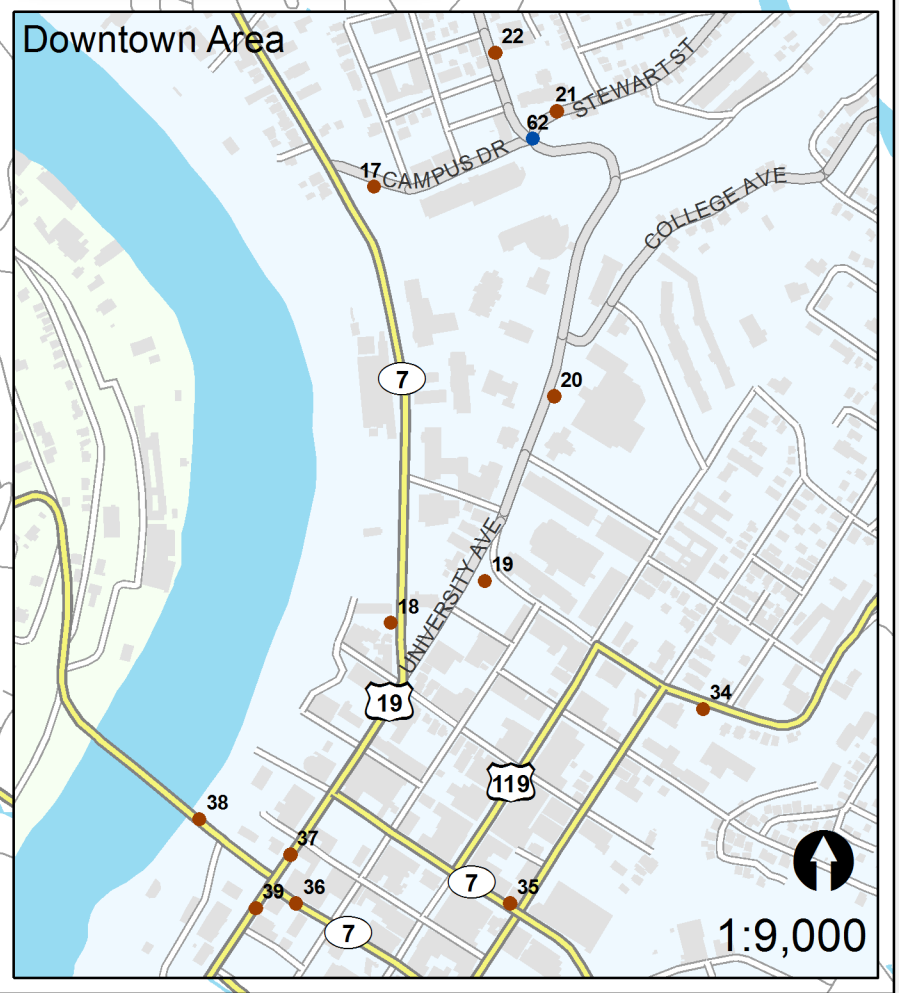
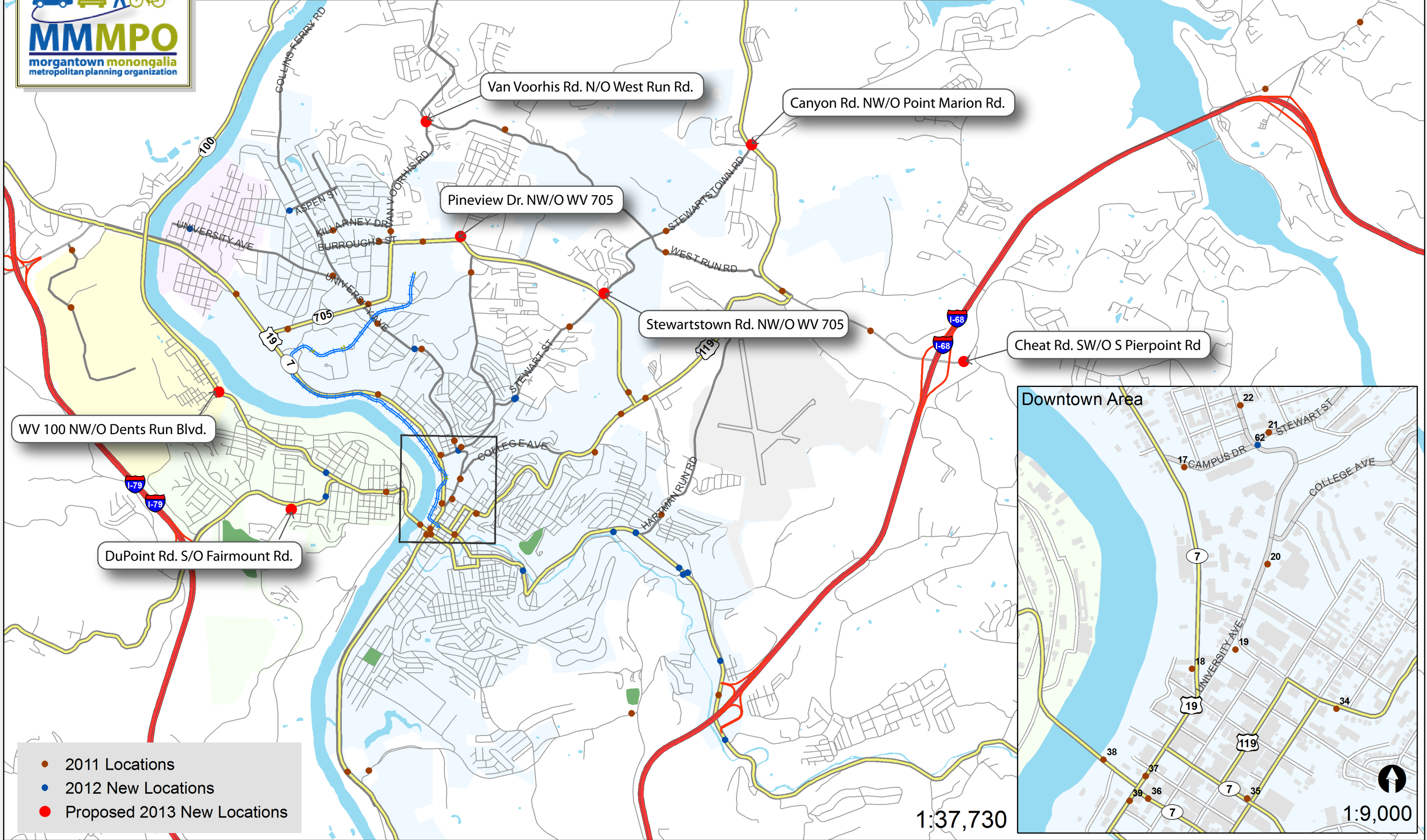




