



82 Hart Field Road Suite 105
Morgantown, WV 26508
(304) 291-9571
www.plantgether.org

Agenda

MPO Transportation Technical Advisory Committee Meeting
MPO Conference Room
Morgantown Airport Terminal
January 13, 2015
1:30 PM

1. Call To Order
2. Approval of Minutes
3. Draft 2015 Calendar
4. Draft 2015-2016 Unified Planning Work Program
5. Status Report Greenbag Road Study
6. Status Report University Avenue Complete Streets Study
7. Status Report I-79 Access Study
8. Other Business
9. Meeting Adjournment



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Memorandum

Date: January 5, 2015

To: Transportation Technical Advisory Committee Members

From: Bill Austin, AICP

Subject: January 13, 2015 TTAC Agenda

Please find below a short description of the action items to be considered at the November 13, 2014 CAC Meeting to be held at the MPO Office in the Conference Room at 1:30 PM.

-Draft FY 2015 Calendar- Please review the enclosed calendar to determine if our meeting dates conflict with known events that may affect attendance. If there are no conflicts we would appreciate a recommendation to adopt the calendar for the Policy Board.

-FY 2015 Unified Planning Work Program- Please find enclosed the draft FY 2015-2016 Unified Planning Work Program. Work included in the draft UPWP includes the completion of the I-79 Access Study and the University Avenue Complete Streets Study. MPO Staff will also be performing a pedestrian study on the arterials in Westover and Granville. This work will entail looking at the need for sidewalk as well as the proper location of transit stops. This project would be in agreement with the LRTP's recommendation that the MPO develop a Regional Sidewalk Connectivity Plan in addition to the work performed for the Morgantown Pedestrian Safety Plan.

-Status Report Greenbag Road Study- The MPO's Long Range Transportation Plan calls for the development of a corridor plan to facilitate all modes of transportation and the use of Greenbag Road from WV 7 to Don Knotts Boulevard as an alternative route for truck traffic which currently uses WV 7. MPO staff is currently working on this study with the exception of the Greenbag Road-WV 7 intersection.

WVDOH has commissioned HDR to study the Greenbag Road-WV 7 intersection. Discussions with WVDOH indicate that this study is taking a comprehensive look at WV 7 from I-68 to at least Hartman Run Road. The MPO's study of Greenbag Road will be coordinated with the results of this study.

To date MPO staff has prepared an analysis of the operation of the Greenbag Road-Dorsey Avenue/Kingwood Pike intersection. The analysis has been completed and a recommendation for improvements to the intersection have been accepted by the MPO Policy Board. This recommendation will be part of a final Greenbag Road Corridor Study.

For the remainder of the corridor staff has completed preliminary data collection for the entire corridor including topographic data, available right of way, accident data, and traffic counts including turning movements. Staff has developed a Syncro model of the corridor. The study Steering Committee has met twice and there has been a public meeting and a stakeholders meeting with representatives from trucking firms to solicit input on improvements the public would like to see to the corridor.

Staff prepared initial recommendations for improvements to the corridor (enclosed) which were reviewed at a steering committee meeting held on December 4th. As a result of the Steering Committee's review staff prepared an estimate of the time savings resulting from implementing the short term improvements. That analysis is also enclosed for your information.

It is anticipated that this information will be presented to the public at a meeting to be held at the end of January. We would appreciate any comments or suggestions you may have on these documents. It is anticipated that after additional public input and feedback from the Steering Committee the draft Corridor Study will be presented to the MPO's committee's for consideration during the March meeting cycle.



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www.plantgether.org

MINUTES

MPO Transportation Technical Advisory Committee Meeting

Morgantown Airport Terminal Building 1st Floor

Morgantown Monongalia MPO Conference Room

November 18, 2014

1:30 PM

Members Present

Rich Wood-MCPC, Donald Williams-WV DOT, Brian Carr-WV DOT, Kevin Burgess-FHWA, Christopher Fletcher-City of Morgantown, Damien Davis-City of Morgantown, Dave Bruffy-Mountain Line, Bill Austin-MMMPO, Clement Solomon-WVU (phone)

Others Present

Jing Zhang-MMMPO

I. Call to Order

Bill Austin called the meeting to order at 1:30 PM

II. Approval of the Minutes

Mr. Austin noted that since a quorum of committee members hadn't been present in the October TTAC meeting, the minutes of the August meeting had been included in the agenda packet. Mr. Austin called for a motion to approve the Minutes. Mr. Williams moved to approve the minutes; seconded by Mr. Wood. The motion was unanimously approved.

III. Transportation Improvement Program Amendments

Mr. Austin noted that Mountain Line Transit had requested a TIP amendment to increase funding for the Mountain Line Transit System, pursuant to Section 5339 Bus and Bus Facilities Grant. This

funding will enable Mountain Line to purchase approximately 12 replacement buses. Mr. Austin then introduced TIP Amendments requested by the Division of Highways. They are: Morgantown CBD Signal System Renovation, Grafton-Morgantown Road Resurfacing, and Deck Replacement at Whiteday Creek Road Bridge NB on I-79. Mr. Wood inquired about the construction schedule of the Whiteday Creek Rd Bridge Project and expressed his concern on potential inconvenience likely to be caused by the construction of this project, including possible traffic backup to the interstate highway. Mr. Carr noted that according the current schedule, this project is to be finished in a 6-month time frame. He noted that the project will be constructed to minimize its impact to traffic.

Mr. Fletcher noted that the City of Morgantown is undertaking streetscape improvements in the downtown area and asked if alternative colors on downtown traffic signal boxes will be considered as a part of the CBD Signal System Renovation Project. Mr. Carr noted that it is currently unknown if this project will include changing the colors of traffic signal boxes. He then provided the contact information for WV DOH staff directly involved in this project. Mr. Fletcher moved to recommend the proposed TIP Amendment for approval by the MPO Policy Board; second by Mr. Davis. The motion was unanimously approved.

