to intersection with Dunkard Avenue ○ Dunkard Avenue from Riverside Drive to Dents Run Boulevard ○ Dents Run Boulevard to roadway connection to TIF development roadways ○ Bus stops and shelters at key locations • New roadway connection between Dents Run Boulevard to TIF development 	<p><u>Estimated Cost</u> \$32,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,4,5,6,8</p>

8th Street Bridge over Monongahela River and Roadway Connection to TIF Development Area Interchange to I-79

First implementation item: Alignment and feasibility studies for the bridge and new roadway connection. Engineering study of needed turn lane additions and intersection upgrades, sidewalk locations, lane widening, and geometric improvements to Riverside Avenue, Dunkard Avenue, and Dents Run Boulevard that includes property impacts and costs.

Key implementation factors: Environmental feasibility, local acceptance of impacts, property acquisition.

FHWA Planning Factors Supported
1,2,3,4,5,6,7,8

7 

Van Voorhis Road Improvements

Limits: From WV-705 to West Run Road

Purpose: To provide improved multimodal connectivity from the campus area to the residential areas to the north in a way that incentivizes transit usage and reduces automobile demand.

Improvements:

- Improve traffic lanes (pavement, drainage, width)
- Provide bicycle and pedestrian connectivity from WV-705 to White Oak Drive
- Provide bus only lane southbound with priority traffic signal phase for buses at WV-705 intersection
- Provide bus stops at key locations

First implementation actions: Preliminary engineering study of feasibility of bus lane and appropriate length, options for providing bicycle and pedestrian connectivity such as: 15 foot wide lane on northbound side, sidewalk on one or both sides, and/or a parallel multiuse trail. Logical limits of improvements based on walkable/bikeable slopes should also be verified.

Key implementation factors: Coordination with MLTA to ensure utilization of proposed bus lane.

Estimated Cost
\$10,000,000

Primary Travel Modes Improved
Auto
Transit
Bicycle
Pedestrian

L RTP Goals Directly Supported
1,2,3,5,6,7

FHWA Planning Factors Supported
2,4,5,6,7,8

8 

Beechurst Avenue Improvements

Limits: From Foundry Street to 8th Street

Purpose: To improve automobile capacity and travel time and maintain pedestrian and bicycle traffic through corridor

Improvements:

- Additional lanes/turn lanes to improve capacity
- Access management
- Replace sidewalks
- Provide bus stops with shelters at key locations

First implementation action: Perform a planning and preliminary engineering study of corridor that will include an assessment of capacity and safety needs, a detailed review of existing right-of-way, and the use and value of adjacent properties. The study must evaluate a comprehensive set of potential alternatives that maximize traffic capacity and maintains acceptable bicycle and pedestrian movement through the corridor. Access management options should be explored. The study should include an intense public/stakeholder/property owner involvement process that identifies potential partnership opportunities in redeveloping properties along the corridor and providing needed right-of-way. To-scale mapping based on ground survey and right-of-way research must be included.

Key implementation factors: Identifying a cost feasible alternative that has acceptable impacts to adjacent properties, increases automobile capacity in the corridor, and maintains acceptable levels of service for bicycles and pedestrians.

Estimated Cost
\$7,000,000

Primary Travel Modes Improved
Auto
Transit
Pedestrian

L RTP Goals Directly Supported
1,2,3,5,6,7

FHWA Planning Factors Supported
2,4,5,6,7,8

9 

University Avenue Improvements

Location: From Boyers Avenue to Fayette Street

Purpose: To provide a bicycle and pedestrian focused corridor and improve traffic capacity.

Improvements:




- Provide completed sidewalks on both sides of street for entire length
- Provide 15 foot lanes in uphill direction for bicycle climbing by widening and/or restriping:
 - Boyers Avenue to Congress Avenue
 - Mulberry Street to Laurel Street
 - Koontz Ave to Patteson Boulevard




Estimated Cost
\$20,000,000

Primary Travel Modes Improved
Auto
Transit
Bicycle
Pedestrian

	<ul style="list-style-type: none"> • Include bicycle route signing and marking in corridor • Improve pedestrian crossings throughout corridor • Improve automobile capacity (turn lanes, improved intersections, etc.) and safety (pedestrian crossings, sight distance, etc.) at key intersections (i.e. law school, Patteson Blvd., Collins Ferry) • Provide identifiable bus stop locations and shelters at key locations <p>First implementation action: Perform preliminary engineering study to identify (through data and analysis) the optimal solution for the corridor including traffic forecasts and capacity analysis, pedestrian and bicycle safety and flow needs, right-of-way and cost impacts of solutions, etc.</p> <p>Key implementation factors: Property impacts and costs related to widening of roadway/right-of-way.</p>	<p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 2,4,5,6,7,8</p>
<p>10</p> <p>Burroughs Street</p>	<p>Location: From Collins Ferry Road to WV-705/Van Voorhis Road</p> <p>Purpose: To increase capacity to address existing capacity deficiency.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Improve automobile capacity at intersections with Collins Ferry Road and WV-705 • Provide left turn lanes at key intersection/driveways • Limit and/or combine access points • Maintain and widen sidewalk on south side of street • Add sidewalk to north side of street <p>First implementation action: Perform preliminary engineering analysis to determine most critical needs and potential solutions and impacts in corridor.</p> <p>Key implementation factors: Acceptance of improvements by residents along corridor. Potential property impacts of widening for turn lanes and/or sidewalks.</p>	<p><u>Estimated Cost</u> \$4,000,000</p> <p>Primary Travel <u>Modes Improved</u> Auto Pedestrian</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 2,3,4,5,6,7</p>
<p>11</p> <p>West Run Improvements - Western Section</p>	<p>Location: From VanVoorhis Road to Stewartstown Road</p> <p>Purpose: To increase traffic capacity and to improve pedestrian and bike traffic flow.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Add capacity through key turn lane additions and intersection improvements • Widen lanes to 15 feet wide lanes on inclines for adequate bicycle overtaking width • Improve geometry (sight distance, curvature, lane widths, shoulders, etc.) • Explore potential for parallel multiuse path in corridor <p>First implementation actions: Engineering study of needed turn lane additions and intersection upgrades, lane widening, and geometric improvements that includes property impacts and costs. Feasibility study for parallel multiuse path in corridor.</p> <p>Key implementation factors: Impacts to adjacent properties and cost.</p>	<p><u>Estimated Cost</u> \$12,000,000</p> <p>Primary Travel <u>Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 1,2,4,5,6,7,8</p>
<p>12</p> <p>Stewartstown Road Improvements</p>	<p>Location: From WV-705 to Point Marion Road (US-119)</p> <p>Purpose: To provide additional people moving capacity from I-68 to campus area and employment areas north of WV-705.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Add one through traffic lane in each direction from WV-705 to West Run Road • Provide turn lanes where appropriate • Implement a defined access management corridor plan • Rightmost lane between West Run Road and WV-705 to be HOV lane and/or provide bus queue jump at WV-705 	<p><u>Estimated Cost</u> \$12,000,000</p> <p>Primary Travel <u>Modes Improved</u> Auto Transit Pedestrian</p>