Morgantown Monongalia MPO Traffic Count Locations



UNIFIED PLANNING WORK PROGRAM

FISCAL YEAR 2013 – 2014

DRAFT



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

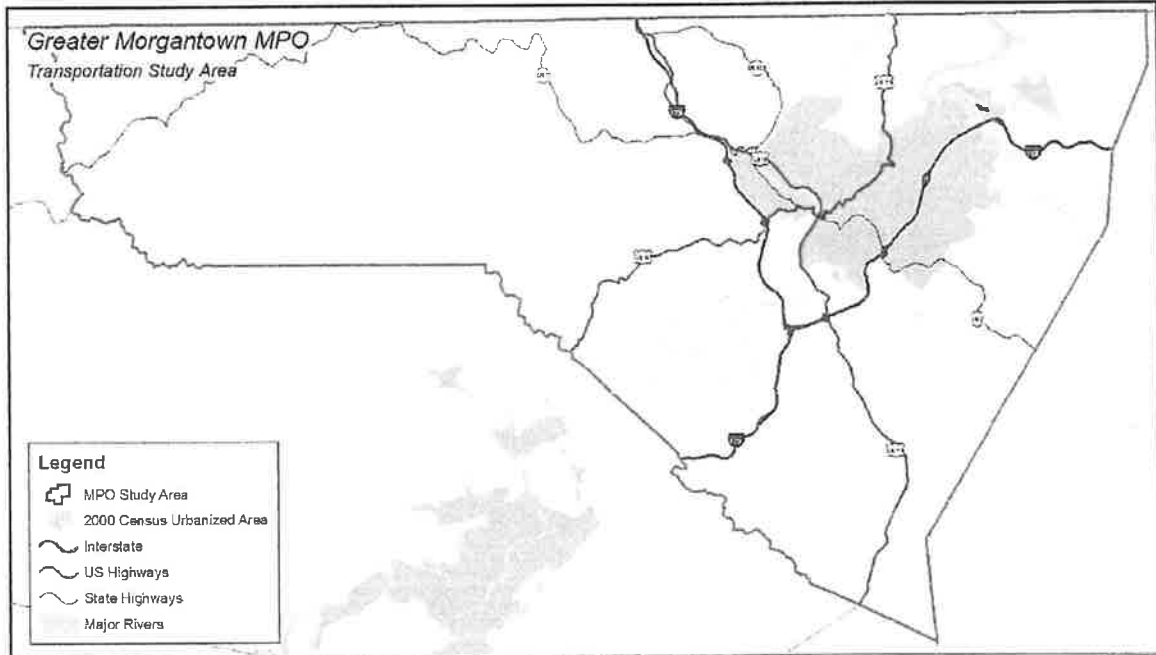
In accordance with Federal Regulations this document outlines the budget for the Morgantown Monongalia MPO. It provides information about the work the MPO will be performing in the upcoming year and summarizes the funding that will be used to accomplish that work.

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 02.16.2005 Source: US Census Bureau

During Fiscal Year 2012-2013 the Morgantown Monongalia MPO has accomplished a great deal to assist the West Virginia Department of Transportation and the area's local governments in improving transportation in the area. Please find below a short description of these activities.

In addition to normal administrative activities, MPO staff coordinated with City of Morgantown staff and Star City to carry out the development of an updated Long Range Transportation Plan (LRTP) and updates to the municipal Comprehensive Plans. MPO staff has focused on the LRTP development and adoption. The LRTP planning process has involved numerous public meetings as well as concentrated staff effort. A priority for MPO staff has been working on strategies to acquire funding to implement the Plan.

The MPO facilitated discussions within the community and with the West Virginia Division of Highways for the Dynamic Signalization project along the WV 705 Corridor and in the Beechurst/University Avenue corridor and the Mileground Widening Project. The work being performed by DOH's consultants also includes a study of traffic operations in downtown Morgantown. MPO Staff will continue to assist State and local staff with this process. Staff will provide technical advice and assistance with public involvement efforts.

The first traffic counts for the MPO's annual traffic count program were taken in April of 2011 and the area's second set of annual counts were taken in April of 2012. This program is an ongoing effort to develop a database showing both the vehicle mix in the area and the directional peak periods on the major arterials in the area. The MPO has prepared a map of these locations which is available on the MPO's website.

MPO Staff also had traffic counts taken along West Run and Staff has prepared an analysis of both physical features of the West Run corridor and an analysis of the existing and projected future traffic conditions for the corridor. It is anticipated that this is the first of several similar studies the MPO will be preparing in the area as recommended in the MPO's Long Range Transportation Plan.

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. At the time of this writing the MPO has released an RFP to recruit potential vanpool providers to enter the Morgantown market and to utilize a grant from the West Virginia Department of Transportation to encourage the formation of vanpools in the area.

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 hopes to provide more of this type of assistance in the future.

At the time of this writing the MPO is planning to conduct an assessment of pedestrian traffic on the Mileground as part of the pedestrian initiative funded in the FY 2012-2013 UPWP. This work should be underway in March or April depending on the weather.

FOCUS FOR FISCAL YEAR 2013-2014

Local initiatives:

Major initiative to be under taken this year include: MPO Staff will evaluate the intersections and corridors proposed for improvement in the recently adopted LRTP. Staff is in the process of developing a list prioritizing the intersections and corridors to be looked at during this process. Staff will then evaluate the proposed area's for study utilizing the priorities established by the MPO Policy Board.

MPO Staff will develop an area wide bicycle plan encompassing the work already performed by the Morgantown Bicycle Board and expanding the area covered to reach further into the community. Staff has done preliminary work on this effort.

MPO Staff will seek to reinvigorate the MPO's Vanpool Program. As of this writing the MPO has released an RFP seeking potential vanpool service providers for the area.

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.

In addition to performing vehicle counts the MPO will continue to explore the feasibility of performing automated bicycle counts and manual pedestrian counts. MPO staff will hire interns to perform manual pedestrian counts along corridors identified in the LRTP Project prioritization process during the upcoming Fiscal Year.

Staff will continue ongoing administrative functions including scheduling, minutes and other arrangements for the MPO's standing committee meetings, preparation of Transportation Improvement program amendments, preparation of the budget, 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.

SAFETEA-LU PLANNING FACTORS

The Federal transportation authorization bill, "SAFETEA-LU" outlines eight planning factors to be addressed in the Transportation Planning Process as a requisite for the use of transportation planning funds. The Morgantown Monongalia MPO (MMMPO) will address these issues in Fiscal Year 2012 as outlined below:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency:

The MMMPO will coordinate transportation projects with local governments and agencies to improve the region's global competitiveness. This will be achieved by promoting transportation corridors that improve access to the MPO study area, thus enhancing flow of goods and services to the global market. A prime example of this is the cooperation between the West Virginia Department of Transportation and the Morgantown MPO on the design and construction of the Mon-Fayette Expressway, as well as, regular maintenance and upgrades on both major interstate corridors in the region. The Morgantown MPO will work on projects that promote regional connectivity and the coordination of land use and transportation to maximize the economic competitiveness of the area by planning transportation facilities that complement the economic objectives of the area.

2. Increase the safety of the transportation system for motorized and non-motorized users:

The MMMPO will encourage projects that include enhanced safety features for transportation in the region. The safety measures to be included are pedestrian crossings where viable, improved bicycle and pedestrian corridors, and working on transportation safety education when applicable. The MPO will work with the Bicycle and Pedestrian Committees to provide decision makers and planning staff with input on those elements of the Long Range Transportation Plan.

3. Increase the security of the transportation system for motorized and non-motorized users:

For highway security, Intelligent Transportation System (ITS) monitoring systems are being implemented by WVDOT in discussion with local governments and the MPO at key highway intersections to aid in transportation security.

4. Increase the accessibility and mobility of people and for freight:

The MMMPO will work with all local governments in the region as needed to make changes and update the 2030 Regional Transportation Plan to 2040. One of the components of the plan has been to examine the current highway network and project future network demand based on a computer model. The model results are incorporated in the plan. The MMMPO sought freight stakeholders advice the MPO during the development of the 2040 Plan. MPO Staff will continue to reach out to freight stakeholders.