IV. Draft 2015 Calendar

Mr. Austin noted that the draft FY 2015 Calendar was enclosed in the agenda package for the committee review. Mr. Fletcher noted that the policy board meeting in May should be on the 21st, instead of the 14th. Mr. Austin noted that he will recheck this meeting date and adjust it accordingly.

V. Discussion of work to be included in the FY 2015-2016 UPWP

Mr. Austin noted that the MPO is preparing its FY 2015-2016 UPWP and asked for recommendations of projects that the committee would like to be included in the program for the coming fiscal year. Mr. Austin then introduced major projects that the MPO anticipates undertaking. They are: University Complete Street Study, I-79 Access Study, and Westover Pedestrian Study. Specifically, Mr. Austin noted that the University Complete Street Study was requested by WVU and Sunnyside-Up TIF District, in an effort to identify transportation facility improvements to accommodate the growth in the University Ave Corridor. Rob Moyer and Ron Justice, among others, will serve on the committee selecting a consulting firm for this project.

Mr. Fletcher noted that a new connection between Don Knotts Blvd and the industrial park on the west side of Monongahela River should be considered as a viable option in the I-79 Study. Mr. Austin concurred and added that the MPO's modeling capability is expected to be improved as a result of I-79 Study.

VI Status Report on Greenbag Road Study

Mr. Austin noted that in October, the MPO hosted an open house to have public opinion concerning project goals and objectives. Twenty-two citizens participated in that event. Mr. Austin went on to note that a focus group meeting was held in early November, in which representatives from local truck company expressed their concerns and suggested improvements for better accommodating

truck traffic. Mr. Wood commented that the stakeholder's meeting was very constructive and information from the Greenbag Rd Planning Study was well received.

Mr. Fletcher asked about the status of the traffic study on the intersection Greenbag Rd and WV 7. Mr. Austin noted that the traffic study has been finished and currently under the internal review by WV DOH. Six alternatives are being evaluated. The project is proceeding to the preliminary design phase.

VII Other Business

Mr. Bruffy mentioned the need to place a do-not-stop sign at the Mountain Line bus pull -off area adjacent to the district garage at Westover. Mr. Williams suggested that the downtown parking signage be clearer to reduced confusion to downtown visitors.

VIII Adjournment

There being no further business the meeting adjourned at 2:15 PM.

Draft 2015 MPO Committee Meeting Schedule

MPO Policy Board

Thursday, January 22, 2015

Thursday, March 19, 2015

Thursday, May 21, 2015

Thursday, June 18, 2015

Thursday, August 20, 2015

Thursday, October 22, 2015

Thursday, November 19, 2015

Technical Advisory Committee

Tuesday, January 13, 2015

Tuesday, March 10, 2015

Tuesday, May 12, 2015

Tuesday, June 9, 2015

Tuesday, August 11, 2015

Tuesday, October 13, 2015

Tuesday, November 10, 2015

Citizens Advisory Committee

Thursday, January 15, 2015

Thursday, March 12, 2015

Thursday, May 14, 2015

Thursday, June 11, 2015

Thursday, August 6, 2015

Monday, October 12, 2015

Thursday, November 12, 2015

Policy Advisory Committee

Monday, February 2, 2015

Monday, August 3, 2015

Monday, October 5, 2015

UNIFIED PLANNING WORK PROGRAM

DRAFT FISCAL YEAR 2015 – 2016



MORGANTOWN MONONGALIA METROPOLITAN PLANNING ORGANIZATION

Adopted:

Amended:

Morgantown Municipal Airport
82 Hart Field Road Suite 105
Morgantown, WV 26508
(304) 291-9571 phone
(304) 291-9573 fax

INTRODUCTION

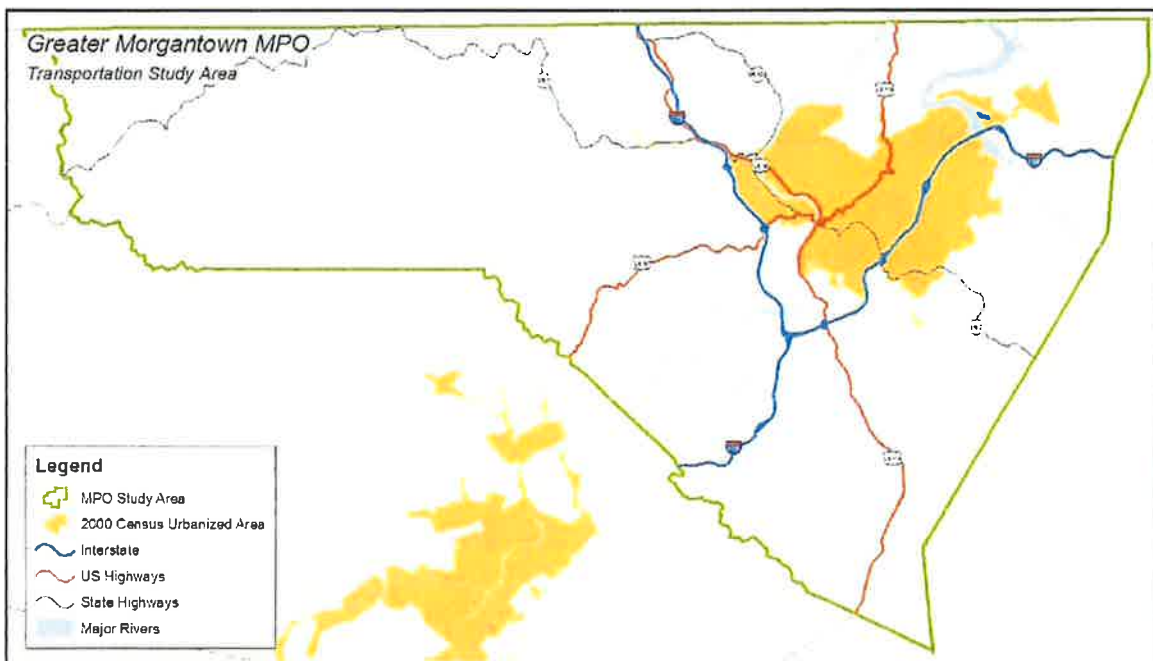
In accordance with Federal Regulations this document outlines the budget for the Morgantown Monongalia MPO. It provides information about the work the MPO will be performing in the upcoming year and summarizes the funding that will be used to accomplish that work.