	<ul style="list-style-type: none"> • Limit access points to one full movement intersection between WV-705 and West Run Road • Limit access points to two full movement access points between West Run Road and Point Marion Road • Construct outside lanes 15 feet wide on inclines for adequate bicycle overtaking width • Construct sidewalk on west side of street <p>First implementation actions: Preliminary engineering study to determine intersection and capacity needs, access management concepts, HOV/BRT feasibility and benefits, costs, right-of-way and environmental impacts.</p> <p>Key implementation factors: Acceptance of any negative impacts versus benefits, HOV/BRT benefits and acceptability, maintaining adequate access.</p>	<p>L RTP Goals <u>Directly Supported</u> 1,3,5</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,7,8</p>
<p>13</p> <p>West Run Road Improvements - Eastern Section</p>	<p>Location: From Stewartstown Road to Point Marion Road</p> <p>Purpose: To increase traffic capacity and to improve transit, pedestrian, and bike traffic flow.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Add capacity through key turn lane additions and intersection improvements • Widen lanes to 15 feet wide lanes on inclines for adequate bicycle overtaking width • Improve geometry (sight distance, curvature, lane widths, shoulders, etc.) • Explore potential for parallel multiuse path in corridor • Explore providing queue jump lanes at intersections for expedited bus service <p>First implementation actions: Engineering study of needed turn lane additions and intersection upgrades, lane widening, and geometric improvements that includes property impacts and costs. Feasibility study for parallel multiuse path in corridor.</p> <p>Key implementation factors: Impacts to adjacent properties and cost.</p>	<p><u>Estimated Cost</u> \$3,000,000</p> <p>Primary Travel Modes Improved Auto Transit Bicycle Pedestrian</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,8</p>
<p>14</p> <p>Cheat Road Improvements</p>	<p>Location: From I-68 interchange to West Run Road</p> <p>Purpose: Improve traffic/people carrying capacity in heavily traveled corridor. To encourage transit use, and van/carpooling from park and ride at Glenmark Centre.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Add one lane of through capacity in each direction – The additional lane would be a High Occupancy Vehicle (HOV) lane that only buses and automobiles with 3 or more occupants could legally use (2 occupants or less would have to use other 2 general purpose lanes). The purpose of the HOV lane is to add vehicular capacity in this overcapacity corridor in a way that also gives a distinct travel time advantage to transit and vanpooling/carpooling to maximize total person trips that can be handled in the corridor. • Explore option of rightmost lane as an HOV/BRT lane • Improve signal with Glenmark Center to provide bus priority • Add bike lanes <p>First implementation actions: Engineering study to determine required widening and potential use of existing shoulder for HOV/BRT use in lieu of widening.</p> <p>Key implementation factors: HOV/BRT benefits and acceptability.</p>	<p><u>Estimated Cost</u> \$6,000,000</p> <p>Primary Travel Modes Improved Auto Transit Bicycle</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,7,8</p>
<p>15</p> <p>Willowdale Road/ Grove Street/North Avenue Sidewalk Improvements</p>	<p>Location: From University Avenue to WV-705</p> <p>Purpose: To provide a convenient/inviting corridor for pedestrians.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Complete sidewalks connections on both sides of street <p>First implementation actions: Preliminary engineering investigation of the preferred locations for sidewalk additions, impacts, and costs.</p>	<p><u>Estimated Cost</u> \$4,000,000</p> <p>Primary Travel Modes Improved Pedestrian</p> <p>L RTP Goals</p>