5. Protect and enhance the environment, promote energy conservation, and promote consistency between transportation improvements and state and local planned growth and economic development patterns:

The MMMPO will continue to implement the recommendations of the Transportation Demand Management Study working with area employers. The MPO will also seek to expand the number of environmentally responsible transportation modes available to the citizens of the area. These efforts include promoting transit services, pedestrian facilities and accommodations for cyclists. The MMMPO has strengthened these elements by coordinating the Long Range Plan Update with the Comprehensive Plans developed by the City of Morgantown and Star City.

6. Enhance the integration and connectivity of the transportation system across and between modes, for people and freight:

The MMMPO will examine integrating transportation systems for the MPO region. The Morgantown MPO will continue working alongside the Mountain Line Transit Authority on the implementation of its Transit Master Plan as part of the area's LRTP to create a multi-modal transportation network.

Implementation of the Transit Master Plan Elements include:

- a. Targeted Highway Improvement Recommendations (Transit Lanes, Transit Only Lanes, left turn lanes, restriping, contra-flow lanes, and signal priority studies).
- b. Car Sharing and Vanpool Programs — demand modeling and development of an implementation plan for the community
- c. Transit Oriented Development — working with local municipalities and the State to develop land use policies integrating public transportation.

The MMMPO will also support the maintenance and upgrade of WVU's Personal Rapid Transit System (PRT). The PRT is an important part of the area's transit system.

7. Promote efficient system management and operation:

The MMMPO, along with a number of local government and private interests, are working with WVDOT's initiatives to develop options for the use of Intelligent Transportation Systems (ITS) technology in the region. The architecture promotes the efficient use of technology to improve transportation management systems and operations. The MPO is also working to implement Transportation Demand Management strategies to reduce peak hour stress on the network. These efforts are part of the 2040 Long Range Transportation Plan.

8. Emphasize the preservation of the existing transportation system:

In all plans and projects the MMMPO will examine the existing transportation system before recommending improvements. To help this effort the MPO will develop its GIS based information system.

BUDGET ITEMS BY MAJOR CATEGORY

In March of 2010 the MPO adopted a new Prospectus that defines the MPO's work tasks. The Project codes used in this document refer to the work task codes identified in the Prospectus.

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

II-A-1 Traffic Counts- MPO will continue the annual traffic count program with the initial 58 locations counted in the spring of 2012 and add count locations for 2013. 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. They will also be available to the public for their use. 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-9 Travel Time Studies-The MPO and Mountain Line will continue funding for a program to use GIS to track Mountain Line vehicle speeds for use in monitoring the travel speeds on the areas transportation network.

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-6 Community Goals and Objectives- MPO and consulting staff will continue to work with area communities to assist them with the development of their community goals and objectives as part of their comprehensive planning efforts. Staff will also be available to work with Westover, and Granville in their Comprehensive Planning efforts. Staff will review the 2040 LRTP's Goals and Objectives to insure they are consistent with the Communities objective.

II-B-8 Deficiency Analysis-The MPO's consultant will perform deficiency analysis of proposed projects as required.

II-B-9 Highway Element-The MPO will update the Highway Element of the LRTP as required.

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

II-B-11 Bicycle and Pedestrian Planning- MPO will work with the established Bicycle Board, to develop the LRTP Countywide Bicycle Plan.

II-B-13 Collector Street Planning- MPO Staff will provide support to area municipal review of proposed development to insure that the proposed collector streets are adequate. Staff will also review proposals to insure that proposed changes to arterials and collector streets are consistent with the LRTP.

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 will review and coordinate with WVDOT/DOH on congestion mitigation strategies including TDM activities, as well as, 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 2015 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 revisions to the TIP and the creation of a new UPWP. The MPO will continue to televise Policy Board Meetings. Staff also anticipates increased public involvement associated with the implementing the TDM Study, and the LRTP.

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

III-D-1 Transportation Enhancement Planning-MPO Staff will provide assistance with enhancement planning activities as requested by area agencies.

III-D-2 Environmental Coordination-MPO Staff will work with WVDOH to provide resource agencies with information on projects proposed in the LRTP to ensure that environmental concerns are recognized as projects move to implementation.

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

III-E Management and Operations

MPO staff will perform normal management and operational functions as required. Tasks include monitoring the performance of the Long Range Transportation Plan consultant and MPO Staff. This line item includes 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 table below:

DRAFT MORGANTOWN MONONGALIA MPO OPERATING BUDGET FY 2013-2014
Revenues and Expenditures by Major Category

Task Number	Task Item	Category	Consolidated Federal Planning Funds			Total Cost Allocatio
			WVDOT	City/County/MPO	Other	
II-A	Inventory of Facilities					
	1	Traffic Counts	12,000	1,500	1,500	\$15,000
	10	Mapping	16,000	2,000	2,000	\$20,000
	12	Bicycle and Ped Fac.	12,000	1,500	1,500	\$15,000
		Total	40,000	5,000	5,000	\$50,000
II-B	L RTP					
	6	Community goals	400	50	50	\$500
	8	Deficiency Analysis	2,000	250	250	\$2,500
	9	Highway Element	2,400	300	300	\$3,000
	10	Transit Element	2,400	300	300	\$3,000
	11	Bicycle and Ped.	12,000	1,500	1,500	\$15,000
	13	Collector Street	2,400	300	300	\$3,000
	16	Financial Planning	16,000	2,000	2,000	\$20,000
	17	Cong. Mgmt. Strat.	12,000	1,500	1,500	\$15,000
		Total	\$49,600	\$6,200	\$6,200	\$62,000
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	\$8,000	\$1,000	1,000	\$10,000
	D-1	Enhancement Plan	\$4,800	\$600	600	\$6,000
	D-2	Env. And Pre-TIP	\$8,000	\$1,000	1,000	\$10,000
	D-3	Special Studies	\$9,600	\$1,200	1,200	\$12,000
	D-4	Regional and State	\$9,600	\$1,200	1,200	\$12,000
	E	Management and Ops	\$40,800	\$5,100	5,100	\$51,000
		Total	\$102,400	\$12,800	\$12,800	\$128,000
Grand Totals - All Programs			\$192,000	\$22,500	\$22,500	\$240,000

DRAFT Morgantown Monongalia MPO Operating Budget FY 2013-14

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	\$ 56.72 Incl. benefits + Overhead/Contract
Planner I	\$ 29.96 Incl. benefits + Overhead/Contract
Additional Travel	Monongalia County Rate as adjusted

Line Item Fixed Operating Expenses

Category	Consolidated Federal Planning Funds	WVDOT	City/CountyMPO	Total Cost Allocation
Salaries				
Director	\$64,800	\$8,100	\$8,100	\$81,000
Asst. to Director	\$32,800	\$4,100	\$4,100	\$41,000
Benefits (see below)	\$39,903	\$4,987	\$4,987	\$49,879
Contracted/Cap. Expenses				
Contracted Services	\$12,000	\$1,500	\$1,500	\$15,000
Consulting Services	\$9,200	\$1,150	\$1,150	\$11,500
Computer Equipment	\$6,400	\$800	\$800	\$8,000
Software	\$4,000	\$500	\$500	\$5,000
Public Notices/Publishing	\$1,600	\$200	\$200	\$2,000
Overhead				
Travel & Training	\$8,000	\$1,000	\$1,000	\$10,000
Office Rent	\$7,600	\$950	\$950	\$9,500
Utilities (phone, internet, web site)	\$4,800	\$600	\$600	\$6,000
Copier lease, supplies, postage	\$880.00	\$110.00	\$110.00	\$1,100
Total	\$191,983	\$23,997	\$23,997	\$239,979

DRAFT MORGANTOWN MONONGALIA MPO OPERATING BUDGET FY 2012-2013

The Executive Director and Planner I positions are salaried and therefore all costs including benefits are allocated to a 2080 hour work week.