STUDY AREA

The Morgantown Monongalia MPO covers Monongalia County including the municipalities of Blacksville, Granville, Morgantown, Star City, and Westover.

The MPO's Policy Board may include representatives from:

1. Monongalia County (pays one half of any local match requirements) - three county commissioners
2. City of Morgantown (pays one half of any local match requirements) - three council members
3. City of Westover — one elected representative
4. Town of Star City — one elected representative
5. Town of Granville — one elected representative
6. Town of Blacksville — one elected representative
7. Mountain Line Transit Authority — one representative
8. Monongalia County Board of Education — one representative
9. West Virginia University — one representative
10. West Virginia Department of Transportation — MPO liaison



Prepared by: Morgantown MPO 02/18/2005 Source: US Census Bureau

Accomplishments

During Fiscal Year 2014-2015 the Morgantown Monongalia MPO worked with the West Virginia Department of Transportation and the area's local governments to improve transportation in the area. The MPO's efforts were focused on the implementation of the area's 2040 Long Range Transportation Plan and further defining the projects identified in that Plan. Please find below a short description of these activities.

As provided for in the MPO's Long Range Transportation Plan MPO staff worked to develop a corridor plan for Greenbag Road. The purpose of the plan is to make the corridor more attractive for commercial traffic as well as for the general public. The corridor was evaluated for its appropriateness for truck traffic as well as for bicyclists and pedestrian traffic along selected portions of the corridor. The MPO developed a set of recommendations for the corridor that accommodates the primary users of the corridors as well as increasing capacity on the corridor for future growth in the area.

Another priority for MPO staff has been working on strategies to acquire funding to implement the Plan. During the first half of FY 2014-2015 MPO Staff and the MPO Chairman worked closely with legislators and the Chamber of Commerce's Transportation Committee to develop legislation for local funding initiatives.

MPO Staff also began work on two major corridor studies for the area. The first study, as recommended in the LRTP, is a study of the need for additional access to I-79. The LRTP identifies three potential locations for this access as well as the need for an additional river crossing. In order to make the proposed study most useful staff developed a Request for Qualifications for consultants to identify the purpose and need statement for this access for use in the environmental process to implement a project that may result from the Study.

The second study is a "complete streets" study for University Avenue from Beechurst Avenue to WV 705. The rapid development along the corridor and the Sunnyside Up! TIF District have made this corridor a high priority for WVU and the City of Morgantown. It is envisaged that this study as well as the I-79 Access Study will continue on in FY 2015-2016,

The first traffic counts for the MPO's annual traffic count program were taken in April of 2011. The MPO has sponsored counts every year since those first counts. In 2013 the MPO expanded the count program by adding additional locations as well as by taking a limited number of counts during the fall to assist in the development of seasonal count factors. These seasonal count factors will allow the standardization of project level traffic counts for comparison on an annual basis. The MPO has prepared a map of these locations with count volumes over time. The map is available on the MPO's website.

In addition to the traffic count program MPO staff developed a traffic accident data base using information from WVDOH and from Monongalia County MECCA 911. This data covered approximately three years. The data was used in the MPO project prioritization process and will be used in the future to identify high incident locations. MPO Staff was also granted access to the WVDOH accident data base during FY 2014-2015, however WVDOH has warned that this data is incomplete and should not be

publicly distributed. It is hoped that this data will become available for use as the MPO evaluates incident locations in the area.

The MPO has been working to implement Transportation Demand Management programs in coordination with several large employers including WVU, Monongalia General Hospital, NETL, Mylan Pharmaceuticals and WVU Health Services. The vanpool effort was dormant for a short portion of FY 2012-2013 due to staff turnover. During FY 2013-2014 MPO staff working with Mountain Lines Mobility Coordinator instituted a coordinated advertising campaign and a redefined incentive package for new van pools. The momentum from this effort continued in the FY 2014-2015 when as of this writing two van pools are participating in the van pool program with a third van pool having exhausted its eligibility to receive funding from the MPO's grant.

During FY 2014-2015 MPO Staff worked with the MPO Policy Board to review and revise the MPO's Bylaws. Several amendments to the Bylaws were adopted as a result of this work.

MPO Staff has also assisted Monongalia County, Star City and the City of Morgantown in evaluating the impact of ongoing development on the transportation network as new development is proposed. MPO Staff also performed an operational evaluation of the portion of Boyers Avenue from University Avenue to Monongahela Boulevard. This evaluation was provided to Star City for use in redeveloping that section of road. MPO staff hopes to provide more of this type of assistance in the future.

MPO Staff also began working in 2013-2014 with the other MPO's across the State to develop an MPO Association to share best practices in transportation planning and to enhance coordination with WVDOT. This effort continued in FY 2014-2015 and it is anticipated to continue into FY 2015-2016.

