

East Gateway Plan Transportation Analysis Study

A Focus on Transportation



January 19, 2012

Presentation Outline

1. Meeting Focus
2. Project Development Process
3. Current Congestion
4. Forecast Congestion and Evaluation
5. Conceptual Project Improvement Projects
6. What's Next?
7. Group Discussion



Today's Focus – Transportation Needs

□ Goals of meeting:

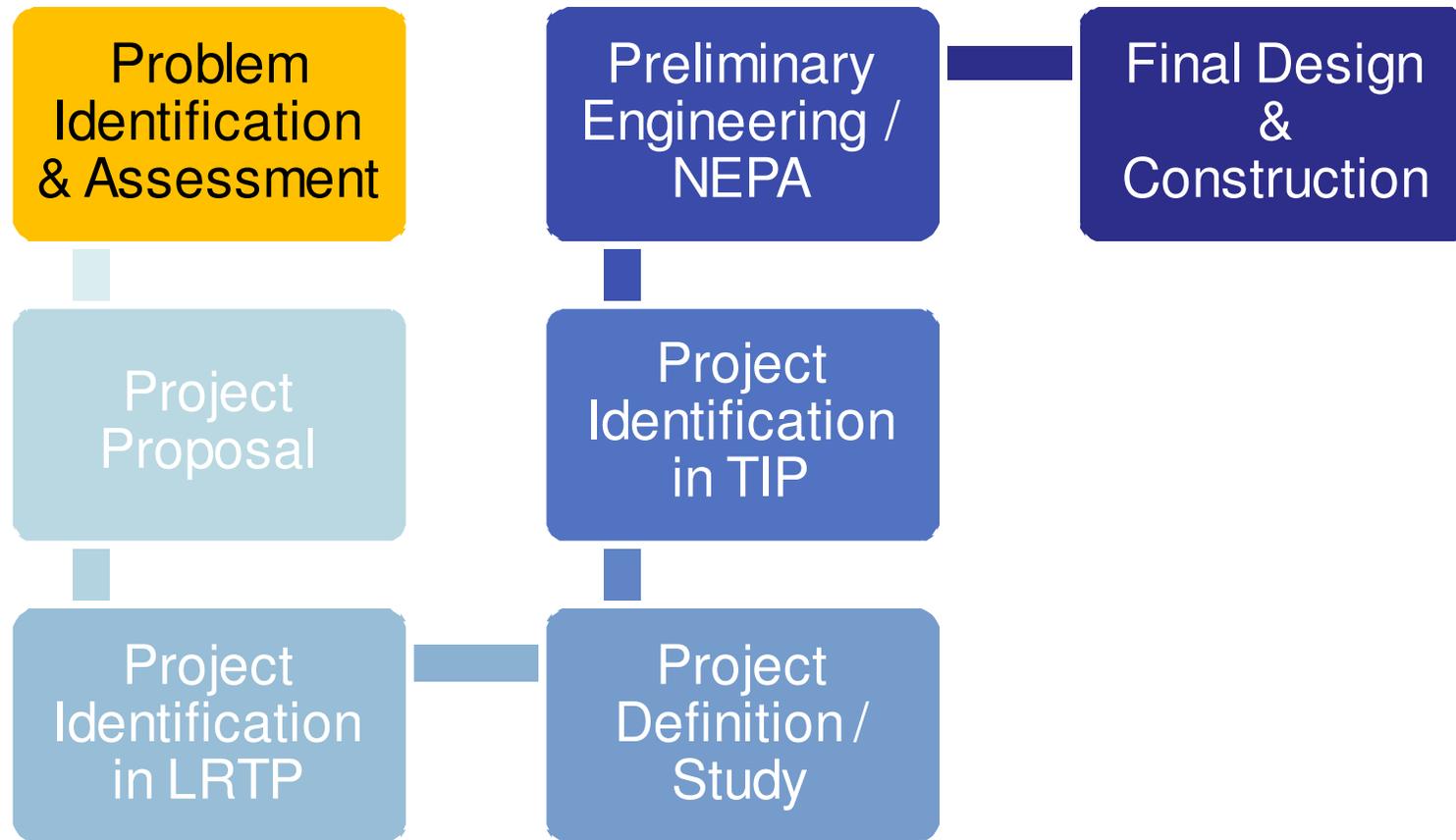


□ Harpers Ferry Bridge / Alternative Crossing

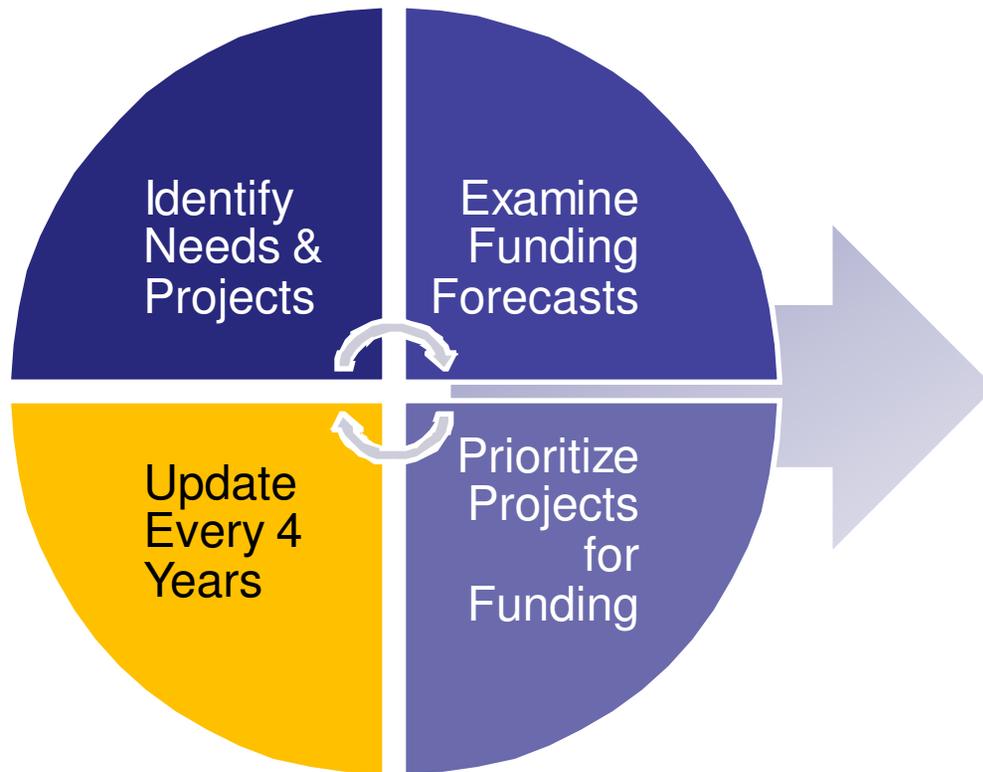
- Important impact on corridor congestion
- Significant cost – Multi state involvement – Other studies
- Not specifically addressed in this study



The Project Development Process



LRTP = Hagerstown Eastern Panhandle MPO Long Range Transportation Plan
TIP = West Virginia DOT Transportation Improvement Program



What's on the LRTP? ***(Within the East Gateway Corridor)***

Identified Project Needs:

- US 340 / Country Club Road
(Intersection / Interchange Improvement)
- US 340 Halltown Road
(Intersection / Interchange Improvement)
- US 340 Widening
(Washington Street to Bridge Crossing)

Projects on Financially Constrained Project List:

- US 340 / Country Club Road
(Intersection / Interchange Improvement)

Funding Issues

❑ Funding limited

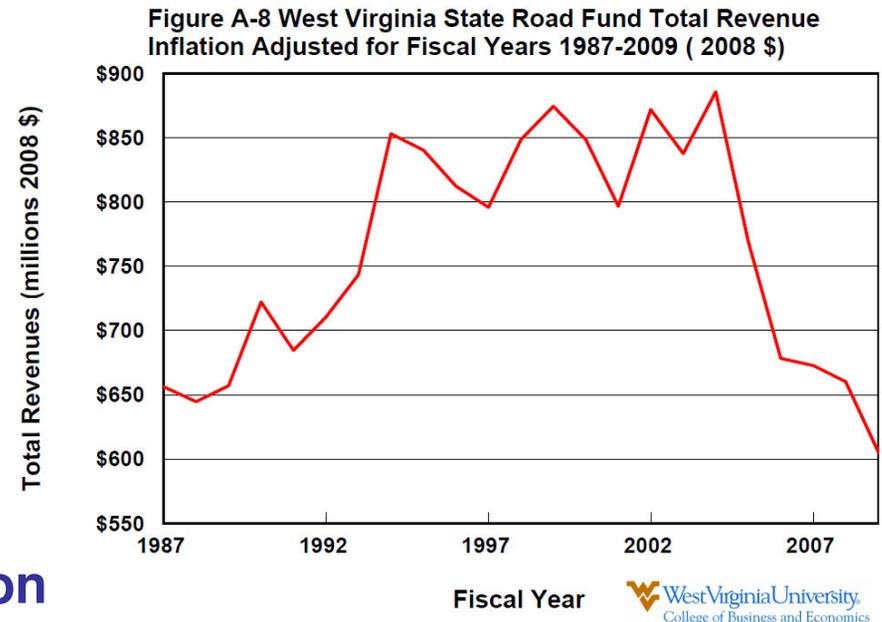
❑ WV transportation funding (Berkeley and Jefferson Counties)