		Key implementation factors: Acceptability of property impacts and cost feasibility.	<u>Directly Supported</u> 1,2,3,5,6,7
			FHWA Planning Factors Supported 2,4,5,6,8
16		Location: From Cheat Lake bridge to western intersection of Cheat Road and Old Cheat Road	<u>Estimated Cost</u> \$7,000,000
Old Cheat Road / Cheat Road Bike Lanes		Purpose: To provide a more inviting bike route for commuters from the Cheat Lake area.	Primary Travel Modes Improved Bicycle
		Improvements: <ul style="list-style-type: none"> Widen roadway to provide bike lanes 	L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7
		First implementation actions: Engineering study to determine the required widening needs and costs.	FHWA Planning Factors Supported 2,4,5,6
		Key implementation factors: Identification of funding.	
17		Location: Through Westover from the I-79 Interchange to the Westover Bridge	<u>Estimated Cost</u> \$11,000,000
Fairmont Road / Holland Avenue (US-19)		Purpose: To improve automobile traffic capacity and safety and increase travel by pedestrians and bicyclists.	Primary Travel Modes Improved Auto Transit Bicycle Pedestrian
		Improvements: <ul style="list-style-type: none"> Improve access management by reducing and consolidating access points Improve intersections and traffic signal timings and coordination Provide additional turn lanes where beneficial Provide 15 feet wide lanes or bike lanes on inclines and other difficult areas for adequate bicycle overtaking width Provide complete sidewalks on both sides of the street Provide bus stops and shelters at key locations 	L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7
		First implementation actions: Perform preliminary engineering study to identify optimal solutions for the corridor that includes crash analysis, traffic forecasts and capacity analysis, pedestrian and bicycle safety and flow needs, identification of access management deficiencies, locations for bicycle climbing lanes, right-of-way and cost impacts of solutions, etc.	FHWA Planning Factors Supported 1,2,4,5,6,7,8
		Key implementation factors: Property impacts and costs related to widening of roadway/right-of-way.	
18		Location: From Don Knotts Boulevard (US-119) to Sabraton Avenue (SR-7)	<u>Estimated Cost</u> \$15,000,000
Greenbag Road Improvements		Purpose: To enhance route as an attractive alternative for automobiles and especially trucks (in lieu of traveling downtown). To increase travel by pedestrians and bicyclists.	Primary Travel Modes Improved Auto Bicycle Pedestrian Transit
		Improvements: <ul style="list-style-type: none"> Improve intersection of Earl Core Road (WV-7) and Greenbag Road to better accommodate truck turns Improve intersections in corridor Widen roadway to a minimum of two 11' lanes with 4-5' paved shoulders including wider (15 feet wide) lanes on inclines for adequate bicycle overtaking width Construct sidewalks in targeted locations (focused on key sidewalk network connections) Provide bus stops with shelters at key locations Strengthen pavement where needed Include truck route signage 	L RTP Goals <u>Directly Supported</u> 1,2,3,4,5,6,7
		First implementation actions: Perform preliminary engineering study to determine most appropriate intersection configurations, pedestrian and bicycle safety and connectivity needs, locations for	

	bicycle climbing lanes, right-of-way and cost impacts of solutions, etc.	FHWA Planning Factors Supported 2,4,5,6,7,8
19 	<p>Location: High Street to Greenbag Road</p> <p>Improvements:</p> <ul style="list-style-type: none"> Complete the sidewalks on at least one side of the Street <p>First implementation actions: Preliminary engineering investigation of the preferred locations for sidewalk additions, impacts, and costs.</p> <p>Key implementation factors: Acceptability of property impacts and cost feasibility.</p>	<p>Estimated Cost \$4,000,000</p> <p>Primary Travel Modes Improved Pedestrian</p> <p>L RTP Goals Directly Supported 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 2,4,5,6,8</p>
Dorsey Avenue		
20 	<p>Location: Walnut Street to Deckers Creek Road (Old Rte 7)</p> <p>Purpose: To provide pedestrian and bike connectivity from Sabraton to downtown.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Improve connections to Decker’s Creek Trail Improve and complete sidewalk connections Provide bus stops with shelters at key locations <p>First implementation action: Preliminary engineering study to determine most appropriate locations to provide/improve trail connections and to improve sidewalk connectivity and to determine right-of-way impacts and costs.</p> <p>Key implementation factors: Acceptability of property impacts and cost feasibility.</p>	<p>Estimated Cost \$6,000,000</p> <p>Primary Travel Modes Improved Bicycle Pedestrian Transit</p> <p>L RTP Goals Directly Supported 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 2,4,5,6,7,8</p>
Brockway Rodgers/Powell Avenues (WV-7)		
21 	<p>Location: Deckers Creek Road (Old Rte 7) to I-68</p> <p>Purpose: To provide pedestrian and bike connectivity from Sabraton to downtown, to improve traffic flow and safety, and to provide attractive truck access to Greenbag Road</p> <p>Improvements:</p> <ul style="list-style-type: none"> Improve intersection with Greenbag Road to better accommodate trucks. Corridor signal optimization Reduce access conflicts (consolidation of duplicate access points, redesign of driveways) Add continuous sidewalks on both sides of Earl Core Road Improve capacity and safety in corridor Add turn lanes where appropriate Improve connectivity to Decker’s Creek Trail at key locations Provide bus stops with shelters at key locations <p>First implementation action: Preliminary engineering study that includes needed intersection capacity and safety improvements based on crash data and traffic volumes, identification of existing</p>	<p>Estimated Cost \$9,000,000</p> <p>Primary Travel Modes Improved Auto Transit Bicycle Pedestrian</p> <p>L RTP Goals Directly Supported 1,2,3,4,5,6,7</p> <p>FHWA Planning</p>
Earl Core Road (WV-7) - Northern Section		