As a part of the MPO's ongoing process the MPO considered numerous TIP Amendments which were considered in depth by the MPO's committees. These amendments included proposed projects in the vicinity of Brookhaven, on Monongahela Boulevard, on Van Voorhees Road, and the Mileground +1 Widening project.

FOCUS FOR FISCAL YEAR 2015-2016

Local initiatives:

Major initiative to be under taken this year include:

MPO Staff will work to develop a pedestrian plan for the City of Westover. This Project is in accord with the Long Range Transportation Plan's recommendation that the MPO develop a regional pedestrian plan. This Project will incorporate improved connectivity with neighboring communities including Granville and unincorporated portions of Monongalia County as well as look at improving access to the current connection with the City of Morgantown, the Pleasant Street Bridge. This effort will take a comprehensive approach to pedestrian planning building on work performed by the Morgantown Pedestrian Board amended to fit the unique situations of Westover and Granville. Work to be performed will include the collection of pedestrian counts at selected locations, GIS mapping to accurately locate existing facilities and "missing links". Staff will also perform field review of the area under consideration to identify physical deficiencies. This planning effort will also require significant public outreach including the establishment of a webpage and several public meetings. The ultimate product of this effort will be coordinated pedestrian plans for Westover and Granville.

MPO Staff will work to complete two ongoing major studies. The first study is of the need for alternative means to access I-79 recommended in the LRTP. This Study was begun by a consultant in FY 2014-2015. MPO Staff will also oversee the completion of the University Avenue Complete Streets Study which was also begun in FY 2014-2015. MPO Staff is the primary project manager for both of these efforts.

MPO Staff will also continue work to develop potential local funding sources to implement the LRTP. Staff has been working with a committee from the LRTP Update effort and the Chamber of Commerce as well elected representatives to address this issue.

Other tasks:

The MPO will continue to update the annual traffic count database with counts taken for the MPO as well as counts taken by other local agencies. The first counts for this database were taken in April of 2011 and April 2012. This database provides the MPO with base data, which may be used to project the future growth of traffic, as well as, to provide decision makers with complete information about the existing conditions in the area. This data will continue to be available to the public at large for use in developing business plans and other marketing efforts and to the area's municipalities so they may evaluate the impact of proposed new development in the area. The traffic counts will be of use to the MPO in assessing the Long Range Transportation Plans model as well as in identifying area's where operational improvements to the road network may be needed. The information will also be useful to the Division of Highways when planning operational improvements to the area's transportation facilities. This data will be supplemented with data from the MPO's traffic accident data base which will also be updated during FY 2015-2016.

Staff will develop a new Transportation Improvement Program for adoption during FY 2015-2016. This update is required since the TIP was last fully adopted in 2012. In conjunction with the adoption of a new TIP MPO staff will also work with the MPO's committees to update the MPO's project prioritization list. The update of the priority list should be informed by the results of the I-79 Access Study and the University Avenue Complete Streets Study as well as the Greenbag Road Corridor Study which is to be completed during FY 2014-2015.

MPO Staff will continue ongoing administrative functions including scheduling and staff meetings, preparation of minutes and other arrangements for the MPO's standing committee meetings. Staff will continue preparation of Transportation Improvement Program amendments, preparation of the budget, performance of human resource functions and intergovernmental relations and public involvement activities. Staff will also continue to provide technical assistance to area municipalities as well as the Bike Board and the Pedestrian Board. Staff will also review the MPO's Public Involvement Policy to determine the need for an update to the its provisions.

BUDGET ITEMS BY MAJOR CATEGORY

The Project codes used in this document refer to the work codes identified in the MPO's Prospectus.

II-A Continuing Transportation Planning Activities-Surveillance of Inventory Data

II-A-1 Traffic Counts- MPO will continue the annual traffic count program. The initial program included 58 locations counted in the spring of 2012. As of the 2014 counts the MPO has 74 count locations around the urbanized portion of the County. The data collected includes daily directional traffic volumes, peak period traffic volumes and vehicle classification counts at selected locations. These counts supplement traffic counts taken every three years in the area by the Division of Highways and they will be used both as base data for traffic modeling efforts and as information for decision makers as they consider the impact of proposed development in the area. These counts will be performed by a consultant team already on contract with the State of West Virginia to perform these services. The MPO will also seek to augment these counts by upgrading traffic count technology to have the capability to collect data on both bicycle and pedestrian travel at selected points.

II-A-4 Traffic Accidents-MPO Staff will continue to collect, quantify and locate traffic accident data as it becomes available.

II-A-10 Mapping- The MPO is using ArcGIS to work with Monongalia County to share data. This work will also include supplementing the County's recently acquired aerial photography with additional data.

II-B Long Range Transportation Plan Development

II-B-10 Transit Element- The MPO will update the LRTP Transit Element as required.

II-B-11 Bicycle and Pedestrian Planning- MPO staff will develop a coordinated Pedestrian Plan for Westover and Granville. Staff will also continue work with the established Bicycle Board and the Pedestrian Board, to implement the Countywide Bicycle Plan.

II-B-13 Collector Street Planning- MPO Staff will provide support to area municipalities in reviewing proposed development to insure that the proposed collector streets are adequate. Staff will also review proposals to insure that the proposed connection between major arterials and collector streets are consistent with the capacity anticipated in the Long Range Transportation Plan.

II-B-16 Financial Planning- MPO Staff will continue to work for the development of funding streams for transportation and implementing the LRTP.

II-B-17 Congestion Management Strategies- MPO staff will review and coordinate with WV DOT/DOH on potential congestion mitigation strategies including ongoing TDM activities. MPO staff will also work with Mountain Line staff on the van pool program. MPO Staff will continue to provide information on operational improvements that may assist in the mitigation of congestion including an ongoing study of signalization improvements and the operation of the downtown Morgantown street network being conducted by the State.