- \$8-9 million annually
- \$354 million thru 2035
- Split among needs in both counties

❑ Importance of project prioritization

❑ The need for alternative funding mechanisms

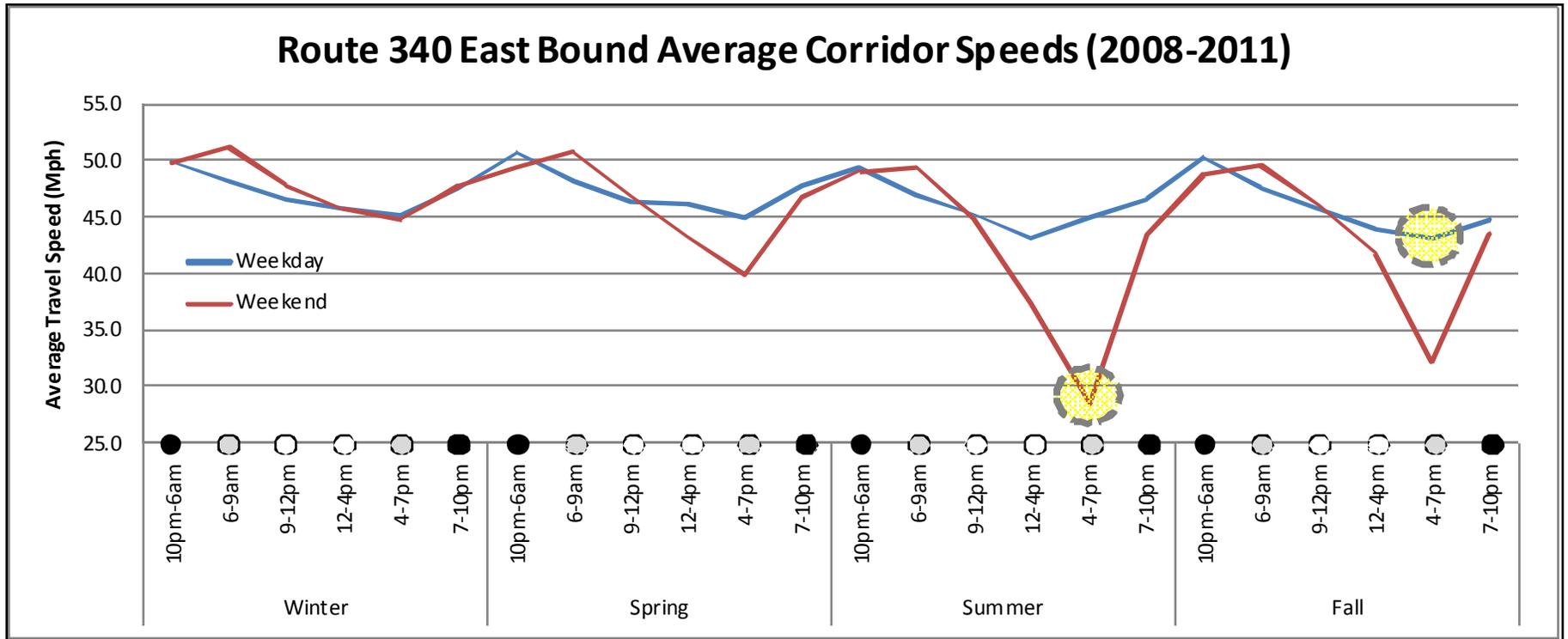
- Public – private partnerships
- Developer funded projects or land donation
- Development fees / Tolls