	<p>access management deficiencies, coordination with local property owners to optimize access design and sidewalk locations, and identifications of costs and property impacts.</p> <p>Key implementation factors: Coordination with local property owners for access improvements and sidewalk installation, and potential property impacts for capacity improvements.</p>	<p><u>Factors Supported</u> 1,2,4,5,6,7,8</p>
<p>22</p> <p>Earl Core Road (WV-7) - Southern Section</p>	<p>Location: I-68 to Deckers Creek Boulevard</p> <p>Purpose:</p> <ul style="list-style-type: none"> Improve traffic capacity and flow <p>Improvements:</p> <ul style="list-style-type: none"> Consolidate and redesign driveways Add turn lanes (potentially a center two-way left turn lane for entire length) Add sidewalks on at least one side of roadway <p>First implementation action: Preliminary engineering study that includes needed intersection capacity and safety improvements based on crash data and traffic volumes, identification of existing access management deficiencies, coordination with local property owners to optimize access design and sidewalk locations, and identifications of costs and property impacts.</p> <p>Key implementation factors: Coordination with local property owners for access improvements and sidewalk installation, and potential property impacts for capacity improvements.</p>	<p><u>Estimated Cost</u> \$9,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p><u>L RTP Goals</u> <u>Directly Supported</u> 1,2,3,5,6,7</p> <p><u>FHWA Planning Factors Supported</u> 2,4,5,6,8</p>
<p>23</p> <p>New Road Connection from Willey Street to Downtown Campus Area</p>	<p>Location: From Willey Street approximately ¼-mile south of WV-705 to Protzman Street or Falling Run Road.</p> <p>Purpose: To provide a more efficient connection between Mileground area and downtown campus for autos, buses, bicyclists, and pedestrians. Reduce traffic volumes at WV-705/Stewartstown Road Intersection. Provide a direct route to campus that bypasses downtown.</p> <p>Improvements:</p> <ul style="list-style-type: none"> New two-lane roadway with 11 feet wide traffic lanes 10 feet wide multiuse trail on one side of roadway Strict access management (no access points allowed) <p>First implementation actions: Alignment study to determine best alignment and termination points and treatments, environmental impacts, and costs.</p> <p>Key implementation factors: Providing the transportation connection without violating the communities desire to preserve the “Reserved Open Area” and “Limited Growth” through which the alignment would traverse (see land use concept map from Visioning process). Completing the pedestrian and bicycle connectivity to University Avenue will be important to make this project successful.</p>	<p><u>Estimated Cost</u> \$6,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Transit Bicycle Pedestrian</p> <p><u>L RTP Goals</u> <u>Directly Supported</u> 1,2,3,5,6</p> <p><u>FHWA Planning Factors Supported</u> 1,2,4,6</p>
<p>24</p> <p>Protzman/Falling Run Pedestrian and Bicycle Connector</p>	<p>Location: From the western terminus of Project # 23 to University Avenue.</p> <p>Purpose: To connect multiuse trail of Project 23 to the downtown campus area.</p> <p>Improvements:</p> <ul style="list-style-type: none"> 10-12’ wide multiuse trail/path parallel to existing streets Sidewalks adjacent to street on one side <p>First implementation actions: Engineering study of feasible locations for proposed improvements and impacts/costs.</p>	<p><u>Estimated Cost</u> \$1,000,000</p> <p><u>Primary Travel Modes Improved</u> Bicycle Pedestrian</p> <p><u>L RTP Goals</u> <u>Directly Supported</u></p>

	Key implementation factors: Constructability/funding.	1,2,3,5,6,7 <u>FHWA Planning Factors Supported</u> 2,4,5,6,8
25 Willey Street Improvements	<p>Location: From High Street to WV-705</p> <p>Purpose: To increase traffic capacity of Willey Street and to improve auto capacity and pedestrian and bike traffic flow from neighborhoods to downtown and the Mileground.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Add capacity through key turn lane additions and intersection improvements • Add key connections to complete the sidewalks • Widen lanes to 15 feet wide lanes on inclines for adequate bicycle overtaking width • Improve geometry (sight distance, curvature, lane widths, shoulders, etc.) • Provide bus stops and shelters at key locations. <p>First implementation actions: Engineering study of needed turn lane additions and intersection upgrades, sidewalk locations, lane widening, and geometric improvements that includes property impacts and costs.</p> <p>Key implementation factors: Impacts to adjacent properties and cost.</p>	<p><u>Estimated Cost</u> \$13,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Bicycle Pedestrian Transit</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,5,6,7</p> <p><u>FHWA Planning Factors Supported</u> 2,4,5,6,7,8</p>
26 WVU Campus Bus Rapid Transit Connector	<p>Location: From Evansdale Campus to Downtown Campus</p> <p>Purpose: To improve capacity of transit service between WVU campuses.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Designation of combination of WVU and City streets • Construct missing roadway sections required for completing the route <p>First implementation actions: Engineering study of the feasibility and cost of the concept.</p> <p>Key implementation factors: Coordination between MLTA, WVU, and the City.</p>	<p><u>Estimated Cost</u> \$1,000,000</p> <p><u>Primary Travel Modes Improved</u> Transit</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,5,6,7</p> <p><u>FHWA Planning Factors Supported</u> 2,4,5,6,7,8</p>
27 Grant Avenue Bicycle/Pedestrian Connector	<p>Location: From end of Grant Avenue to Riverview Drive</p> <p>Purpose: To provide bicycle and pedestrian connection between Downtown and the WVU Evansdale Campus.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Construct multiuse trail <p>First implementation actions: Preliminary engineering study to determine the most appropriate alignment, impacts, right-of-way needs, and costs.</p> <p>Key implementation factors: Right-of-way acquisition (if not already publicly owned).</p>	<p><u>Estimated Cost</u> \$900,000</p> <p><u>Primary Travel Modes Improved</u> Bicycle Pedestrian</p> <p><u>L RTP Goals Directly Supported</u></p>