Employee Benefit Expenditure Detail					
(Calculated on Total Wages = \$118,672)					
Description	Consolidated Federal Planning Funds	WVDOT	(City/County) MPO	Total Cost Allocation	
FICA (6.2%)	\$ 5,886.13	\$ 735.77	\$ 735.77	\$	7,357.66
Worker's Compensation (2.3%)	\$ 218.36	\$ 27.29	\$ 27.29	\$	272.95
Medicaid (1.45%)	\$ 1,376.60	\$ 172.07	\$ 172.07	\$	1,720.74
Retirement (12.5%)	\$ 11,867.20	\$ 1,483.40	\$ 1,483.40	\$	14,834.00
Health Insurance (PEIA Rates- Same as FY 2012)	\$ 10,780.00	\$ 1,347.50	\$ 1,347.50	\$	13,475.00
Dental & Vision Insurance (2011- 2012 rates)				\$	2,220.00
Total Employee Benefit Package				\$	39,880.35
Note: The Director and Assistant to the Director are salaried positions. 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.					

West Run Corridor Study

a preliminary analysis of urban, natural, and
transportation conditions on West Run Road

Jing Zhang, Planner I
Morgantown Monongalia MPO



1

Outline



Urban Environment

Natural Environment

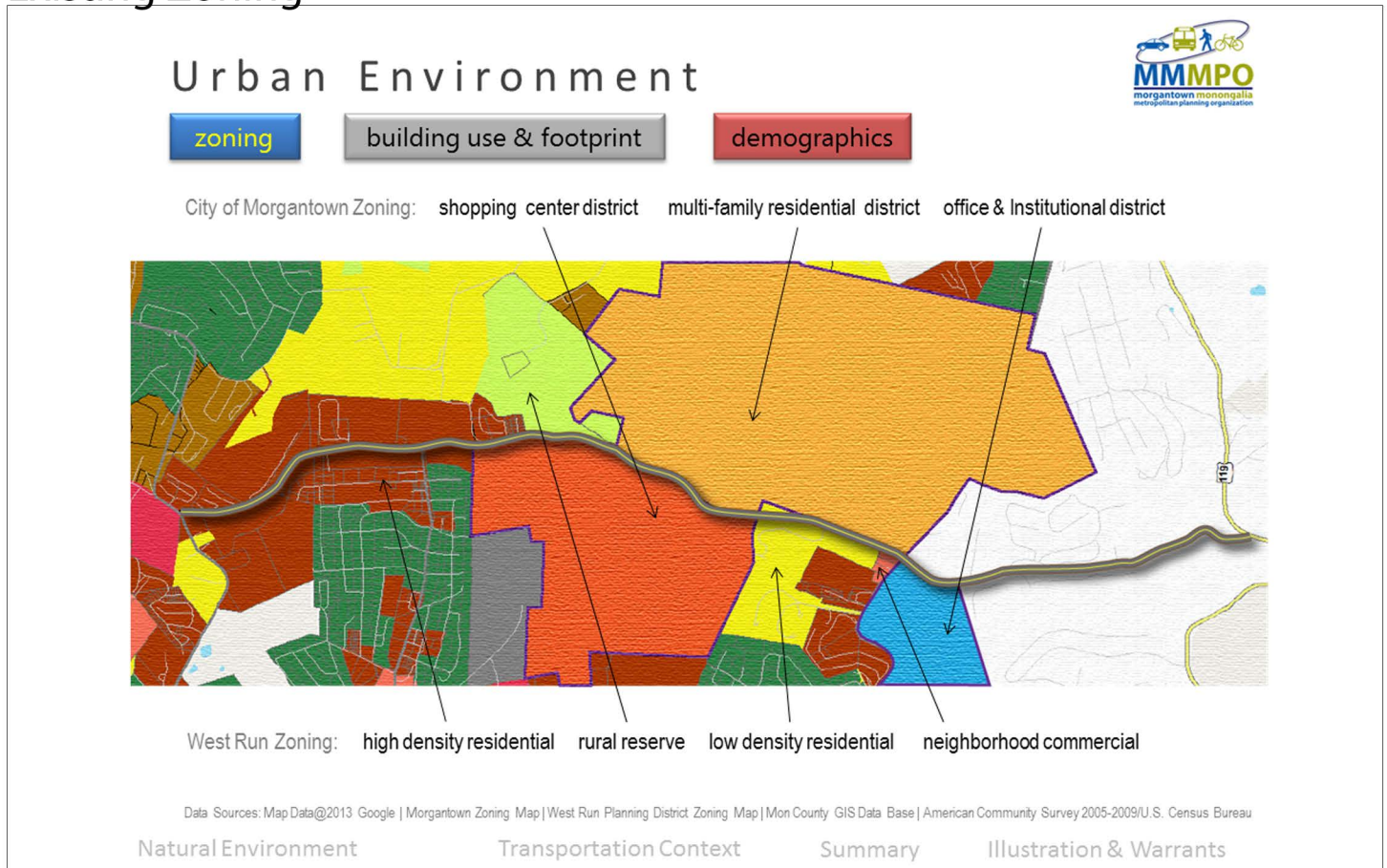
Transportation Context

Summary: Opportunities and Challenges

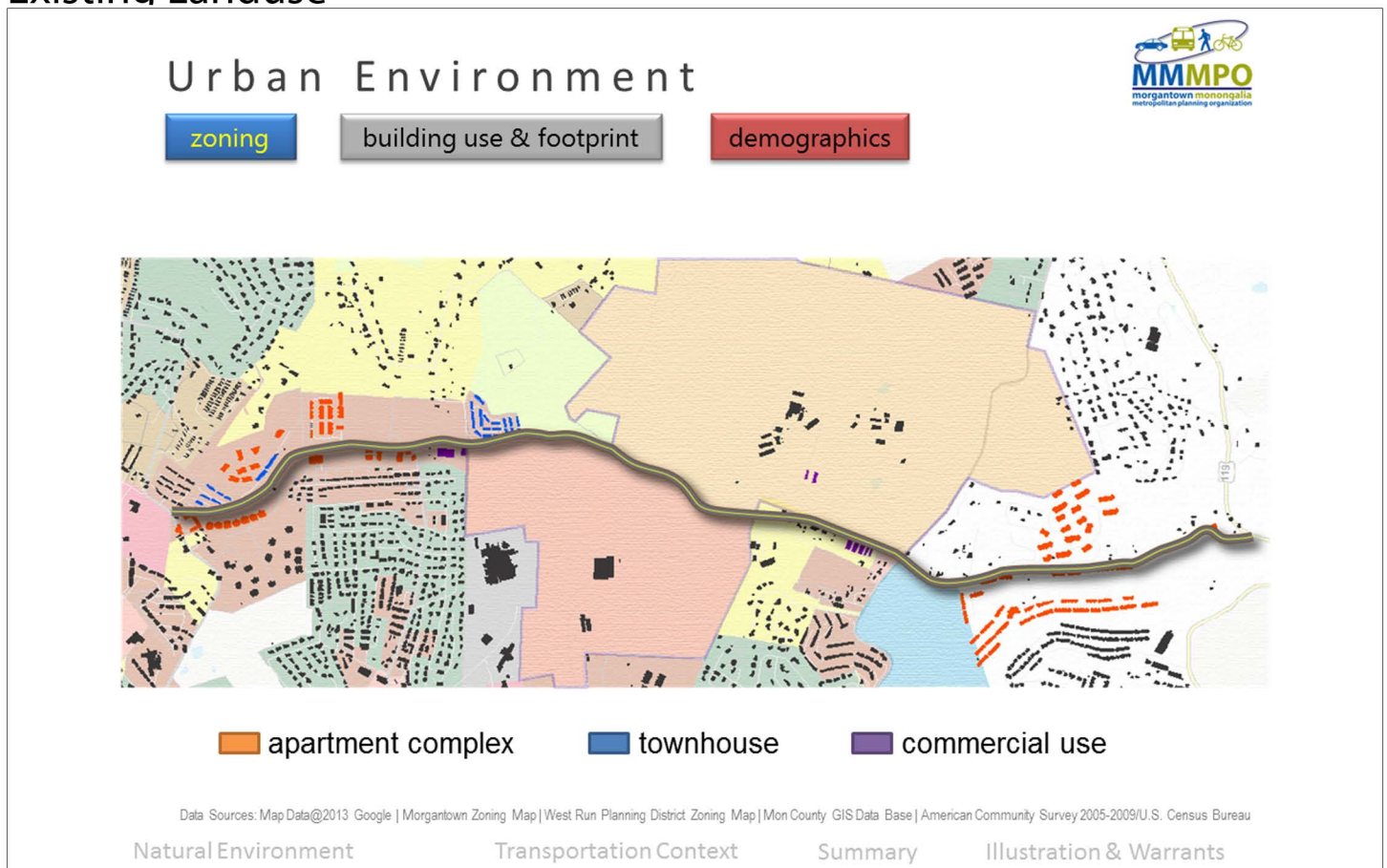
Illustration & Warrants

2

Existing Zoning



Existing Landuse

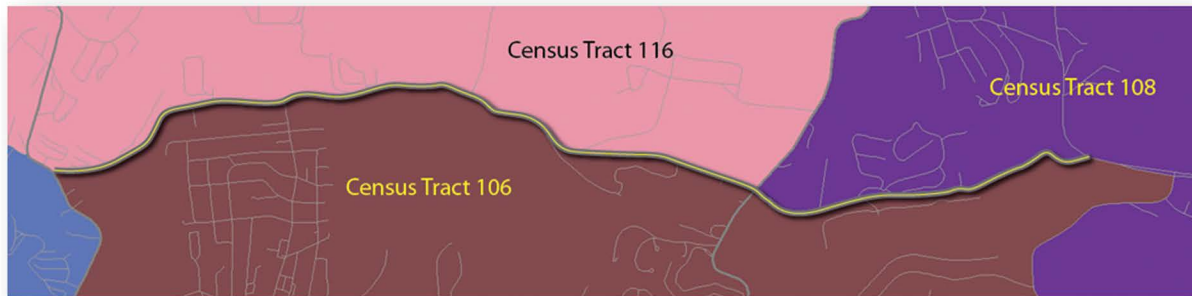
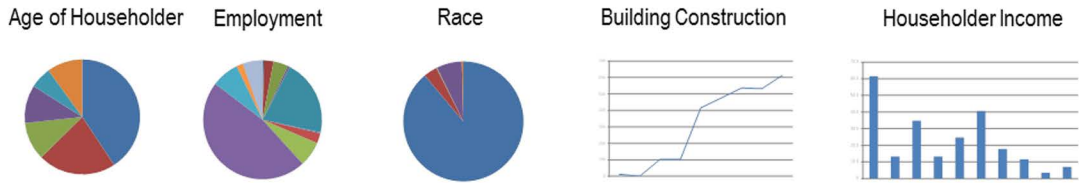


Resident Census Information



Urban Environment

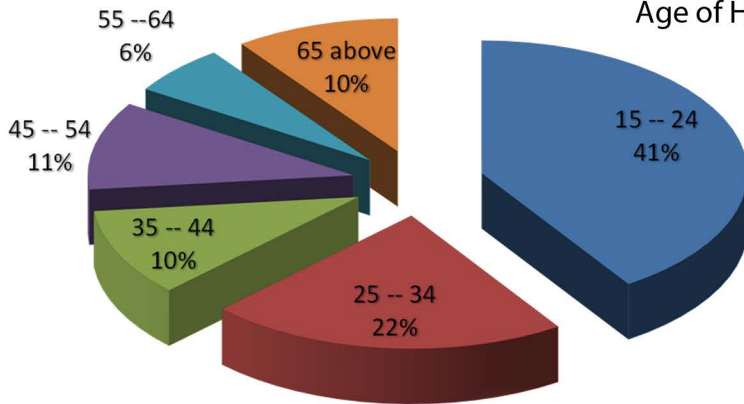
- zoning**
- building use & footprint
- demographics



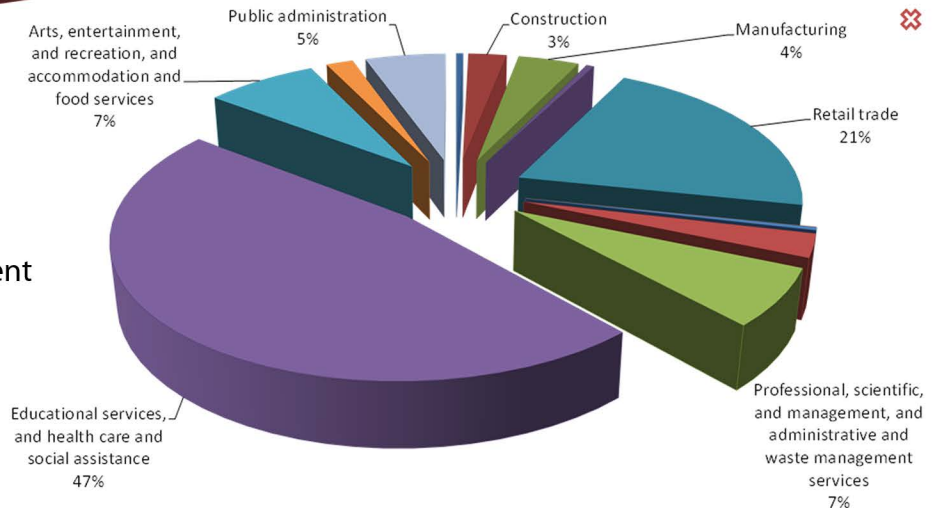
Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

- Natural Environment
- Transportation Context
- Summary
- Illustration & Warrants