A Look At Current Congestion



East Bound Corridor Average Speed

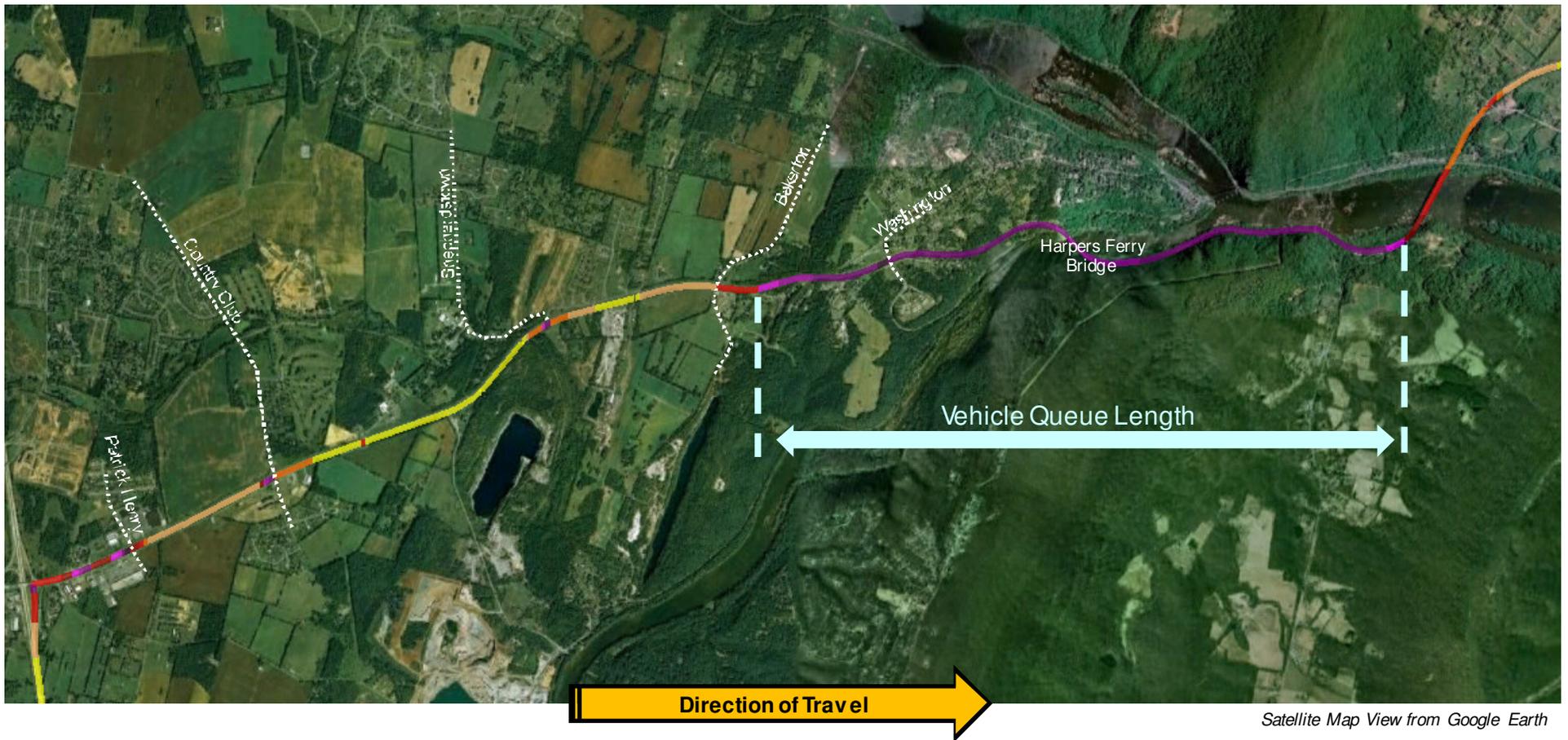


❑ Worst Weekend: Summer 4-7pm

❑ Worst Weekday: Fall 4-7pm

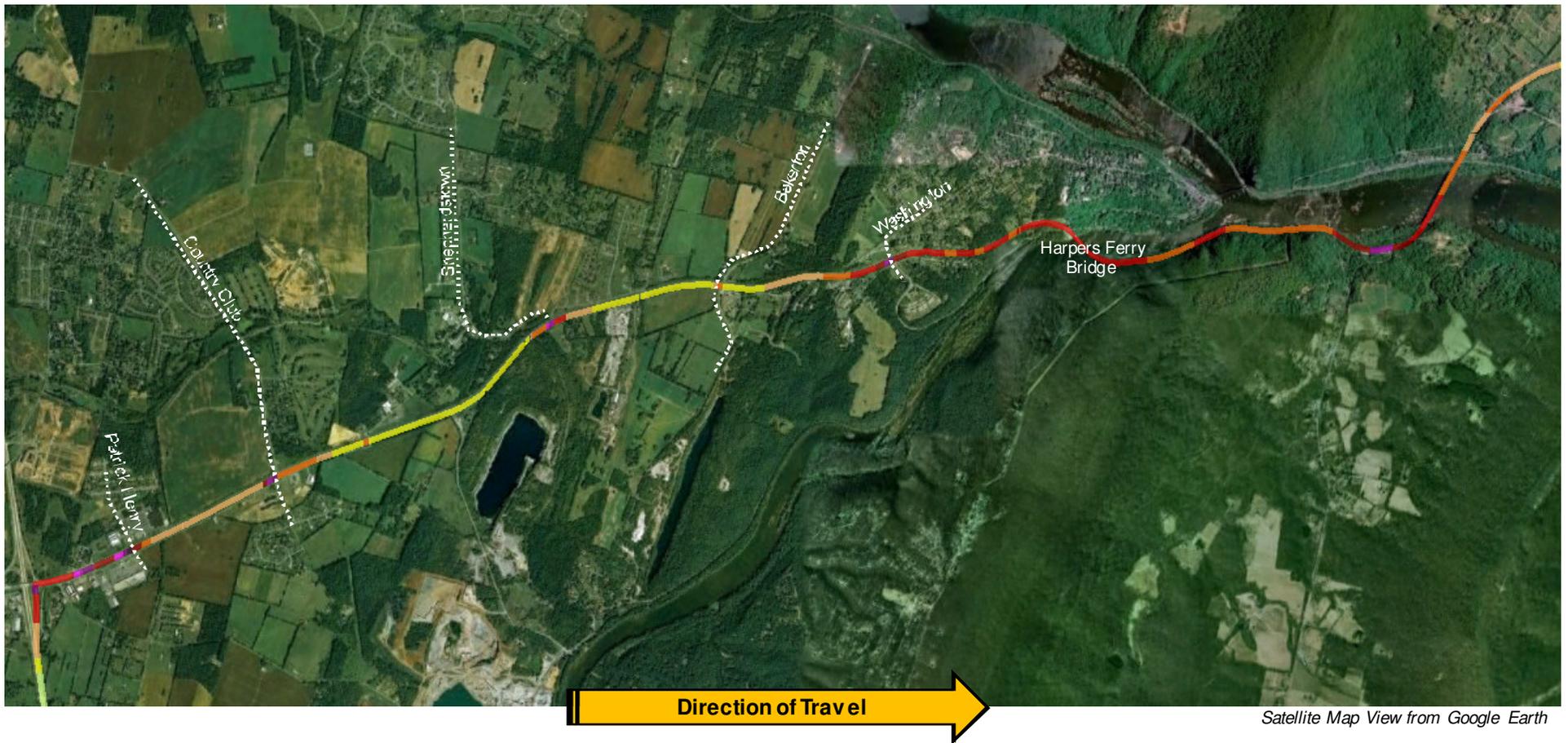
East Bound Speeds by Section

Summer Weekend : 4-7pm

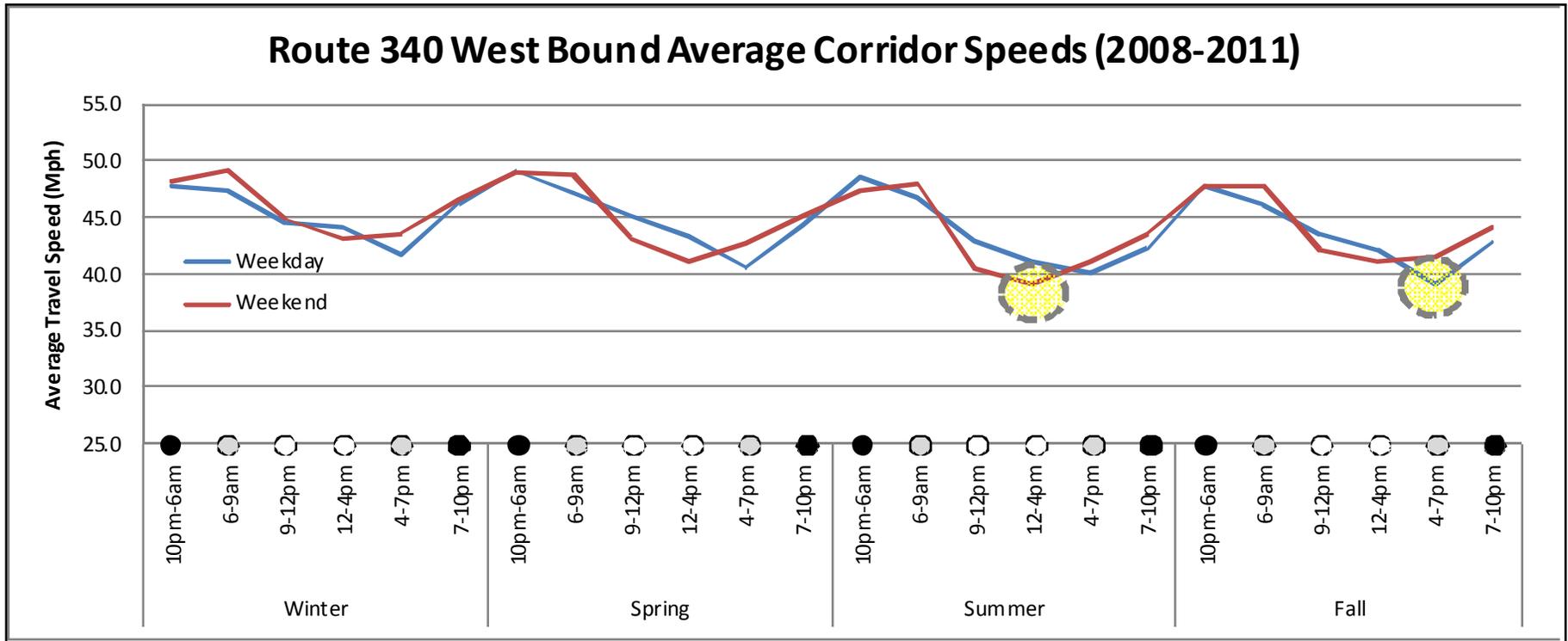


East Bound Speeds by Section

Fall Weekday : 4-7pm



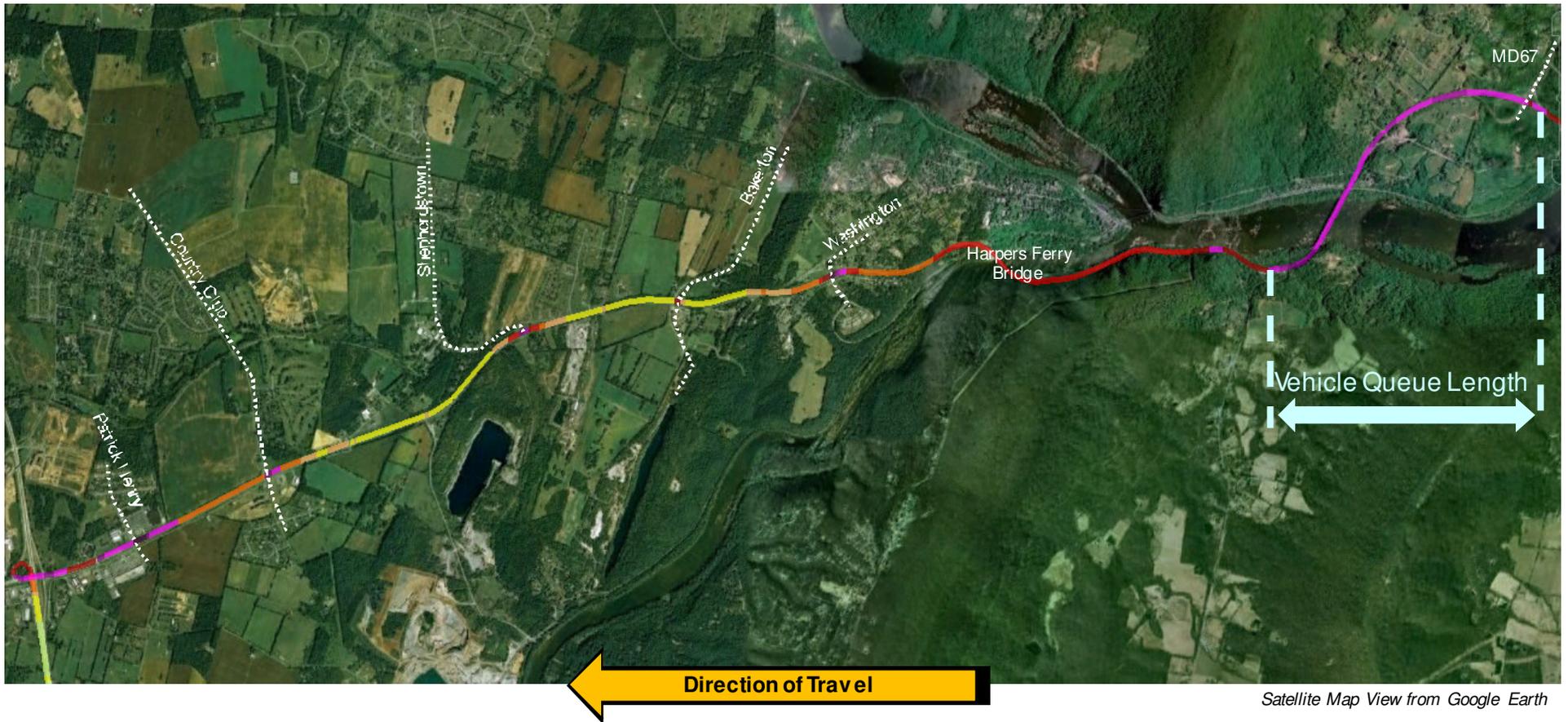
West Bound Corridor Average Speed



- Worst Weekend: Summer 12-4pm**
- Worst Weekday: Fall 4-7pm**