		1,2,3,5,6,7
		FHWA Planning Factors Supported 2,3,4,5,6
28	<p>White Park / Caperton Trail Connection</p> <p>Location: From White Park to Caperton Trail</p> <p>Purpose: To provide connectivity from White Park and adjacent neighborhoods to the regional trail system.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Construct multiuse trail <p>First implementation actions: Preliminary engineering study to determine the preferred alignment, crossing treatment at Don Knotts Boulevard, impacts, right-of-way needs, and costs.</p> <p>Key implementation factors: Crossing of Don Knotts Boulevard.</p>	<p><u>Estimated Cost</u> \$50,000</p> <p><u>Primary Travel Modes Improved</u> Bicycle Pedestrian</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,5,6,7</p> <p><u>FHWA Planning Factors Supported</u> 2,3,4,5,6</p>
29	<p>Grafton Road (US-119)</p> <p>Location: From Scotts Avenue to Greenbag Road</p> <p>Purpose: To increase automobile capacity to address existing capacity deficiency and to provide bike connectivity.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Complete 4-lane roadway Provide turn lanes where appropriate Limit any new full access points to no closer than 2000 feet from an existing full access point Bike lanes or climbing lanes <p>First implementation actions: Preliminary engineering study to identify capacity and delay deficiencies in more detail, impacts, costs, and access point locations.</p> <p>Key implementation factors: Identifying the true need for this improvement in more detailed studies. Establishing access management in short-term to avoid future access problems.</p>	<p><u>Estimated Cost</u> \$5,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Bicycle</p> <p><u>L RTP Goals Directly Supported</u> 1,2,3,4,7</p> <p><u>FHWA Planning Factors Supported</u> 1,2,4,5,6,8</p>
30	<p>Stewart Street Improvements</p> <p>Location: From High Street to WV-705</p> <p>Purpose: To increase traffic capacity and to improve pedestrian and bike traffic flow from neighborhoods to downtown and WV-705.</p> <p>Improvements:</p> <ul style="list-style-type: none"> Add capacity through key turn lane additions and intersection improvements Add key sidewalk connections to complete the sidewalks Widen lanes to 15 feet wide lanes on inclines for adequate bicycle overtaking width Improve geometry (sight distance, curvature, lane widths, shoulders, etc.) Provide bus stops and shelters at key locations <p>First implementation actions: Engineering study of needed turn lane additions and intersection upgrades, sidewalk locations, lane widening, and geometric improvements that includes property</p>	<p><u>Estimated Cost</u> \$11,000,000</p> <p><u>Primary Travel Modes Improved</u> Auto Bicycle Pedestrian Transit</p> <p><u>L RTP Goals Directly Supported</u></p>

	impacts and costs.	1,2,3,5,6,7
	Key implementation factors: Impacts to adjacent properties and cost.	FHWA Planning Factors Supported 2,4,5,6,7,8
31	<p>Location: From University Health Sciences to Mon General Hospital</p> <p>Purpose: To provide high capacity person moving connection between these locations to reduce automobile traffic demand within the core campus and employment areas.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Extension of PRT system • Stations at each location • Assumes a system that includes wireless communications and battery powered vehicles (expansion cost greatly reduced over current technology) <p>First implementation actions: Alignment study to determine the most cost effective route.</p> <p>Key implementation factors: Feasibility of construction and cost.</p>	<p><u>Estimated Cost</u> \$57,000,000</p> <p>Primary Travel Modes Improved Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,7,8</p>
32	<p>Location: From Mon General Hospital to Glenmark Centre</p> <p>Purpose: To provide high capacity person moving connection between these locations to reduce automobile traffic demand to and from the core campus and employment areas from I-68.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Extension of PRT system • Stations at each location • Assumes a system that includes wireless communications and self-powered (battery) vehicles. <p>First implementation actions: Alignment study to determine the most cost effective route.</p> <p>Key implementation factors: Feasibility of construction and cost.</p>	<p><u>Estimated Cost</u> \$103,000,000</p> <p>Primary Travel Modes Improved Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,7,8</p>
33	<p>Location: Grumbein’s Island on University Avenue</p> <p>Purpose: To separate vehicular traffic on University Avenue from pedestrian crossing traffic to improve traffic flow and reduce pedestrian/auto conflicts.</p> <p>Improvements: Grade separation of roadway from pedestrian crossing.</p> <p>First implementation actions: Completion of traffic operations study and prepare final plans based on preliminary engineering report.</p> <p>Key implementation factors: Coordination between WVU, City, and State.</p>	<p><u>Estimated Cost</u> \$10,000,000</p> <p>Primary Travel Modes Improved Auto Pedestrian Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported</p>

34

Riddle Street/ Pineview Drive Improvements

Location: From WV-705 to West Run Road

Purpose: To improve pedestrian and bike traffic flow from neighborhoods to WV-705.

Improvements:

- Add sidewalk to at least one side of street
- Widen lanes to 15 feet wide lanes on inclines for adequate bicycle overtaking width
- Provide bus stops and shelters at key locations

First implementation actions: Engineering study of most desirable sidewalk locations and lane widening that includes property impacts and costs.

Key implementation factors: Impacts to adjacent properties and cost.

Estimated Cost
\$4,000,000

Primary Travel Modes Improved
Pedestrian
Bicycle
Transit

L RTP Goals Directly Supported
1,2,3,5,6,7

FHWA Planning Factors Supported
2,4,5,6,8

35

PRT Connection New Business Park to Evansdale Campus

Location: From new park and ride lot in TIF district business park to Coliseum parking lot, to Evansdale Campus.

Purpose: To provide a transit connection to the park and ride at new interchange to reduce vehicular demand into the core.

Improvements:

- New PRT track integrated with the construction of the new roadway and bridge connection.
- Station at business park - Park and Ride
- Station at Coliseum parking lot
- Station near Evansdale Campus Drive
- Connection to Engineering PRT station

First implementation actions: Preliminary engineering study of potential ridership and implementation cost and feasibility.

Key implementation factors: Likely not feasible with current PRT system infrastructure, but could become feasible if system moves to self-powered vehicles with wireless controls. Cost would then only be cost of guideway, vehicles, and stations, which is the estimated cost included in this description. Alternative alignments could be explored depending on the selected location of a new river crossing (see Project #6).

Estimated Cost
\$80,000,000

Primary Travel Modes Improved
Transit

L RTP Goals Directly Supported
1,2,3,5,6,7

FHWA Planning Factors Supported
1,2,4,5,6,7

36

New Roadway Connection from Mileground Road to Hartman Run Road

Location: From intersection of WV-705 and Mileground Road to Hartman Run Road near Fulmer Street

Purpose: To provide an efficient alternative route for traffic from the Mileground to Sabraton for all modes including trucks.

Improvements:

- New 2-lane roadway with turn lanes at appropriate locations
- Sidewalk on one side
- Multiuse trail on one side
- Bus stops and shelters at key locations

First implementation item: Alignment and feasibility study for the roadway connection

Key implementation factors: Construction feasibility, property impacts, public acceptance, and cost.

