



SECTION 200

I-95, North of MD 43 to
North of MD 22

Focus Group #4
May 17, 2007



Overview of Presentation

- Roles and Responsibilities of the Focus Group
- Section 200: Purpose & Need
- Schedule for Other Improvements
- I-95 Growth Patterns and Projections
- Criteria Utilized in Developing Concepts
- Interchange Options

Roles and Responsibilities of the Section 200 Focus Group

- Review the progress of the study and provide input to the Planning Team on information gathered during the study
- Relay information to and from the representative communities and agencies
- Inform the Planning Team of community issues and concerns



Section 200

Purpose and Need

Purpose: The purpose of the proposed action is to address capacity and safety needs on Section 200 and thereby improve access, mobility, and safety for local, regional, and inter-regional traffic, including passenger, freight, and transit vehicles.

Need: The proposed action is intended to address the following capacity and safety needs on Section 200.



Schedule for Other Improvements

- MD 152 Park & Ride Expansion
- MD 24/MD 924 Interchange

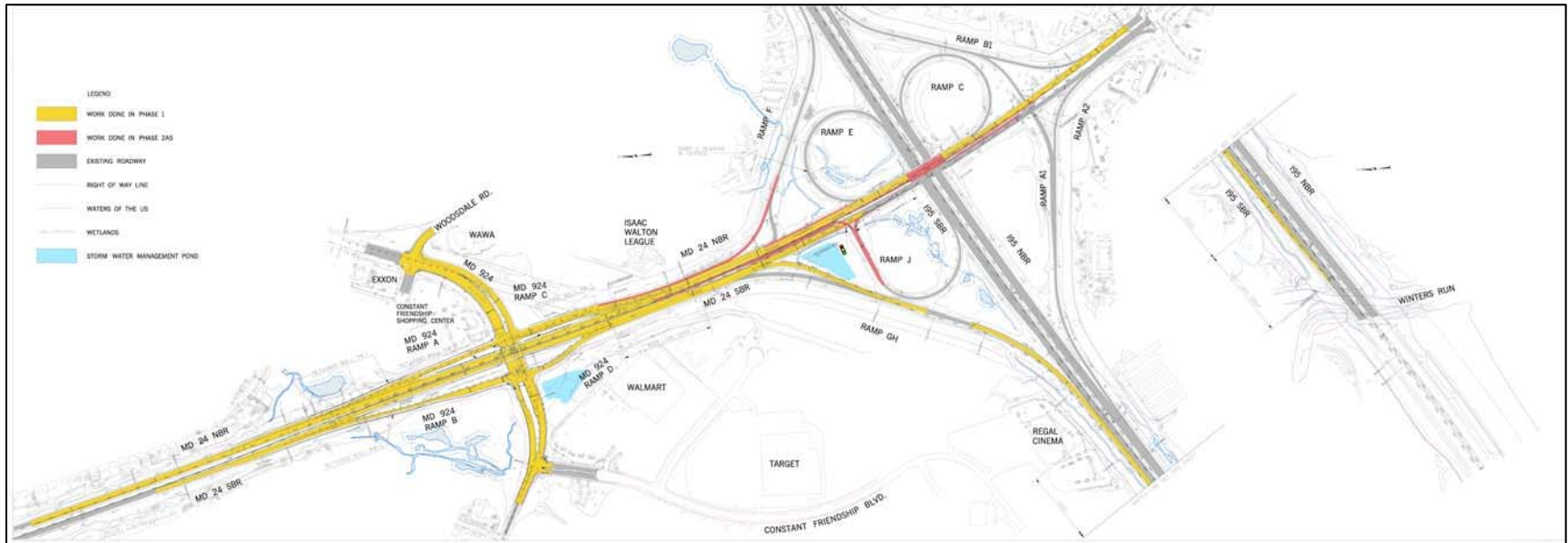
MD 152

Park & Ride Expansion

- Contractor has been given Notice To Proceed
- The capacity will increase from 205 to 316 spaces
- The southern lot will be expanded and resurfaced
- The northern lot will be resurfaced with new striping
- Construction should be completed in approximately 4 months



I-95/MD 24/MD 924 Improvements



- First Phase Toward Ultimate Section 200 Improvements
- Advertise for Bids in March 2007
- Notice to Proceed for Construction on June 30, 2007
- Construction Completed in Fall 2009

I-95 Growth Patterns and Projections



I-95 Growth Trends

Users of I-95

- Daily Commuter
- Local Trips
- Regional/East Coast Movement
- Trucking Freight

I-95 Growth Trends

- MdTA is obligated to utilize the adopted Baltimore Metropolitan Council (BMC) regional traffic model.