- WB Traffic Queues outside of East Gateway Corridor**

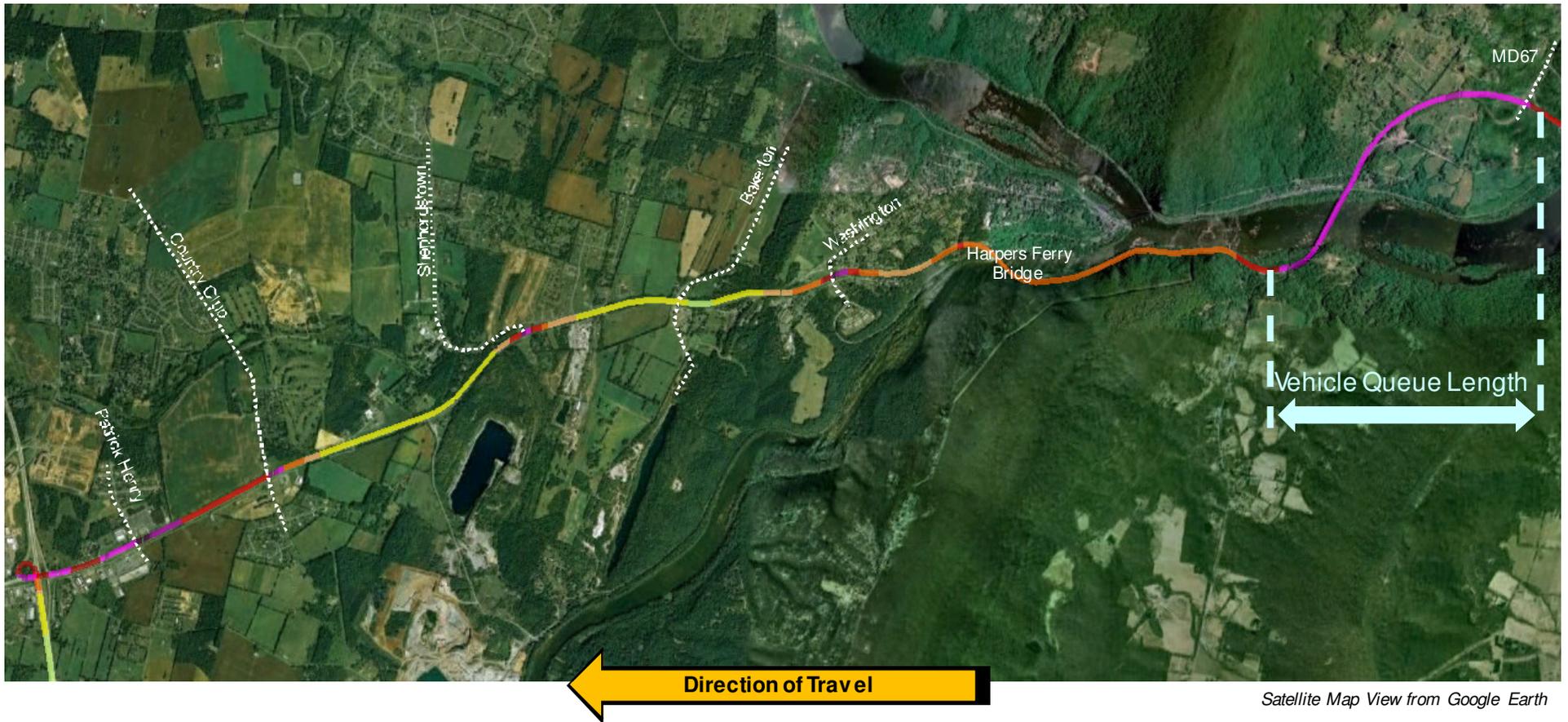
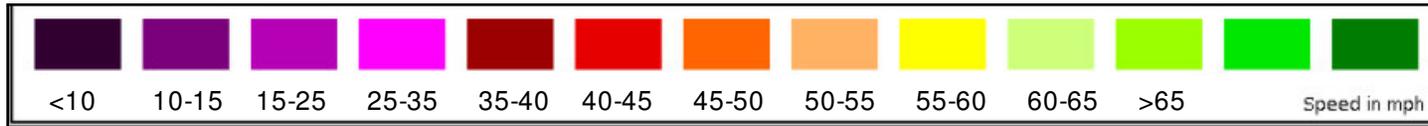
West Bound Speeds by Section

Summer Weekend : 12-4pm



West Bound Speeds by Section

Fall Weekday : 4-7pm



Satellite Map View from Google Earth

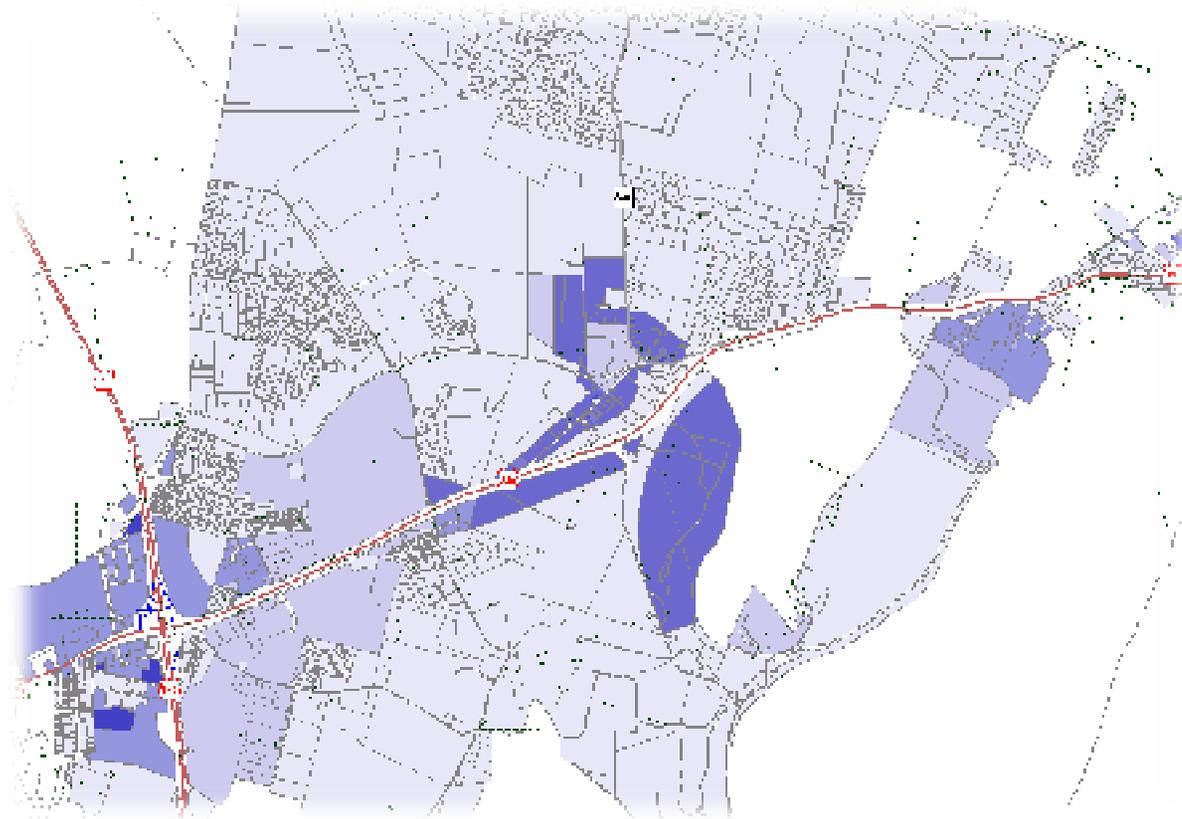
Your Thoughts on Current Congestion

Discussion



- Typical Weekday vs. Weekend
- Length of Peak Period
- Problem Intersections
- Daily Variances
- Vehicle Queuing
- Safety