III Administration

III-A Planning Work Program

MPO staff will monitor the revised Planning Work Program process to insure it is being adequately implemented. Staff will also develop the 2016 Planning Work Program.

III-B Transportation Improvement Program

MPO staff will amend and update the Transportation Improvement Program as needed.

III-C-6 Public Involvement

The MPO will continue ongoing public involvement activities associated with the development of a new TIP. The MPO will continue to televise Policy Board Meetings. Staff also anticipates increased public involvement activities associated with the implementation of the recommendations of the Transportation Demand Management Study, the Long Range Transportation Plan and the Transportation Demand Management initiative. MPO Staff will also review the MPO's Public Involvement Policy to ensure successful outreach to the public.

III-C-7 Private Sector Participation-The MPO will seek to encourage private sector participation wherever possible with projects as they move forward. This effort will immediately focus on the implementation of the MPO's TDM Project, as well as, involving the private sector in the development of the LRTP.

III-D-1 Transportation Enhancement Planning-MPO Staff will provide assistance with enhancement planning activities as requested by area agencies. It is anticipated that this work will focus on bicycle and pedestrian projects identified in the LRTP.

III-D-2 Environmental Coordination-MPO Staff will work with WVDOH to environmental resource agencies with information on projects proposed in the updated Long Range Transportation Plan to help ensure that environmental concerns are recognized as potential projects move forward to implementation.

III-D-3 Special Studies-MPO Staff will act as project management staff for the I-79 Access Study which will determine the need for an additional crossing of the Monongahela River to provide access to I-79 or other strategies that may improve the operations of the area's transportation network.

MPO Staff will also manage the University Avenue Complete Streets project to identify operational improvements to the University Avenue Corridor for all modes of transportation. The Study will also address the impact to adjacent streets of changes to the University Avenue Corridor.

III-D-4 Regional or Statewide Planning-MPO staff will assist WVDOH and the WV MPO Association on regional and or statewide issues as requested.

III-E Management and Operations This line item includes normal administrative functions such as the cost of the MPO audit, supplies, rent, insurance and other administrative costs.

The allocation of resources to each of the Work Tasks may be found on the following tables:

DRAFT Morgantown Monongalia MPO Operating Budget FY 2015-16

Line Item Fixed Operating Expenses				
Category	Consolidated Federal Planning Funds	WVDOT	City/County/WVU/Mtn Line	Total Cost Allocation
Salaries*				
Director	\$ 65,219.20	\$ 8,152.40	\$ 8,152.40	\$ 81,524
Planner I	\$ 33,952.00	\$ 4,244.00	\$ 4,244.00	\$ 42,440
Benefits (see below)	\$ 38,336.48	\$ 4,792.06	\$ 4,792.06	\$ 47,921
Contracted/Capital Expenses				
Contracted Services	\$ 14,400	\$ 1,800	\$ 1,800	\$ 18,000
Consulting Services	\$ 180,000	\$ 22,500	\$ 22,500	\$ 225,000
Computer Equipment	\$ 2,400	\$ 300	\$ 300	\$ 3,000
Software	\$ 2,400	\$ 300	\$ 300	\$ 3,000
Public Notices/Publishing	\$ 1,600.00	\$ 200	\$ 200	\$ 2,000
Overhead				
Travel & Training	\$ 8,000	\$ 1,000	\$ 1,000	\$ 10,000
Office Rent	\$ 7,200	\$ 900	\$ 900	\$ 9,000
Utilities (phone, internet, web site)	\$ 4,000	\$ 500	\$ 500	\$ 5,000
Copier lease, supplies, postage	\$ 800	\$ 100	\$ 100	\$ 1,000
Total	\$ 358,307.68	\$ 44,788	\$ 44,788	\$ 447,885

*Salaries are at FY 2014-15 Rates-Final Salaries for FY 2016 will be adjusted per Policy Board directive

Cost Allocation Rate Table	
All work performed outside program areas shall be charged at an hourly rate to cover actual expenses. Reimbursement/allocation rates are as follows:	
Position	Hourly Rate
Executive Director	\$ 58.53 Incl. benefits + Overhead
Planner I	\$ 30.35 Incl. benefits + Overhead
Additional Travel	Monongalia County Rate as adjusted

Employee Benefit Expenditure Detail

(Calculated on Total Wages = \$122,136)

Description	Consolidated Federal Planning Funds	WVDOT	(City/County)MPO	Total Cost Allocation
FICA (6.2%)	\$ 6,148.61	\$ 768.58	\$ 768.58	\$ 7,685.77
Worker's Compensation (2.3%)	\$ 2,280.94	\$ 285.12	\$ 285.12	\$ 2,851.17
Medicaid (1.45%)	\$ 1,416.78	\$ 177.10	\$ 177.10	\$ 1,770.97
Retirement (14.0%)	\$ 13,679.23	\$ 1,709.90	\$ 1,709.90	\$17,099.04
Health Insurance (PEIA Rates- Same as FY 2014)	\$ 13,466.92	\$ 1,683.37	\$ 1,683.37	\$16,833.65
Dental & Vision Insurance (2014 rates)				\$ 1,680.00
Total Employee Benefit Package				\$47,920.60

Note: The Director and the Planner I positions are salaried. Therefore, all holidays, vacation and sick leave benefits are included in the base wage rate and shall be calculated on an hourly basis using a 2080 hour work year as the base line.

