West Run Corridor Study

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

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Outline

Urban Environment
Natural Environment
Transportation Context

Summary: Opportunities and Challenges

Illustration & Warrants
Existing Zoning

Urban Environment

City of Morgantown Zoning:
- shopping center district
- multi-family residential district
- office & Institutional district

West Run Zoning:
- high density residential
- rural reserve
- low density residential
- neighborhood commercial

Existing Landuse

Urban Environment

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
Roadway Topography

Natural Environment

- topography & slope
- road profile
- vegetation and open space

Potential ROW Concerns

Transportation Context

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

- road section
- intersections
- off road structures

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Transportation Context

- facility
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Urban Environment | Natural Environment | Summary | Illustration & Warrants
Accident Types

**Transportation Context**

- **facilities**
- **transit, pedestrians & biking**
- **behavior**
- **accident**
- **traffic**

- **percent view**
- **time view**
- **location view**

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

- **Single Vehicle Crash**
  - 37% | 29
- **Rear End**
  - 15% | 12
- **Right Angle**
  - 11% | 9
- **Angle (Front to Side) Opp. Direction**
  - 10%
- **Angle (Front to Side) Same Direction**
  - 4%
- **Sideswipe, Opp. Direction**
  - 9%
- **Sideswipe, Same Direction**
  - 4%

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Urban Environment | Natural Environment | Summary | Illustration & Warrants

Accident Locations

**Transportation Context**

- **facilities**
- **transit, pedestrians & biking**
- **behavior**
- **accident**
- **traffic**

- **percent view**
- **time view**
- **location view**

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Urban Environment | Natural Environment | Summary | Illustration & Warrants
Existing & Projected Traffic Volumes

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

Illustration & Warrants

Urban Environment  Natural Environment  Transportation Context  Summary

[Images of proposed improvements with labeled sections]
**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

**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 slope above 12%

- Built structure
  - utility poles
  - buildings
  - containing walls