Potential Future Congestion



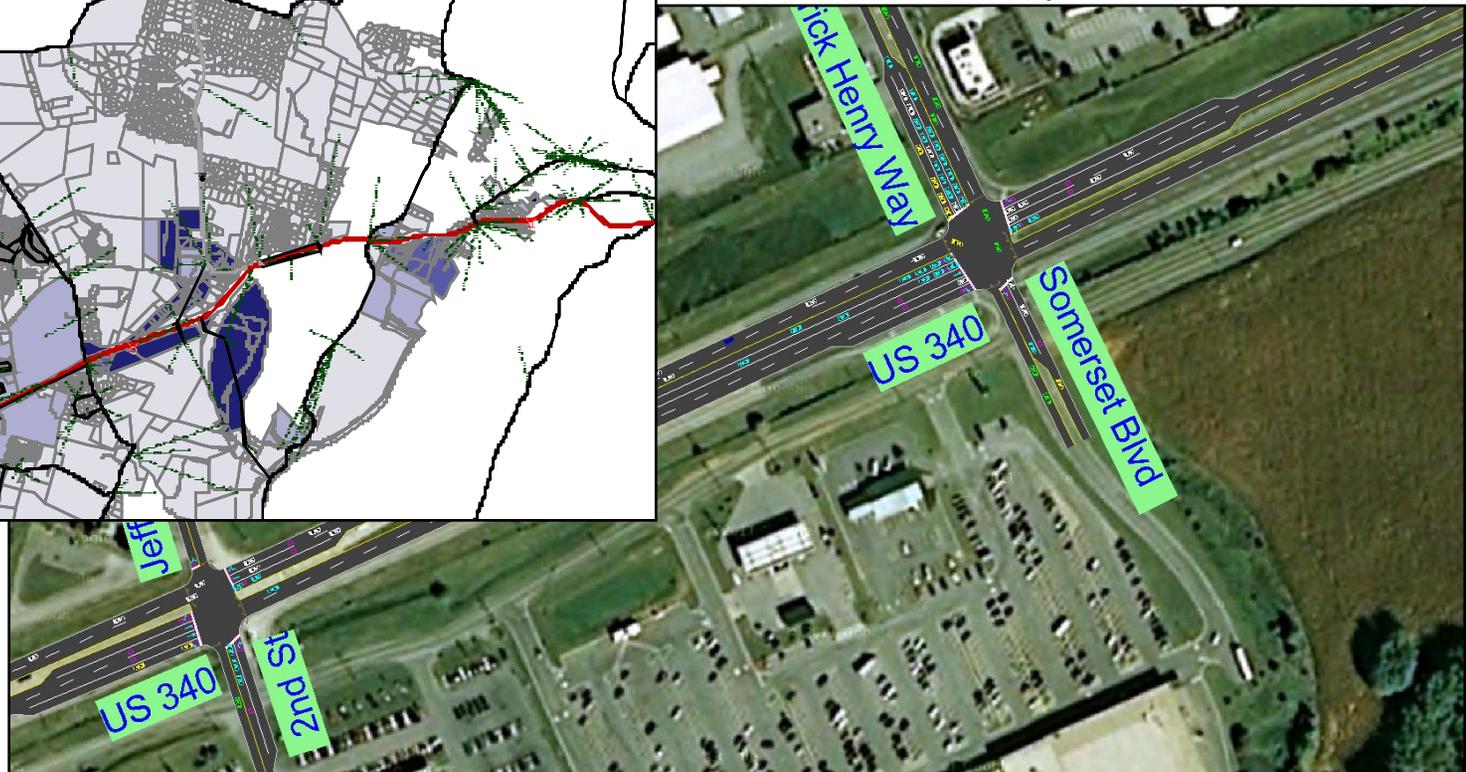
Impact of Future Development on Corridor Congestion

- ❑ Key Input Assumption – East Gateway Land Use Vision
- ❑ Assume 25 year vision (e.g. 2035)
- ❑ Traffic Analysis Tools

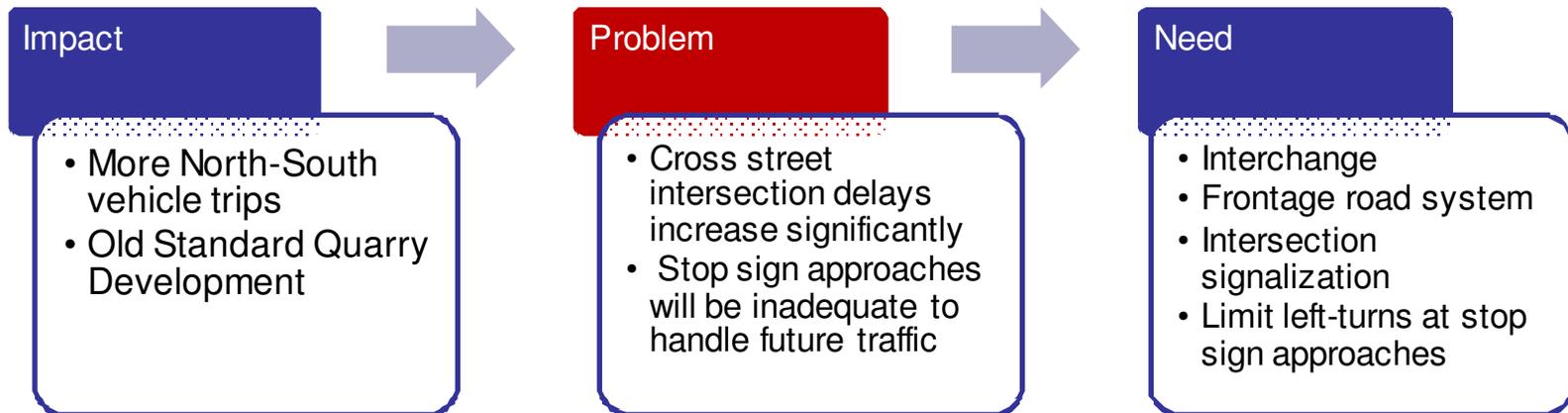
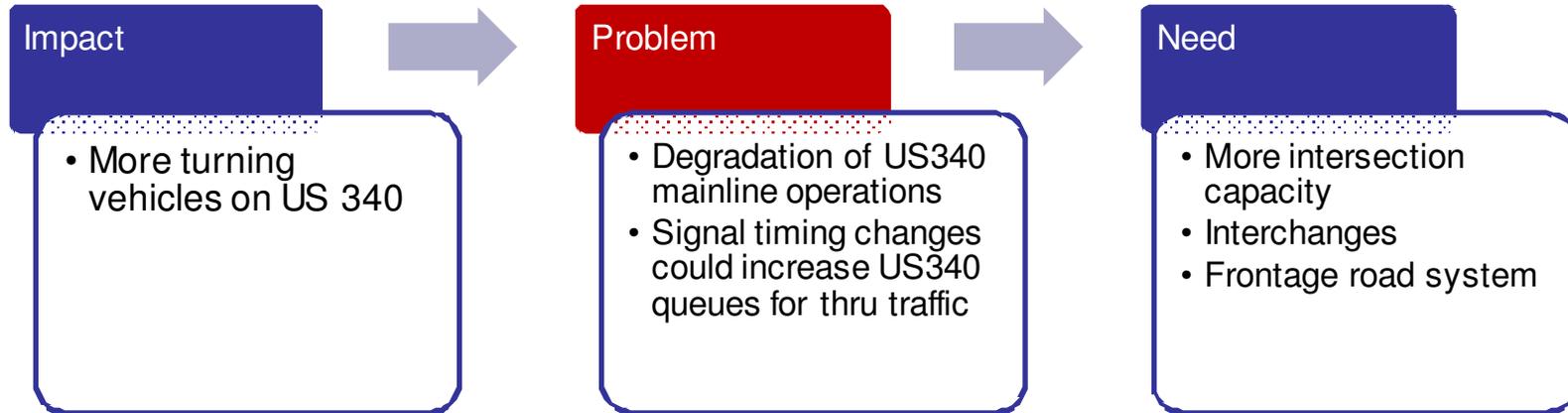
HEPMPO Regional Travel Demand Model