Draft Morgantown Monongalia Metropolitan Planning Organization Operating Budget FY 2015-16

Revenues and Expenditures By Major Category

Task Number	Task Item	Category	Consolidated Federal Planning Funds	WVDOT	City/County/MPO	Other	Total Cost Allocation
II-A	Inventory of Facilities						
	1	Traffic Counts	12,800	1,600	1,600		\$16,000
	4	Traffic Accidents	6,400	800	800		\$8,000
	10					\$	
		Mapping	8,000	1,000	1,000	-	\$10,000
	12	Bicycle and Ped Fac.	3,840	480	480		\$4,800
		Total	31,040	3,880	3,880		\$38,800
II-B	L RTP						
	6	Community goals	0	0	0	-	\$
	8	Deficiency Analysis	4,000	500	500		\$5,000
	9	Highway Element	0	0	0		\$
	10	Transit Element	0	0	0		\$
	11	Bicycle and Ped.	12,000	1,500	1,500	-	\$15,000
	13	Collector Street	0	0	0	-	\$
	16	Financial Planning	12,000	1,500	1,500		\$15,000
	17	Cong. Mgmt. Strat.	9,600	1,200	1,200		\$12,000
		Total	\$37,600	\$4,700	\$4,700		\$47,000
III	Admin.						
	A	Work Program	\$4,000	\$500	500		\$5,000
	B	TIP	\$8,000	\$1,000	1,000		\$10,000
	C-6	Public Involvement	\$9,600	\$1,200	1,200		\$12,000
	C-7	Private Sector	\$2,400	\$300	300		\$3,000
	D-1	Enhancement Plan	\$8,000	\$1,000	1,000		\$10,000
	D-2	Env. And Pre-TIP	\$180,000	\$22,500	22,500		\$225,000
	D-3	Special Studies	\$28,000	\$3,500	3,500		\$35,000
	D-4	Regional and State	\$9,600	\$1,200	1,200		\$12,000
	E	Management and Ops	\$40,000	\$5,000	5,000		\$50,000
		Total	\$289,600	\$36,200	\$36,200		\$362,000
Grand Totals - All Programs			\$358,240	\$44,780	\$44,780		\$447,800



Memorandum

Date: December 15, 2014

To: Greenbag Rd Corridor Planning Study Steering Committee

From: MMMPO Staff

Subject: Time Saving Estimate for Near-Term Improvements

This memorandum is to document the estimated time savings for near-term improvements initially identified as part of the Greenbag Rd Corridor Planning Study. The purpose of this estimation is to evaluate the effectiveness of the identified near-term improvements on Greenbag Rd.

Summary

The major findings are summarized in the following two tables. Calculation methods are documented in the Methodology section and the Calculation Process section. Current travel time was verified by field data collection using a float car methodology. Specifically, significant findings are:

- During PM Peak hour, traveling from WV 7 to CR 73 through Greenbag Rd will be shorten travel time by **5 minutes 23 seconds (47%)** in current traffic volume and by **10 minutes 25 seconds (62%)** in 2034 volume.
- Overall corridor peak hour time saving is approximately **78 hours** per day for the current users at Greenbag Rd and **179 hours** per day for future users.
- Most significant time saving are during PM peak hour.

Time Saving at Corridor Level

Annual Average Daily Traffic Volume	Time¹	Time Saving per Vehicle²	Total Time Saving³
Current Volume (10,940 ⁴)	AM Peak Hour	1 minutes 30 seconds	23 hours 13 minutes
	PM Peak Hour	3 minutes 10 seconds	54 hours 50 minutes
Projected 2034 Volume (14.351 ⁵)	AM Peak Hour	2 minutes 2 seconds	41 hours 18 minutes
	PM Peak Hour	6 minutes 4 seconds	137 hours 49 minutes

¹ Peak factors are 8.5% (AM) and 9.5% (PM)

² The average of time saved for each travel direction

³ Total time saved = total time saved per vehicle × number of vehicles during peak period

⁴ The average of AADT at four count stations on Greenbag Rd

⁵ Annual Average Growth Rate = 1.3662% (per draft WVDOH WV 7 and CR 875 Traffic Operation and Safety Study)

Time Saving by Direction (Per Vehicle Per Trip)⁶

Time	Travel Direction	Current Traffic		2034 Projected Traffic	
		Time Saved	% of Total Trip Time	Time Saved	% of Total Trip Time
AM Peak	WV 7 - US 119 - Downtown (Westbound)	1'21"	20%	1'23"	20%
	WV 7 - US 119 - CR 73 (Westbound)	1'27"	20%	1'39"	22%
	Downtown - US 119 - WV 7 (Eastbound)	1'46"	23%	3'40"	37%
	CR 73 - US 119 - WV 7 (Eastbound)	1'24"	20%	1'25"	19%
PM Peak	WV 7 - US 119 - Downtown (Westbound)	1'54"	26%	4'37"	45%
	WV 7 - US 119 - CR 73 (Westbound)	5'23"	47%	10'25"	62%
	Downtown - US 119 - WV 7 (Eastbound)	2'43"	31%	4'36"	36%
	CR 73 - US 119 - WV 7 (Eastbound)	2'43"	31%	4'39"	38%

Improvements

The short-term improvements included in this estimation of time saved were:

- Lane widening to 12 feet (Westbound) and 11 feet (Eastbound).
- Adding an exclusive left-turn lane for the westbound approach at the intersection of US 119/Greenbag Rd.
- Adding an exclusive left-turn lane for the westbound approach and the eastbound approach at the intersection of Dorsey Ave/Greenbag Rd.
- Adding an exclusive left-turn for the eastbound approach at the intersection of Mississippi St/Greenbag Rd.

The short-term improvements that were not included in this estimation of time saved were:

- Improvements to the intersection of Deckers Creek Rd/Greenbag Rd.
- Improvements to the Diamond Ave intersection and the Lower Aarons Creek Ave intersection.
- Improvements to pedestrians access from adjacent neighborhoods to the shopping/business area in the Greenbag Rd Corridor.
- Improvements for enhancing bicycling safety on Greenbag Rd.
- Improvements to visual/aesthetic appearance.
- Improvements to reducing flood hazard on Greenbag Rd.