Estimated Cost
\$17,000,000

Primary Travel Modes Improved
Auto
Bicycle
Pedestrian
Transit

L RTP Goals Directly Supported
1,2,3,4,5,6

FHWA Planning

37

Extension of Airport Industrial Road to WV-7 in Sabraton

Location: From terminus of planned industrial road east of airport to WV-7 in Sabraton

Purpose: To provide an efficient alternative route for traffic from Cheat Road to Sabraton

Improvements:

- New 2-lane roadway with turn lanes at appropriate locations.

First implementation item: Alignment and feasibility study for the roadway connection.

Key implementation factors: Construction feasibility, property impacts, public acceptance, and cost.

Factors Supported
1,2,4

Estimated Cost
\$12,000,000

Primary Travel Modes Improved
Auto

L RTP Goals Directly Supported
1,3,4,5

FHWA Planning Factors Supported
1,2,4

UNMAPPED PROJECTS

Project/Corridor	Description	Estimated Cost
38 Intersection Capacity and Safety Improvement Program	<p>Location: Numerous intersections throughout the region</p> <p>Purpose: To systematically improve capacity and/or safety at key intersections in the region.</p> <p>Improvements: Short to medium term improvements to intersections to reduce crashes and to increase system capacity and automobile travel efficiency. The improvements could include:</p> <ul style="list-style-type: none"> • Traffic signal optimization through additional and improved detection, improved control equipment and software, optimized phasing and timing. • Addition of turn lanes and/or through lanes. • Correction of geometric deficiencies • Change in traffic control (roundabout, traffic signal, stop sign, yield) • Improved pedestrian crossings • Improved bicycle accommodations <p>The preferred improvements could, but would not necessarily have to, be developed as part of a larger corridor study. The intent of this plan item is to develop feasible short to medium term improvements that can be implemented quickly to improve safety and capacity.</p> <p>First implementation actions:</p> <ul style="list-style-type: none"> • Prioritization of intersections in the region based on a comprehensive study of: <ul style="list-style-type: none"> ○ Crash data including rankings based on number of crashes, crash rates, and severity (injury/fatality) rates. ○ Existing congestion levels (delay per vehicle, backups) • Detailed safety and congestion studies of the top 5 to 10 intersections each year. These studies should evaluate crash data and operational data in detail to identify contributing factors, potential countermeasures, intersection improvement alternatives, short and long term needs, etc. Preferred alternatives should then be programmed and implemented. • Coordination with the findings of the Downtown Signalization Study (RTI/WVU), which is exploring options for some of the key intersections listed below. <p>Key implementation factors:</p> <ul style="list-style-type: none"> • Prioritizing locations • Identifying short to medium term solutions that also fit within the long term needs of the corridor • Acceptable impacts to adjacent properties <p>Initial intersection list for safety and congestion studies:</p> <ul style="list-style-type: none"> • Monongahela Boulevard / Patteson Drive • Patteson Drive / Laurel Street • University Avenue / Collins Ferry Road • University Avenue / Patteson Drive • Van Voorhis Road / Chestnut Ridge / Burroughs Street • Van Voorhis Road / Christy Street • Van Voorhis Road / West Run Road • Van Voorhis Road / Elmer Prince • WV-705 / Stewartstown Road • West Run Road / Stewartstown Road • Stewartstown Road / Point Marion Road • Point Marion Road / West Run Road • University Avenue / Campus Drive • University Avenue / Beechurst Avenue/Fayette Street • University Avenue / 8th Street • Beechurst Avenue / Campus Drive • Greenbag Road and Don Knotts Boulevard 	\$32,000,000
		<u>Primary Travel Modes Improved</u>
		Auto Bicycle Pedestrian Transit
		<u>L RTP Goals Directly Supported</u>
		1,2,3,5,6,7
		<u>FHWA Planning Factors Supported</u>
		1,2,4,5,7,8

- Greenbag Road / Dorsey Avenue
- Greenbag Road and Diamond Avenue
- Greenbag Road and Earl Core Road
- Tyrone Road / Tyrone Avery Road
- Cheat Road / Tyrone Avery Road
- Hartman Run Road / Hart Field Road (north intersection)
- Hartman Run Road / Hart Field Road (south intersection)
- Stewart Street / Hoffman Street / Van Guilder Street
- Spruce Street / Walnut Street
- Spruce Street / Pleasant Street
- Fayette Street / High Street
- High Street / Willey Street
- High Street / Pleasant Street
- Walnut Street / University Avenue

39 Regional Pedestrian Safety and Sidewalk Connectivity

Location: Region-wide

Purpose: To complete sidewalk connectivity to provide safer and more convenient routes for pedestrian travel.

Improvements:

- Repair and replace existing deficient sidewalks
- Widen and improve key sidewalk sections
- Construct new sidewalks in key locations
- Improve safety at locations of high pedestrian crashes
- Improve key pedestrian crossings

Initial intersections identified for pedestrian crossing and safety improvements:

- Foundry Street / University Avenue (US-119)
- Pleasant Street / University Avenue (US-119)
- Walnut Street / University Avenue (US-119)
- Spruce Street / Walnut Street
- High Street / Willey Street
- University Avenue / College Avenue
- Willey Street / Prospect Street
- Spruce Street / Pleasant Street
- Beechurst Avenue / Campus Drive
- Beechurst Avenue / 3rd Street
- Beechurst Avenue / 6th Street
- Chestnut Ridge Road / Van Voorhis Road
- High Street / Walnut Street
- High Street / Fayette Street
- University Avenue / Prospect Street

First implementation item: Extend the City of Morgantown Connecting Network Sidewalks (CNS) plan to include the rest of the region. Develop an action plan that includes identifying potential funding sources, sponsoring agencies, design responsibilities, etc.