US340 Synchro and Simulation Model

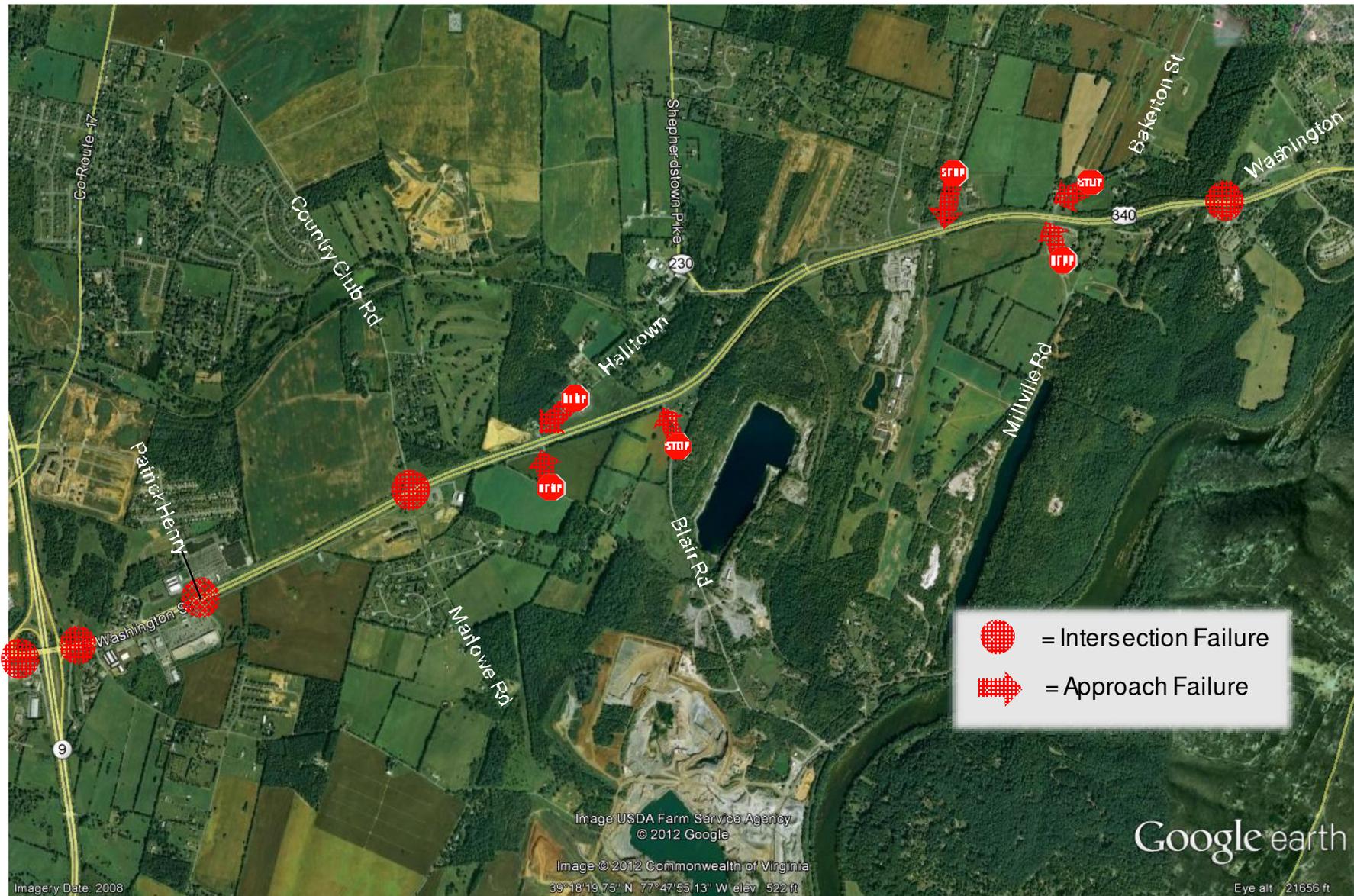


Impact of Future Development on Corridor Congestion



Forecasted Congestion for US340

Weekday PM Peak Hour



Prioritizing Our Needs and Focus

- US 340 “thru” traffic
- Safety
- Special events – casino – national park - peak seasonal traffic
- Access to regional employment and commercial sites for residents within the corridor
- Preserving the character of the corridor
- Reducing vehicle trips within the corridor
- Other?

Discussion: What needs should projects focus on?



Conceptual Projects



What Have We Heard So Far?

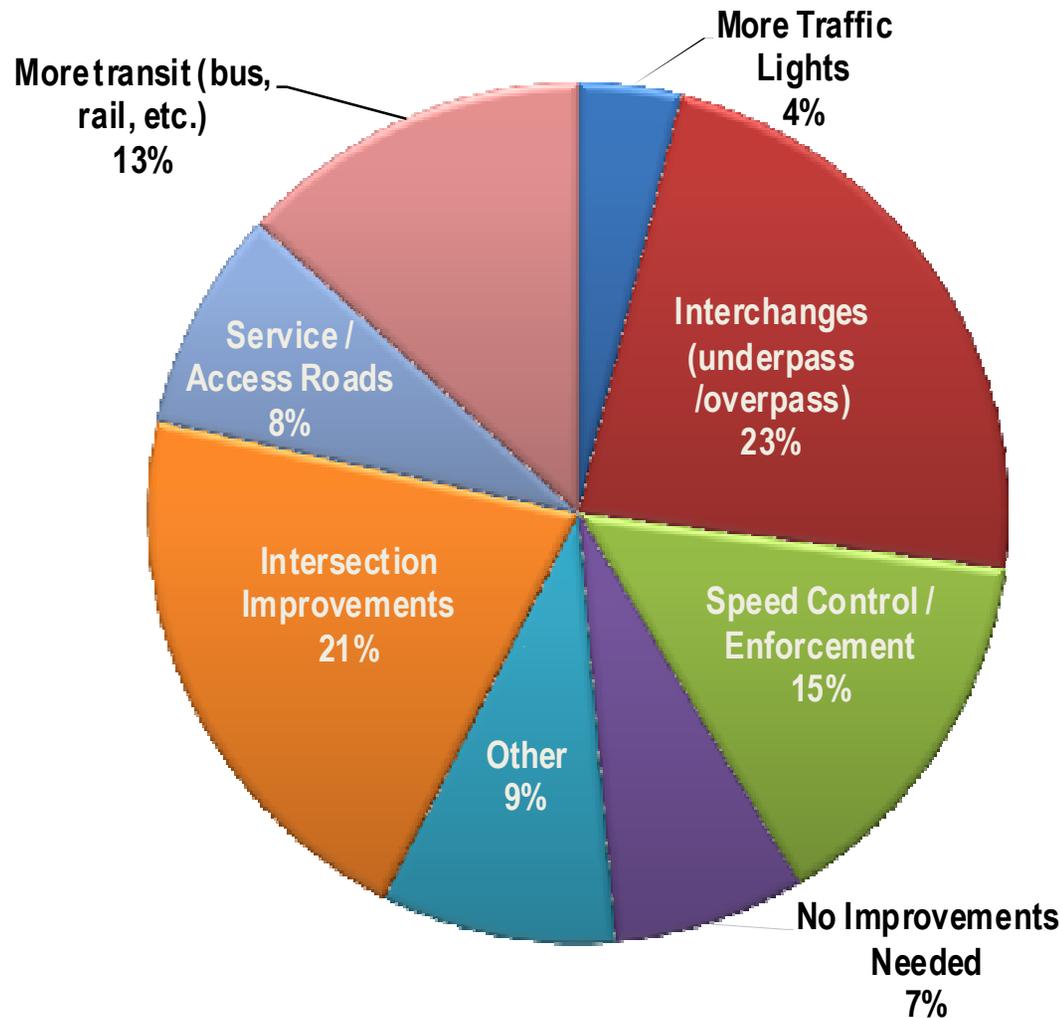
General Transportation Comments from Previous Meetings

Project Type	Key Issues
Improve Intersections	
Reduce or limit traffic signals along Route 340 corridor	Safety/congestion at stop signs
Replace intersections with interchanges (overpass/underpass)	Cost
Install traffic signals	Congestion on US340
Create roundabouts	Feasibility
Roadway Widening and Speed Control	
More lanes on sections of US340	Cost \$\$ / Right-of-Way / Character
Limit speed limits	Increased Travel Times
Work with Virginia on addressing bottlenecks outside the state	Cost
New Roads	
Frontage roads where possible	Cost / Right-of-Way
Projects completed should include green buffers / setbacks	Right-of-Way
Other	
Need more bike and pedestrian trails	Benefits to Traffic Volumes
Need more transit	Cost vs. Benefits
Toll roads	Feasibility

What Have We Heard So Far?