Age of Householder



Employment



Roadway Topograohy

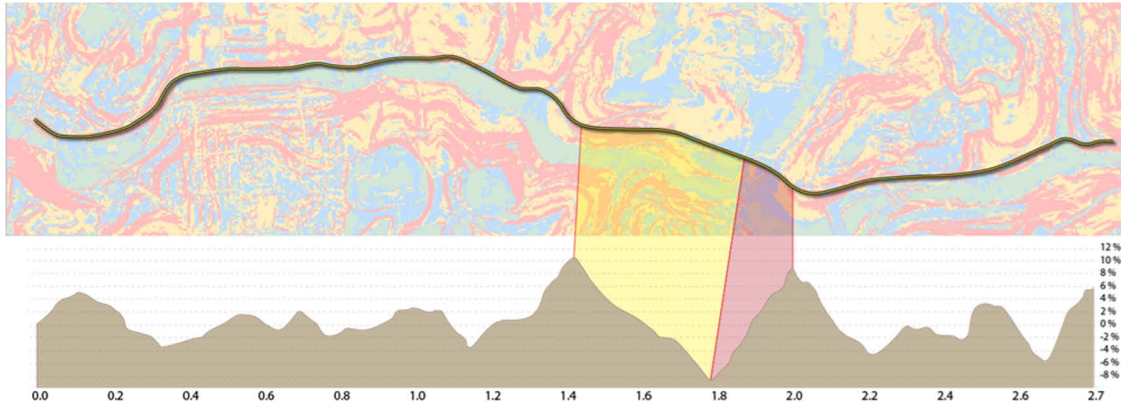
Natural Environment



topography & slope

road profile

vegetation and open space



Data Sources: MapData@2013 Google | Mon County GIS Data Base

Urban Environment

Transportation Context

Summary

Illustration & Warrants

Potential ROW Concerns

Transportation Context



facility

transit, pedestrians & biking

behavior

accident

traffic

road section

intersections

off road structures

area of concerns



Data Sources: MapData@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

Urban Environment

Natural Environment

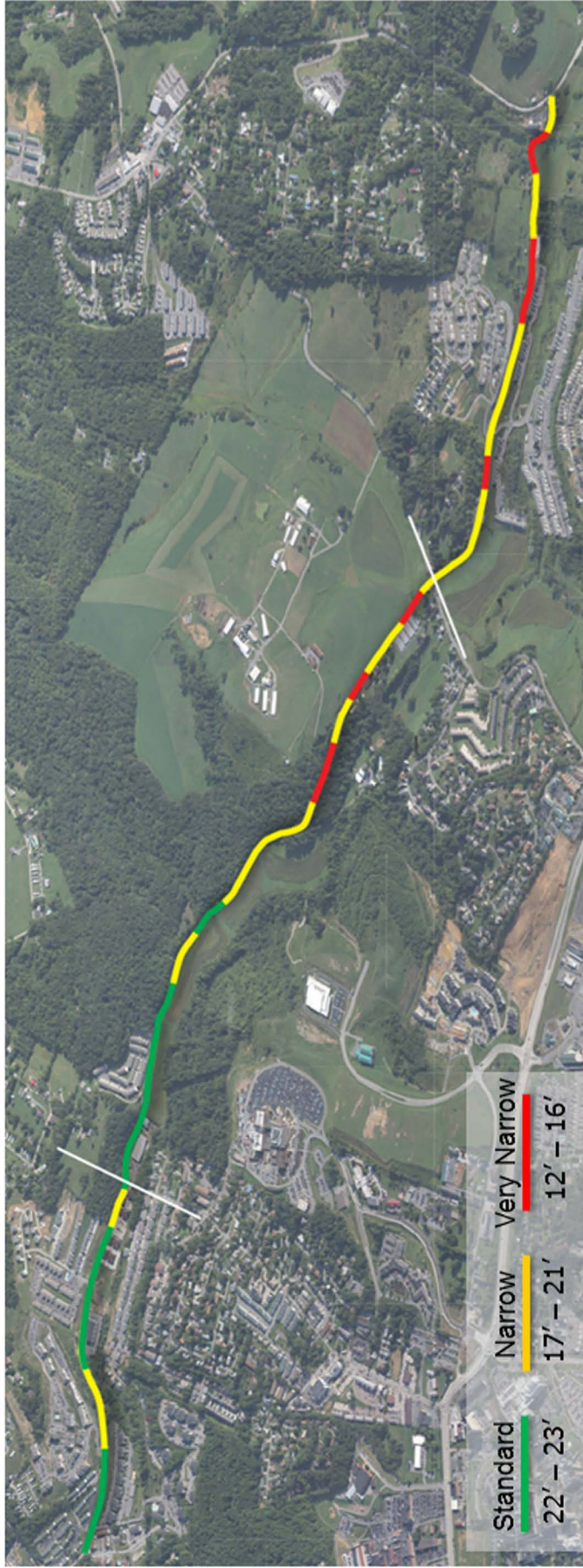
Summary

Illustration & Warrants



Transportation Context

facility	transit, pedestrians & biking	behavior	accident	traffic
road section	intersections	off road structures		



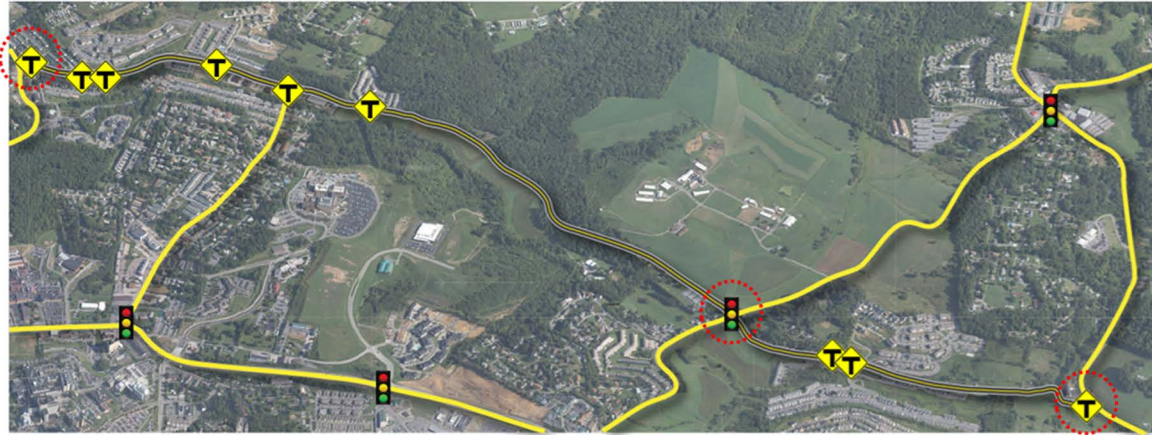
Unusual Intersection Locations

Transportation Context



- facility
- transit, pedestrians & biking
- behavior
- accident
- traffic
- road section
- intersections
- off road structures

⊙ unusual intersection geometry



Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

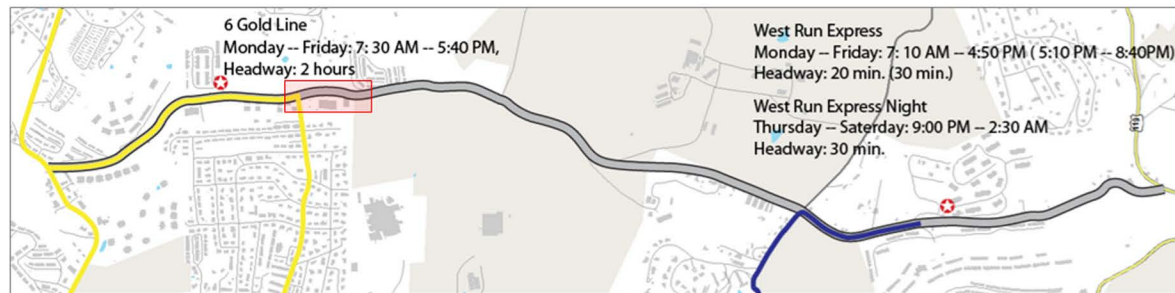
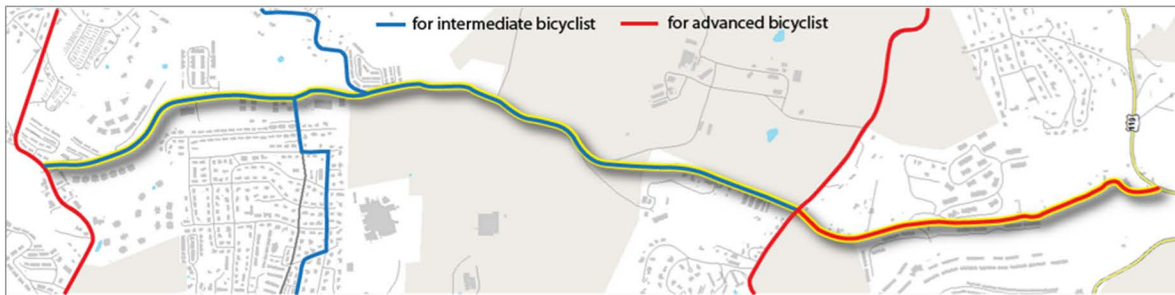
Urban Environment Natural Environment Summary Illustration & Warrants