Key implementation factors: Identifying local funding sources and defining implementation responsibilities.

Estimated Cost
\$33,000,000

Primary Travel Modes Improved
Pedestrian

L RTP Goals Directly Supported
1,3,5,6,7

FHWA Planning Factors Supported
1,2,4,5,6,7,8,

40 Regional Bikeway Plan Implementation

Location: Region-wide

Purpose: To implement a logical and interconnected bikeway system for the region.

Improvements:

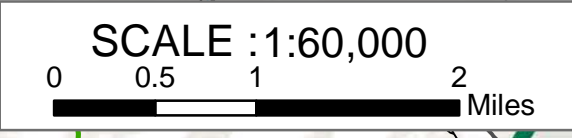
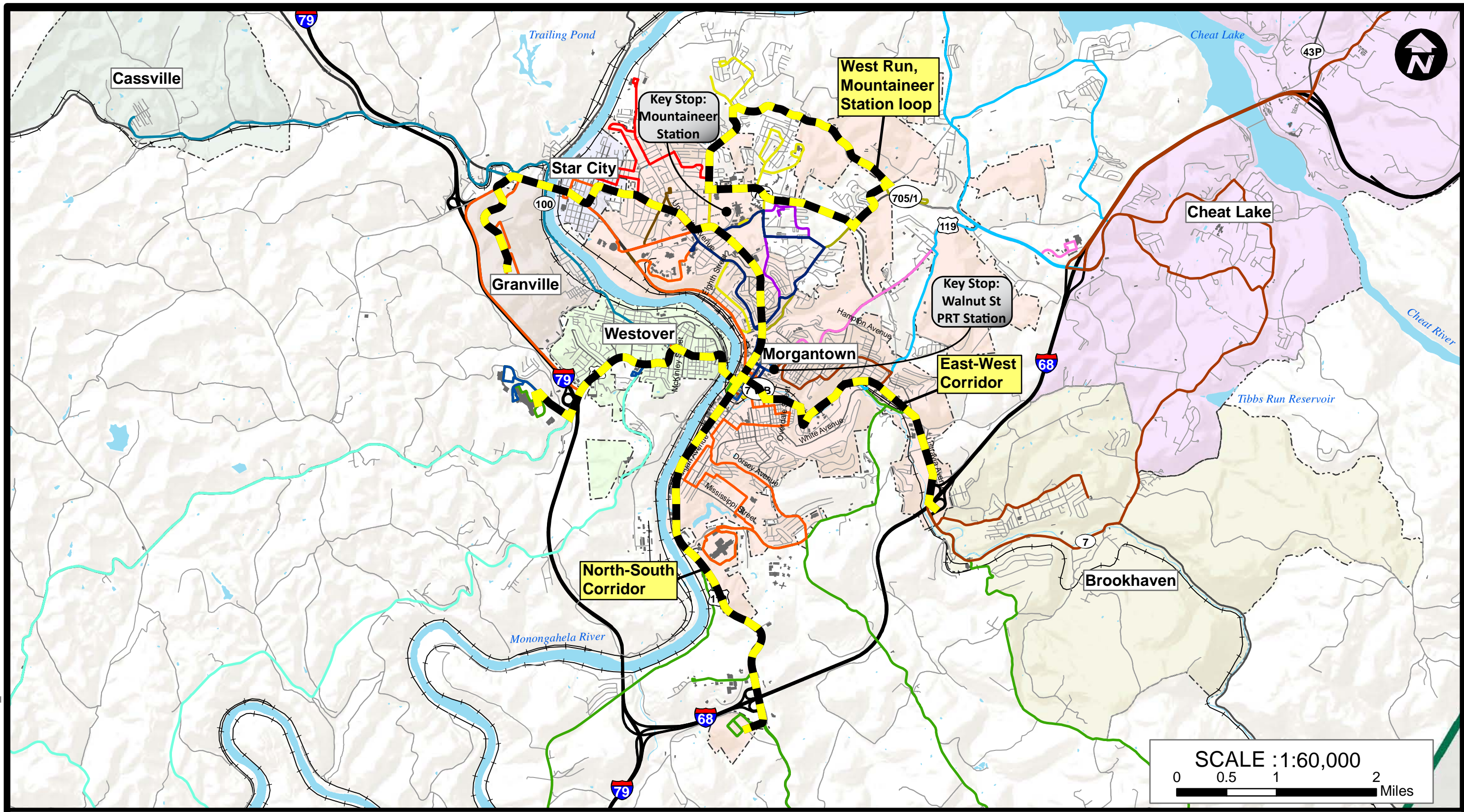
Estimated Cost
\$5,000,000

Primary Travel

	<ul style="list-style-type: none"> • Bike lanes • Multiuse trails • Bike route pavement markings • Bike route signage <p>First implementation actions: Complete the Regional Bikeways Plan as described in the non-mapped strategies.</p> <p>Key implementation factors: Identification of funding.</p>	<p><u>Modes Improved</u> Bicycle</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 1,2,4,5,6,7,8</p>
<p>41 New Park and Ride Lots</p>	<p>Location: As indicated on map.</p> <p>Purpose: To provide locations for commuters and visitors to park and carpool, use transit, or bike.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Sign existing parking areas (public-private partnership) that are underutilized on weekdays during work hours. • New construction not expected <p>First implementation item: Approach private owners and discuss terms.</p> <p>Key implementation factors: Reaching agreements with owners. Promotion and awareness of the locations and advantages of utilizing them.</p>	<p><u>Estimated Cost</u> \$1,000,000</p> <p>Primary Travel <u>Modes Improved</u> Auto Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 1,4,5,6,7,8</p>
<p>42 Enhanced Bus Service</p>	<p>Location: Region-wide</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Provide 10 to 15 minute headways for the following three identified transit routes (see “Bus Service Enhancement” map): <ul style="list-style-type: none"> ○ East-West Corridor ○ North-South Corridor ○ West Run, Mountaineer Station Loop • Provide identifiable and attractive bus stop locations • Provide convenient connections to Mountaineer Station and Walnut Street PRT Station (requires some construction) <p>First implementation item: Identify funding sources beyond current federal sources.</p> <p>Key implementation factors: Public support for additional local funding. Developing an appropriate implementation phasing plan.</p>	<p><u>Estimated Cost</u> \$88,000,000</p> <p>- \$3M/yr for operations - \$4M capital cost for connections to PRT Stations and bus stop improvements</p> <p>Primary Travel <u>Modes Improved</u> Auto Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning <u>Factors Supported</u> 1,2,4,5,6,7,8</p>