From MetroQuest Survey Question

What Improvements are Most Needed along the US 340 Corridor?



A Draft List of Conceptual Projects for Discussion

Assembled 30 project ideas identified by:

- Public input
- County
- MPO
- Consultants

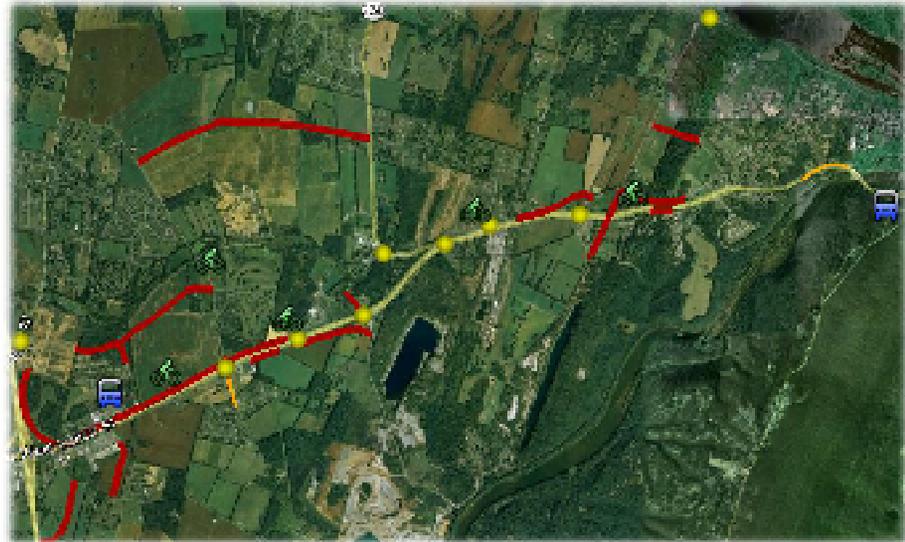


Image Backgrounds from Google Earth

Conceptual in nature

- No detailed feasibility / environmental studies

Included to generate discussion and initiate additional ideas on:

- Project details or concerns
- Other project ideas

Existing Roadway Widening

❑ US340 Turning Lane Extension (Route 9 to 2nd Street)

- Allow turning movements to proceed between intersections



Image Backgrounds from Google Earth and Street View

❑ US340 Truck Climbing Lane (WB)

- Shenandoah Street WB for 0.30mi
- Connect to existing 2-lane WB section



Examples of Key Intersection Improvements

❑ **US340 and Country Club Road**

- Currently on the HEPMPO LRTP
- May be important integration Frontage Roads

❑ **US340 and Halltown Road / CBP**

- Possible signalization
- Has been studied

❑ **Future Needs**

- Un-signalized intersection improvements
- Additional turn lanes at select locations

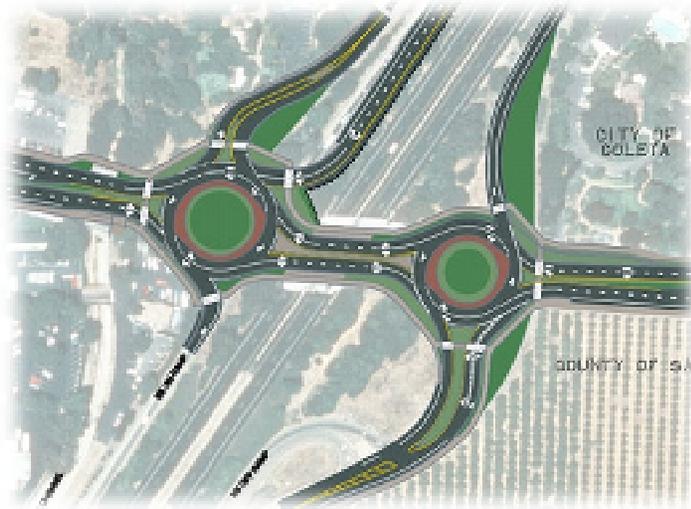
❑ **Limited traditional improvement options**

- US340 / 2nd Street
- US340 / Patrick Henry Way



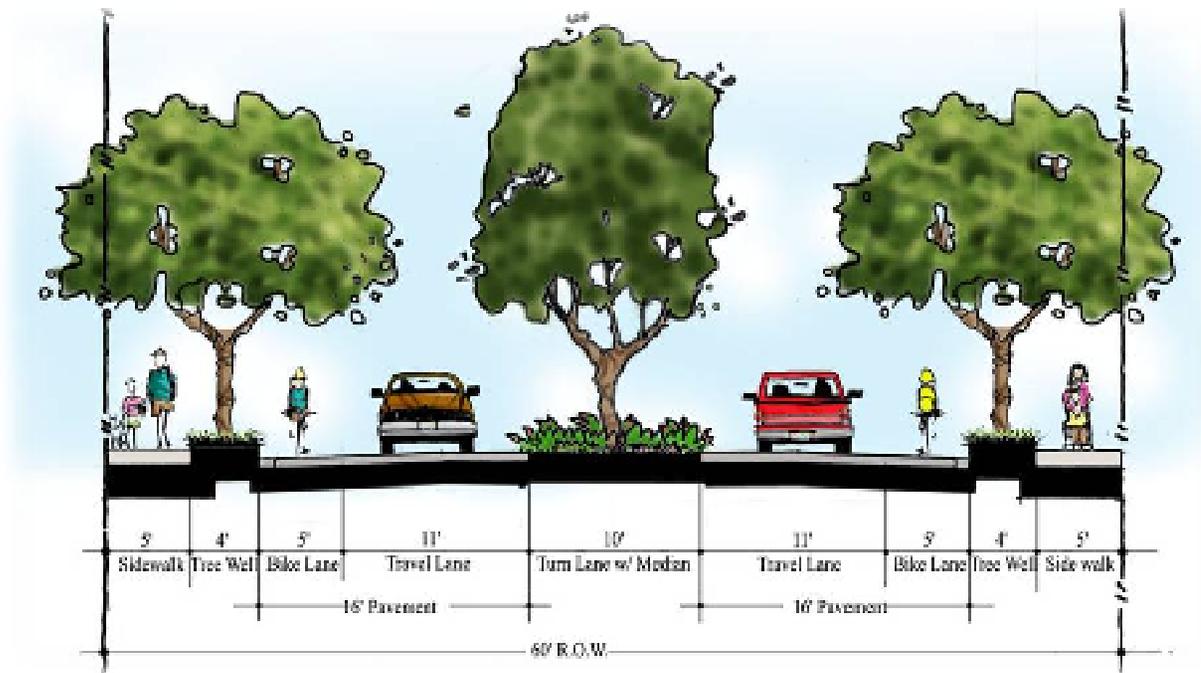
Roundabouts and US340

- ❑ Not a viable option for US340 Mainline
 - Speeds / Volumes too high
 - Safety concerns with double lane roundabouts
 - Limited traffic gaps, Limited right-of-way
- ❑ Possible alternative for frontage road intersections
- ❑ Possible integrated roundabout system for frontage roads if new interchange at US340