⁶ Calculated based on time saving data provided in tables on page 5 and page 6.

Methodology

Calculation of Saving Time

The saving time for each travel direction was obtained by using following equation:

$$\text{Saving Time} = \text{Travel Time Under Current Condition} - \text{Travel Time Under Improved Condition}^7$$

Specifically, the travel time under each condition was calculated separately by using following equation:

$$\text{Travel Time} = \frac{\text{Corridor Length}}{\text{Free Flow Speed}} + \text{Intersection Approach Delay}$$

Intersection approach delays were calculated by Synchro 9 using 2010 Highway Capacity Manual methodology. Corridor segment travel time was calculated by using methodology provided in FHWA Highway Performance Monitoring System Field Manual: Appendix N/Procedures for Estimating Highway Capacity. Supplemental resources for this analysis included the TRB Highway Capacity Manual 2010: Chapter 17/Urban Street Segments and FHWA Report: Mitigation Strategies for Design Exceptions (2007).

Free flow speed was calculated by:

$$\text{Free Flow Speed} = \text{BFFS} - f_{LW} - f_{LC} - f_M$$

Where:

BFFS = base free flow speed

f_{LW} = adjustment factor for lane width

f_{LC} = adjustment factor for lateral clearance

f_M = adjustment factor for median type

In which, base free flow speed was calculated by:

$$\text{Base Free Flow Speed} = S_o + f_{cs}$$

Where:

S_o = speed constant

f_{cs} = adjustment for cross section

Calculation of Corridor Saving Time and Dollar Value

Corridor saving time is calculated largely on the basis of averaged perimeters. This formula was used to calculate corridor saving time:

$$\text{Average Time Saving per Vehicle per Trip} \times \text{Estimated Peak Hour Corridor Volume}$$

⁷ Improvements on the Greenbag Rd/WV 7 were not considered in this estimation.

Calculation Process

Parameters Used in the Calculation Process

Annual Average Growth Rate ⁸ (%)	1.3662%	
Peak Hour Factor/K factor ⁹ (%)	AM	8.5%,
	PM	9.5%
Free-Flow Speed Reduction (mi/h) ¹⁰	10 Feet Lane Reduction in Free-Flow Speed (Existing Condition)	- 6.6 mph in Ave. Speed
	11 Feet Lane Reduction in Free-Flow Speed (mi/h)	- 1.9 mph in Ave. Speed
	12 Feet Lane Reduction in Free-Flow Speed (mi/h)	0
	2 feet shoulder	- 3.0 mph in Ave. Speed
	4 feet shoulder	- 1.2 mph in Ave. Speed
	No median	- 1.6 mph in Ave. Speed

		2014 Travel Time	Free Flow Segment Travel Time*	Intersection Approach Delays**				Total Corridor Travel Time
				US 119	Mississippi St	Dorsey Ave	Deckers Creek Rd	
Existing Condition	AM Peak	WV 7 - US 119 - Downtown (Westbound)	6' 20"	3"	0"	21"	0"	6'44"
		WV 7 - US 119 - CR 73 (Westbound)	6' 20"	35"	0"	21"	0"	7'16"
		Downtown - US 119 - WV 7 (Eastbound)	6' 20"	56"	2"	21"	4"	7'39"
		CR 73 - US 119 - WV 7 (Eastbound)	6' 20"	5"	2"	21"	4"	6'52"
	PM Peak	WV 7 - US 119 - Downtown (Westbound)	6' 20"	11"	0"	51"	0"	7'22"
		WV 7 - US 119 - CR 73 (Westbound)	6' 20"	263"	0"	51"	0"	11'34"
		Downtown - US 119 - WV 7 (Eastbound)	6' 20"	19"	2"	130"	3"	8'54"
		CR 73 - US 119 - WV 7 (Eastbound)	6' 20"	4"	2"	130"	3"	8'39"
After Proposed Improvement	AM Peak	WV 7 - US 119 - Downtown (Westbound)	5' 3"	1"	0	19"	0	5'23"
		WV 7 - US 119 - CR 73 (Westbound)	5' 3"	27"	0	19"	0	5'49"
		Downtown - US 119 - WV 7 (Eastbound)	5' 17"	14"	0	18"	4"	5'53"
		CR 73 - US 119 - WV 7 (Eastbound)	5' 17"	5"	0	18"	4"	5'44"
	PM Peak	WV 7 - US 119 - Downtown	5' 3"	6"	0	19"	0	5'28"
		WV 7 - US 119 - CR 73	5' 3"	49"	0	19"	0	6'11"
		Downtown - US 119 - WV 7	5' 17"	19"	0	32"	3"	6'11"
		CR 73 - US 119 - WV 7	5' 17"	4"	0	32"	3"	5'56"

⁸ Per Draft WVDOH WV 7 and CR 857 Traffic Operations and Safety Study

⁹ The average of peak hour factors at four count stations on Greenbag Rd

¹⁰ According to FHWA Highway Performance Monitoring System Field Manual: Appendix N/Procedures for Estimating Highway Capacity