Transit Service, Pedestrian Activity & Bike Routes

Transportation Context



- facility
- transit, pedestrians & biking
- behavior
- accident
- traffic



Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

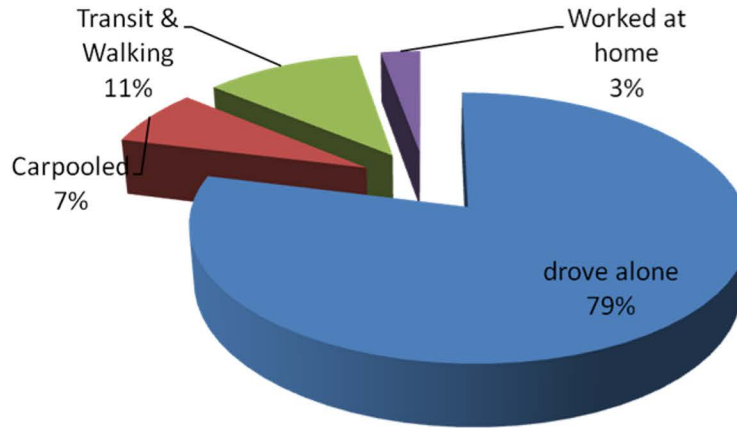
Urban Environment Natural Environment Summary Illustration & Warrants



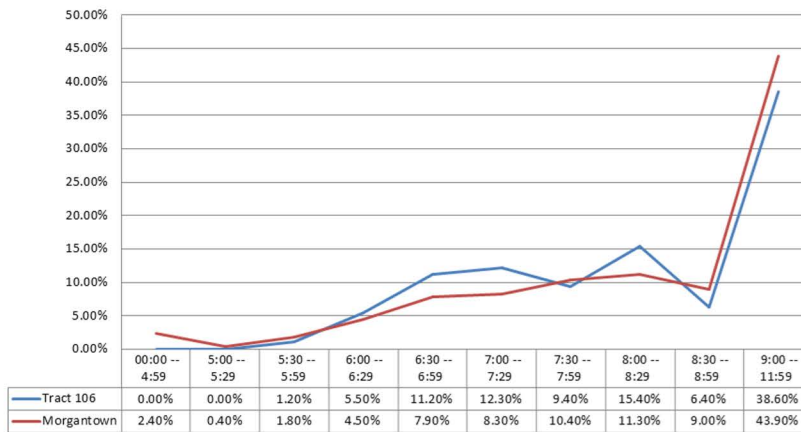
Transportation Context

- facility
 - transit, pedestrians & biking
 - behavior
 - accident
 - traffic
- means of transportation to work
 - time leaving home to work
 - vehicle available
- means of transportation by citizenship status | by time leaving home to work