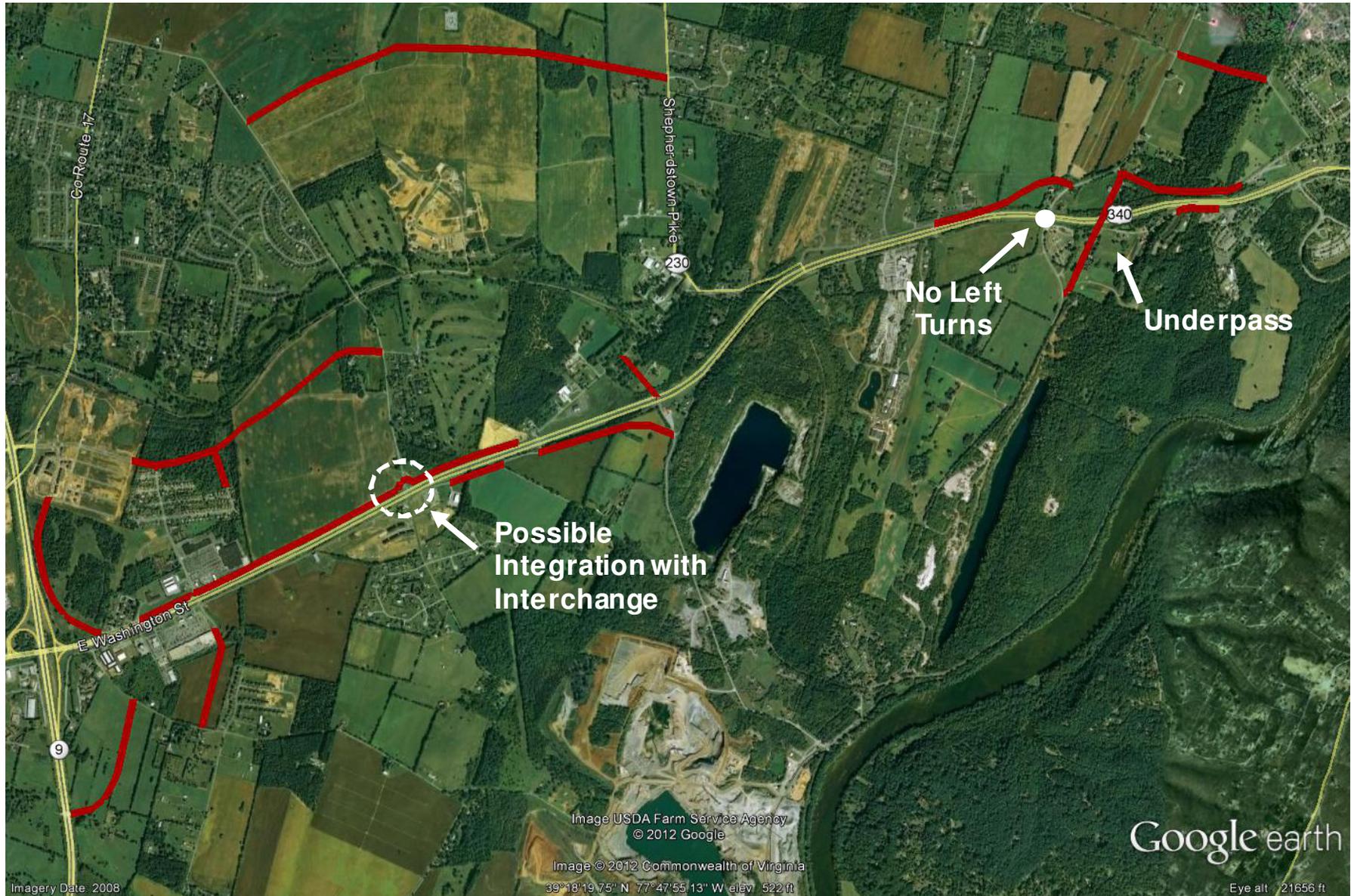


Frontage and Other New Roads

- ❑ Would address added capacity for future increases to US340 turning movements
- ❑ May allow for left-turn limitations at non-signalized intersections
- ❑ Can be designed to preserve character of region
- ❑ Allow for possible integration with trail system



New Frontage and Other Roads - Conceptual Options



Can Frontage Roads Help?

Per Initial Technical Analyses

- ❑ **Will not solve all operational problems on US340**
 - Some existing signals may see increased traffic
 - Patrick Henry Way / Country Club Road still congested
- ❑ **Improves cross street delays and safety at certain intersections**
 - Bakerton/Millville (especially with Old Standard Quarry development)
 - Provides opportunity to divert to alternative intersections to improve safety at un-signalized intersections (e.g. Blair, Halltown, Shipley School Road, etc.)
- ❑ **May be important strategy in combination with other major improvements**
 - Interchange at Country Club Road
 - Left turn limitations at un-signalized intersections
 - Possible cross street closures

Projects Addressing Other Travel Modes

□ Bike/Pedestrian Trails

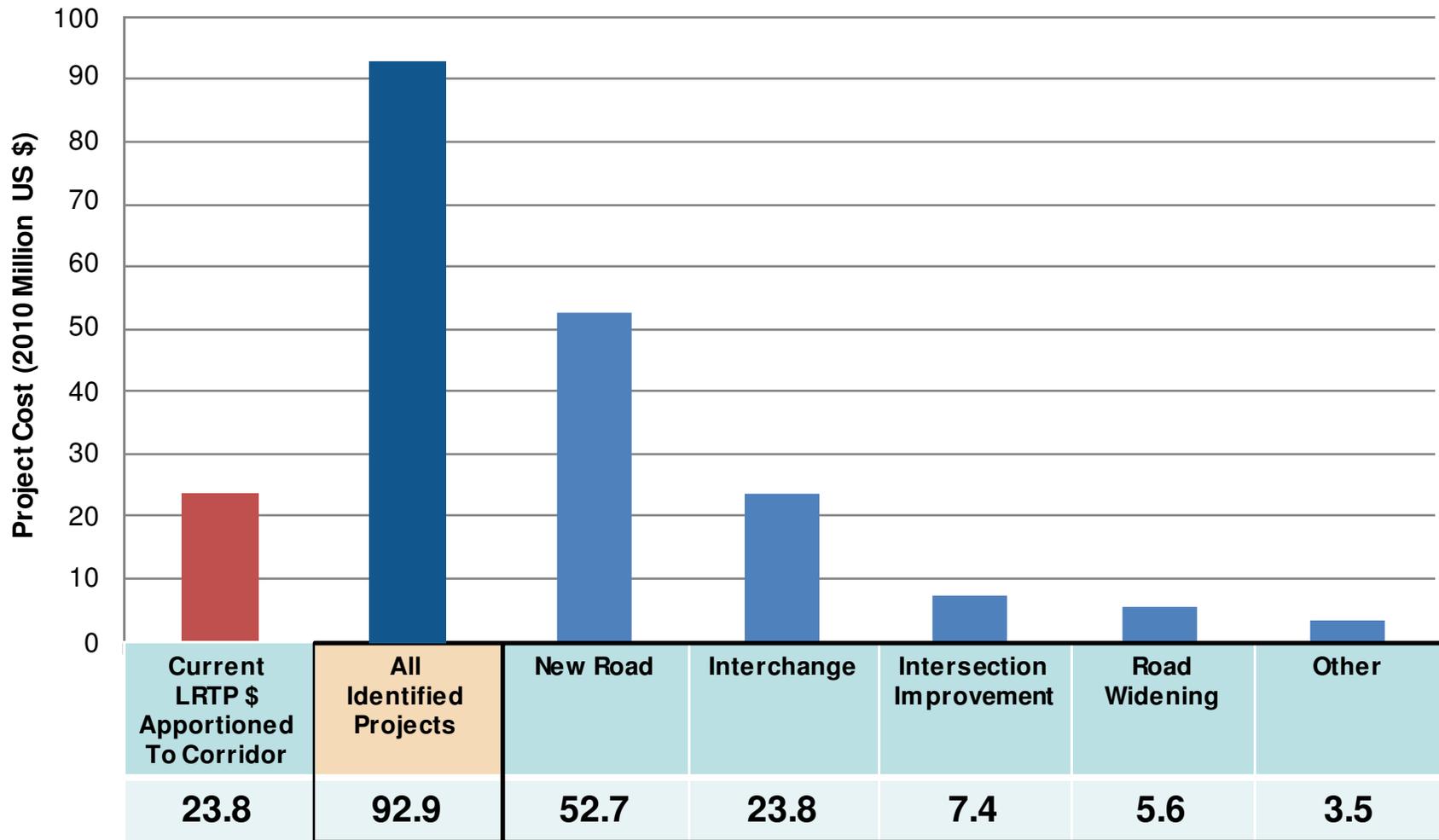
- Not primary focus of this meeting
- Concentrate on potential options to reduce vehicular travel in corridor
- Trail from Ranson to Harpers Ferry
- Possible extensions north on Country Club Road – Linkages to future commercial centers
- Integration with other projects

□ Transit

- Service to commercial areas
- Connections to train service.
- Service for commuters to Northern Virginia / Park-and-Ride lots
- Collaborative efforts:
 - *Linkage to Loudoun County Commuter Bus Service*
 - *Future WMATA Metro extension east of Dulles Airport*



Potential Project Costs of Identified Projects



Discussion

General Discussion on Conceptual Projects



Follow-up Activities:

1. Sub-group evaluations of existing projects. Write your thoughts and comments down. Identify your own concept transportation projects on the maps provided.
2. Prioritization exercise