2034 Travel Time			Free Flow Segment Travel Time*	Intersection Approach Delays**				Total Corridor Travel Time
				US 119	Mississippi St	Dorsey Ave	Deckers Creek Rd	
Existing Condition	AM Peak	WV 7 - US 119 - Downtown (Westbound)	6' 20"	4"	0"	29"	0"	6'53"
		WV 7 - US 119 - CR 73 (Westbound)	6' 20"	47"	0"	29"	0"	7'36"
		Downtown - US 119 - WV 7 (Eastbound)	6' 20"	177"	4"	31"	4"	9'56"
		CR 73 - US 119 - WV 7 (Eastbound)	6' 20"	16"	4"	31"	4"	7'15"
	PM Peak	WV 7 - US 119 - Downtown (Westbound)	6' 20"	13"	0"	221"	0"	10'14"
		WV 7 - US 119 - CR 73 (Westbound)	6' 20"	402"	0"	221"	0"	16'43"
		Downtown - US 119 - WV 7 (Eastbound)	6' 20"	45"	4"	344"	3"	12'56"
		CR 73 - US 119 - WV 7 (Eastbound)	6' 20"	5"	4"	344"	3"	12'16"
After Proposed Improvement	AM Peak	WV 7 - US 119 - Downtown (Westbound)	5' 3"	4"	0	23"	0	5'30"
		WV 7 - US 119 - CR 73 (Westbound)	5' 3"	31"	0	23"	0	5'57"
		Downtown - US 119 - WV 7 (Eastbound)	5' 17"	31"	0	23"	4"	6'15"
		CR 73 - US 119 - WV 7 (Eastbound)	5' 17"	7"	0	23"	4"	5'51"
	PM Peak	WV 7 - US 119 - Downtown	5' 3"	3"	0	31"	0	5'37"
		WV 7 - US 119 - CR 73	5' 3"	43"	0	31"	0	6'17"
		Downtown - US 119 - WV 7	5' 17"	52"	0	128"	3"	8'20"
		CR 73 - US 119 - WV 7	5' 17"	9"	0	128"	3"	7'37"

* Calculated using methodology provided in FHWA Highway Performance Monitoring System Field Manual: Appendix N/Procedures for Estimating Highway Capacity.

** Calculated by Synchro 9 using HCM 2010 methods.

GREENBAG RD CORRIDOR PLANNING STUDY

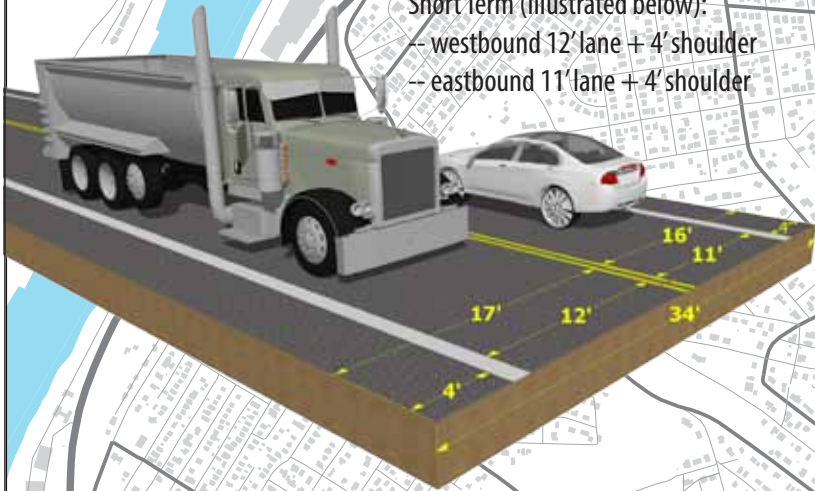
INITIALLY IDENTIFIED SHORT TERM IMPROVEMENTS

WV DOH is currently doing a study of this area.

Roadway Resurfacing and Widening

Short Term (Illustrated below):

- westbound 12' lane + 4' shoulder
- eastbound 11' lane + 4' shoulder



Drainage Improvements on Aarons Creek

WHITE ST

WV 7



DECKERS CREEK TRAIL

DECKERS CREEK BLVD

DIAMOND AVE

Diamond Ave Intersection Improvement

- Increase sight distance

Dorsey Ave Intersection Improvement

- Add exclusive left-turn lanes on Greenbag Rd (2 ways)
- Add exclusive left-turn signals
- Widen lanes and reduce turning curves
- Add crosswalk

Lower Aarons Creek Rd Intersection Improvement

- Reduce turning radius
- Better signage

Drainage Improvements on Aarons Creek

- Reduce storm water runoff
- improve creek bank in flooding area

Bus Shelter

Projected Housing Growth Area

Bus Shelter

Install Bicycle Signages at Appropriate Locations

Sidewalk between Mall and Mississippi St

Crosswalk to Mall

Projected Job Growth Area

US 119 Intersection Improvement

- Optimize traffic signal
- Add one exclusive left-turn lane on Greenbag Rd
- Install traffic signal warnings on Greenbag Rd

Legend

- Greenbag Rd
- Commercial Use
- Residential Use
- Institutional/Public Use

0.1 Mile





GREENBAG RD CORRIDOR PLANNING STUDY INITIALLY IDENTIFIED LONG TERM IMPROVEMENTS

WV DOH is currently doing a study of this area.

Deckers Creek Blvd Intersection Improvement
-- Smaller turning radius
-- Better signage
-- Safer crossing

Brookstone-Decker Creek Blvd Sidewalk Connection

Roadway Resurfacing and Widening
-- add a two-way-left-turning lane on the entire length of Greenbag Rd

Longbranch-Brookstone Multiuse Pathway Connection

Dorsey-Longbranch Multiuse Pathway Connection (Opt A)

Mississippi St Intersection Improvement
-- Add an eastbound left-turn lane to Mississippi St
-- Improve sight-distance
-- Add crosswalk on Mississippi St

Dorsey-Longbranch Sidewalk Connection (Opt B)

Dorsey-Mississippi Multiuse Pathway Connection (Opt A)

Projected Housing Growth Area

Projected Job Growth Area

Dorsey-Mississippi Sidewalk Connection (Opt B)

Legend

- Greenbag Rd
- Commercial Use
- Residential Use
- Institutional/Public Use