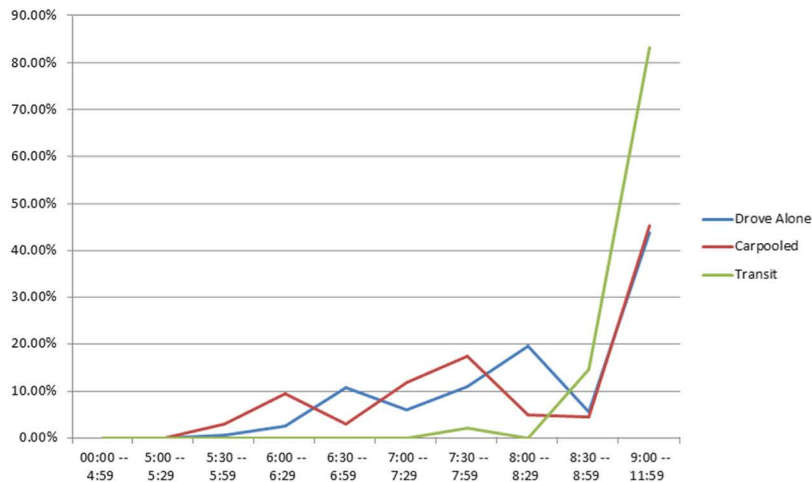
Means of Transportation to Work



Time Leaving Home to Work



Means of Transportation by Time Leaving Home to Work



Data Sources: MapData@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

Accident Types

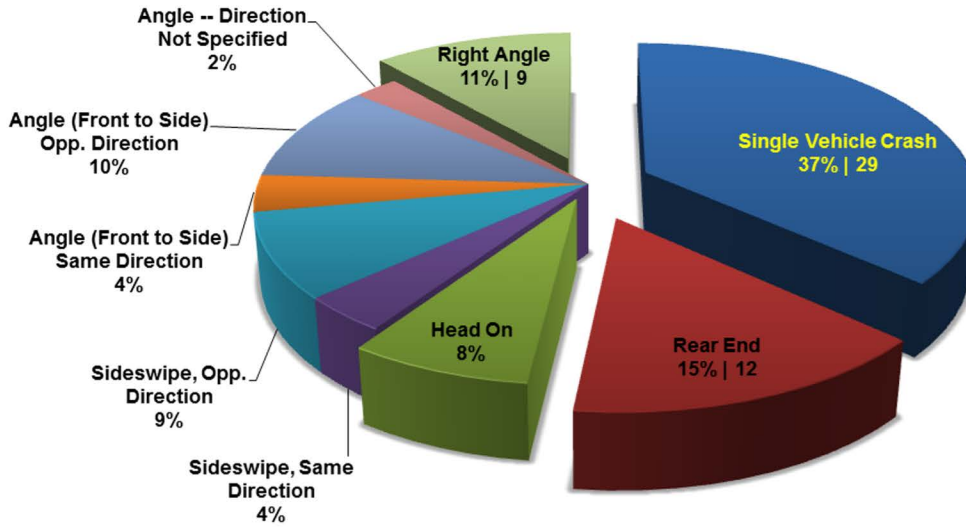
Transportation Context



facility
transit, pedestrians & biking
behavior
accident
traffic

percent view
time view
location view

Total number of Accidents: 79
Time period: 2009 -- 2011



Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

Urban Environment Natural Environment Summary Illustration & Warrants

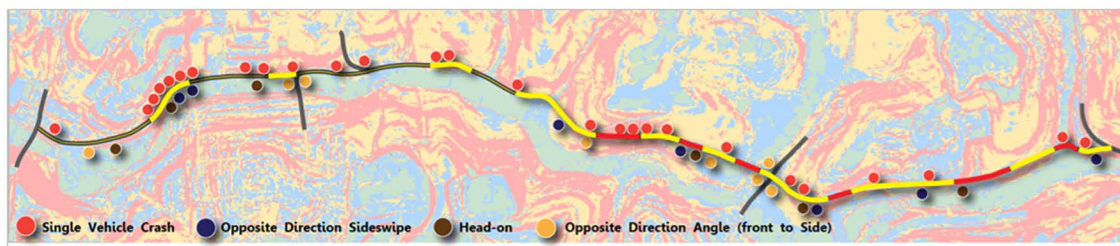
Accident Locations

Transportation Context



facility
transit, pedestrians & biking
behavior
accident
traffic

percent view
time view
location view



Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

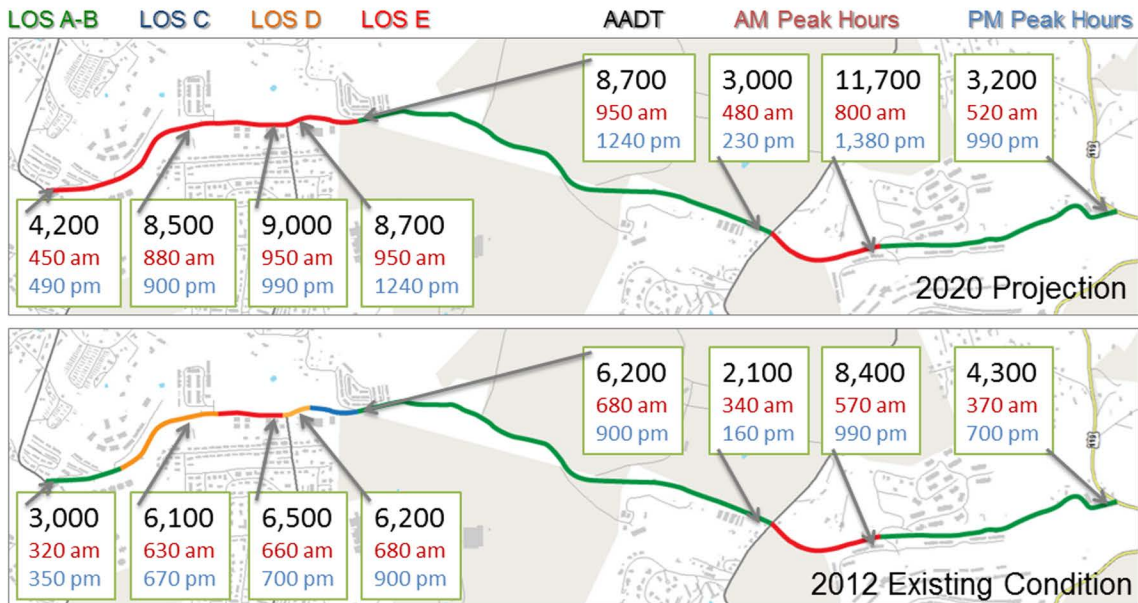
Urban Environment Natural Environment Summary Illustration & Warrants

Existing & Projected Traffic Volumes

Transportation Context



- facility
- transit, pedestrians & biking
- behavior
- accident
- traffic



Data Sources: Map Data@2013 Google | Morgantown Zoning Map | West Run Planning District Zoning Map | Mon County GIS Data Base | American Community Survey 2005-2009/U.S. Census Bureau

Urban Environment Natural Environment Summary Illustration & Warrants

Traffic Count on the Intersection of West Run Rd. and Riddle Ave.

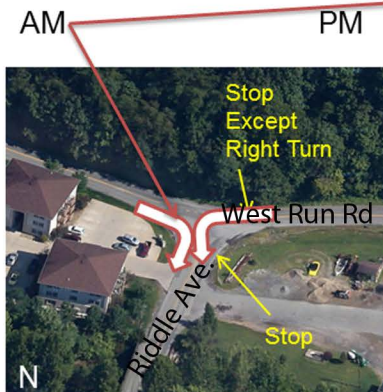
Illustration & Warrants

Traffic Count | Warrants



Date: February 12 & 13 (Tuesday & Wednesday)

Time: 7:00 am – 9:00 am, 11:00 am – 1:00 pm, 4:00 pm – 6:00 pm



Time Period	EB		WB		NB	
	T	R	T	L	L	R
7:00:00 - 7:15:00	13	30	9	19	3	10
7:15:00 - 7:30:00	27	39	12	56	6	8
7:30:00 - 7:45:00	32	82	32	70	11	10
7:45:00 - 8:00:00	17	65	22	64	9	10
8:00:00 - 8:15:00	24	51	16	37	12	7
8:15:00 - 8:30:00	22	68	20	37	12	13
8:30:00 - 8:45:00	17	65	23	35	23	8
8:45:00 - 9:00:00	20	46	23	22	18	8
11:00:00 - 11:15:00	18	29	16	9	14	10
11:15:00 - 11:30:00	12	26	12	7	17	12
11:30:00 - 11:45:00	14	15	10	4	12	8
11:45:00 - 12:00:00	19	20	12	12	18	11
12:00:00 - 12:15:00	11	13	12	9	24	7
12:15:00 - 12:30:00	27	38	25	16	38	19
12:30:00 - 12:45:00	16	30	9	8	28	12
12:45:00 - 13:00:00	23	34	18	21	28	17
16:00:00 - 16:15:00	45	26	40	11	70	67
16:15:00 - 16:30:00	40	20	38	11	36	57
16:30:00 - 16:45:00	25	16	11	7	42	52
16:45:00 - 17:00:00	37	31	44	11	50	73
17:00:00 - 17:15:00	24	26	33	13	59	50
17:15:00 - 17:30:00	34	27	39	12	63	66
17:30:00 - 17:45:00	30	33	33	16	56	45
17:45:00 - 18:00:00	26	29	35	14	71	45

Urban Environment Natural Environment Transportation Context Summary

Visualization of Proposed Improvements



Illustration & Warrants



Urban Environment

Natural Environment

Transportation Context

Summary



Evaluation of Potential New Signal Location (West Run & Riddle)



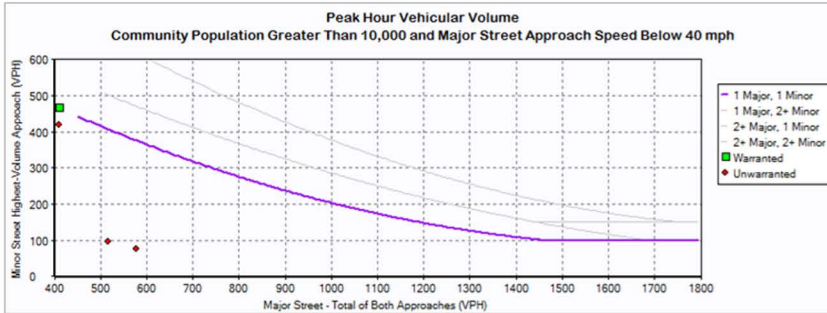
Illustration & Warrants

Traffic Count | Warrants

MUTCD Warrant Met: *the need for a traffic control signal shall be considered*

Three conditions exist for the same 1 hour (any four consecutive 15-minute periods)

- Total stopped time delay experienced by the traffic on Riddle Ave. exceeds 4 vehicle-hours
- The volume on Riddle Ave. approach (one direction only) exceeds 100 vehicles per hour
- The total entering volume serviced during the hour exceeds 650 vehicles per hour



Note:

- 1) Counts taken during construction on WV 705
- 2) Recount needed after construction complete

Software: Synchro Warrants 7

Urban Environment

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Summary

Opportunities & Challenges



Opportunities

Multi-modal transportation

- demographic configuration
- high density urban environment (existing & expected)
- pedestrian activities

Capacity improvement

- open space & proposed development

Safety improvement

- narrow and dangerous road sections
- low visibility intersection
- intersection reconfiguration

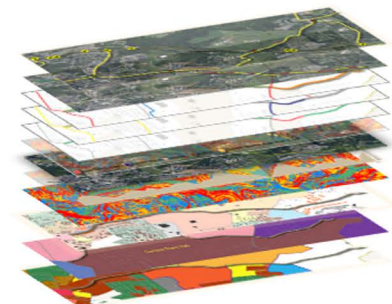
Challenges

Slope

- excessive slop above 12%

Built structure

- utility poles
- buildings
- containing walls



Urban Environment

Natural Environment

Transportation Context

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