<p>43 School Route Improvements</p>	<p>Location: All K-8 schools.</p> <p>Purpose: To enhance safety and personal health of school children and to reduce automobile trips through a greater number of children walking and/or biking school.</p> <p>Improvements: Would primarily focus on elementary schools and improvements could include:</p> <ul style="list-style-type: none"> • Sidewalk improvements • Traffic calming and speed reduction improvements • Pedestrian and bicycle crossing improvements • On-street bicycle facilities • Off-street bicycle and pedestrian facilities • Secure bicycle parking facilities • Traffic diversion improvements in the vicinity of schools <p>First implementation actions: Establish safe routes to school plan through working with safe routes to school committee (see non-capital improvements strategy). The Pedestrian Safety Board’s plan can be used as a significant resource since it addresses pedestrian needs in the vicinity of many schools. Apply for Transportation Alternatives (MAP-21) funding.</p> <p>Key implementation factors: Prioritization and funding of improvements. Identification of local matching funds (potential 20% match required).</p>	<p><u>Estimated Cost</u> \$2,000,000 80% State/Federal 20% Local</p> <p><u>Primary Travel Modes Improved</u> Bike Pedestrian</p> <p><u>LRTP Goals Directly Supported</u> 1,2,3,5,6,7</p> <p><u>FHWA Planning Factors Supported</u> 2,4,5,6,8</p>
<p>44 Access Management Improvements</p>	<p>Location: Region-wide</p> <p>Purpose: To improve multimodal safety, capacity, and to improve property values and attractiveness of development areas.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Removal and consolidation of excess access points • Improved driveway designs • Addition of turn lanes at key locations • Medians to restrict turning movements • U-turn locations <p>First implementation item: Complete Access Management Study (see non-mapped strategies)</p> <p>Key implementation factors: Coordination with property owners and stakeholder during the study phase.</p>	<p><u>Estimated Cost</u> \$10,000,000 80% State/Federal 20% Local</p> <p><u>Primary Travel Modes Improved</u> Auto Bicycle Pedestrian Transit</p> <p><u>LRTP Goals Directly Supported</u> 1,2,3,5,6</p> <p><u>FHWA Planning Factors Supported</u> 2,4,5,6,7,8</p>
<p>45 Downtown Morgantown Signalization and Street Changes</p>	<p>Location: Morgantown Central Business District (CBD)</p> <p>Purpose: To improve multimodal safety, capacity, and to improve attractiveness of downtown area.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Improved signal system • Improved multimodal traffic flows and circulation • Improved multimodal safety • Improved streetscape <p>First implementation item: Complete ongoing traffic study and selection of preferred improvements.</p> <p>Key implementation factors: Coordination with property owners and stakeholder during the study phase.</p>	<p><u>Estimated Cost</u> \$2,000,000 80% State/Federal 20% Local</p> <p><u>Primary Travel Modes Improved</u> Auto Bicycle Pedestrian Transit</p>

		<p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,7,8</p>
<p>46 TDM Program Expansion</p>	<p>Location: Region-wide</p> <p>Purpose: Reduce the total number of automobile trips in the region (goal of 3% reduction in peak hours) through aggressive Transportation Demand Management (TDM) to reduce congestion and reduce the need for costly infrastructure improvements.</p> <p>Improvements:</p> <ul style="list-style-type: none"> • Expand the Commuter Choices program as a formal transportation management association (TMA) • Form strategic partnership between WVU and Commuter Choices • Facilitate access to current transit service, both in terms of geographic proximity and with fare payment incentives, to allow Mountain Line Transit Authority services to play a greater role in meeting commuter transportation needs • Develop land use policies and zoning regulations that offer parking reductions, intensity bonuses or other development incentives to applicants who commit to funding TDM, transit or other alternative commuting strategies for a given period of time. • Develop educational programs targeted at the commuting population of the Morgantown region that illustrate the benefits of TDM <p>First implementation item: Identify program funding. Explore:</p> <ul style="list-style-type: none"> • Taxes or surcharges on public and private parking infrastructure. • Levying Transportation impact fees on new development that to fund multi-modal options and services • Explore private and public grants <p>Key implementation factors: Public agency and private entity buy-in and support.</p>	<p><u>Estimated Cost</u> \$10,000,000</p> <p>10% State/Federal 90% Local</p> <p>Primary Travel <u>Modes Improved</u> Auto Transit</p> <p>L RTP Goals <u>Directly Supported</u> 1,2,3,5,6,7</p> <p>FHWA Planning Factors Supported 1,2,4,5,6,7,8</p>



Existing Bus Routes

Route 1	Route 6	Route 10	Route 14	Route 38
Route 2	Route 7	Route 11	Route 15	Route 44
Route 3	Route 8	Route 12	Route 16	
Route 4	Route 9	Route 13	Route 30	

Legend

Bus Route with Enhanced* Headways

**Maximum of 15 minutes average time between buses in peak travel periods, 30 minutes in non-peak travel periods.*

DRAFT
NOVEMBER 6, 2012

LONG RANGE TRANSPORTATION PLAN
BUS SERVICE ENHANCEMENTS

CROSSROADS

It's time to chart our future.

morgantown monongalia metropolitan planning organization