I-95 Growth Trends

Average Daily Traffic (Prior to BRAC Allocation)				
	1990	2000	2005	2030
MD 43 to MD 152	120,000	160,000	165,000	230,000
MD 152 to MD 24	N/A	145,000	151,000	215,000
MD 24 to MD 543	72,000	114,000	120,000	180,000
MD 543 to MD 22	N/A	96,000	101,000	148,000
MD 22 to MD 155	62,000	83,000	89,000	131,000

I-95 Growth Trends

Forecasted Growth
from 2005 to 2030
(Prior to BRAC Allocation)

Section of I-95	Percentage Change
MD 43 to MD 152	40%
MD 152 to MD 24	42%
MD 24 to MD 543	50%
MD 543 to MD 22	47%
MD 22 to MD 155	47%

I-95 Growth Trends

BMC Model Input for Jobs* by BRAC				
County	Phase 1 2007-2011	Phase 2 2012-2015	Phase 3 2016-2020	Total
Baltimore	839	2,678	381	3,898
Cecil	375	1,297	930	2,602
Harford	9,590	1,898	1,224	12,712
Entire State of Maryland	19,273	20,893	5,066	45,232

*Jobs include Direct, Embedded, Indirect, Induced

I-95 Growth Trends

BMC Model Input for Households by BRAC

County	Phase 1 2007-2011	Phase 2 2012-2015	Phase 3 2016-2020	Total
Baltimore	410	3,243	0	3,653
Cecil	324	1,673	0	1,997
Harford	1,328	5,205	0	6,533
Entire Baltimore Region	3,525	21,787	0	25,312

I-95 Growth Trends

Preliminary **Average Daily Traffic Differences**
on I-95 Between
2035 Volumes with BRAC and
2035 Volumes without BRAC

MD 43 to MD 152	Minor Change
MD 152 to MD 24	Minor Change
MD 24 to MD 543	+ 10,000
MD 543 to MD 22	+ 20,000
MD 22 to MD 155	+ 15,000

I-95 Growth Trends

- While BRAC has a significant influence on the Baltimore/Harford/Cecil Region, the impact will be far greater on the local highways and roadways and less on I-95.

Criteria Utilized in Developing Concepts

- Traffic Operations and Safety
- Bicycle/Pedestrian Operations and Safety
- Engineering Regulations
- Resources

Traffic Operations and Safety

- Develop Peak Hour Traffic Volumes for ALL Movements
- Calculate Levels of Service
 - Merging and Diverging
 - Weaving
 - Signalized Intersections
 - Queueing
- Evaluate Crash Information

Bicycle/Pedestrian Operations and Safety

- Bicycles and Pedestrians are prohibited by law on I-95.
- Bicycle and Pedestrian access across I-95 is important as it may separate housing from employment centers.
- MdTA is working to ensure that bicycle and pedestrian access across I-95 at the interchanges as well as the overpasses will meet or exceed policies established in the Annotated Code of Maryland, American Disabilities Act guidelines, and AASHTO guidelines.

Bicycle and Pedestrian Operations and Safety

- Interchanges providing access across I-95 will provide:
 - 12' travel lanes
 - 8' shoulders
 - 5' sidewalks on both sides
 - Pedestrian/bicycle crossing improvements
 - Compact intersection designs
 - Signalization were feasible
 - Near minimum turning designs on ramps

- Proposed Overpass Features
 - 15' wide shared roadway lanes
 - 5' sidewalks on both sides

Bicycle Considerations at MD 24 Interchange



- Woodsdale Road Option
 - Shared use path between MD24 and Waldon Road
 - Shared roadway along Waldon Road
 - Requires 14' wide shared use bridge over I-95
 - Shoulder bike lanes on Woodsdale Road
 - Approx. 1500' longer than MD 24
- Winter's Run Option
 - Shoulder bike lane along MD 7
 - Shared use path between MD 7 and Tollgate Road
 - Crosses under I-95
 - Approx. 6500' longer than MD 24

Engineering Regulations

- Designs are predominantly based on AASHTO – A Policy on Geometric Design of Highways and Streets
 - These guidelines are intended to provide operational efficiency, comfort, safety and convenience for the motorist while considering impacts and costs.
 - Design guidance is provided for:
 - Lane And Shoulder Widths
 - Design Speeds Based On Facility Type
 - Roadway Curves And Grades
 - Entrance, Exit And Weave Lane Lengths
 - Sight Distances
 - Traffic Control – Signing, Pavement Markings & Signals
 - Bicycle And Pedestrian Accommodations

Resources

- Natural Environmental
- Historic/Archaeological
- Parks and Cultural Facilities
- Noise
- Air
- Properties and Buildings

Mainline Alternates and Interchange Options

- No-Build Alternate
- General Purpose Lane Alternate
- Express Toll Lane Alternate

MD 152 No Build Option



MD 152 Build Options

GPL Options

Option 1

Option 4

ETL Options

Option 1A

Option 4A

Option 4B

MD 152 GPL Option 1



MD 152 GPL Option 4



MD 152 ETL Option 1A



MD 152 ETL Option 4A



MD 152 ETL Option 4B



MD 24 No Build Option



MD 24 Build Options

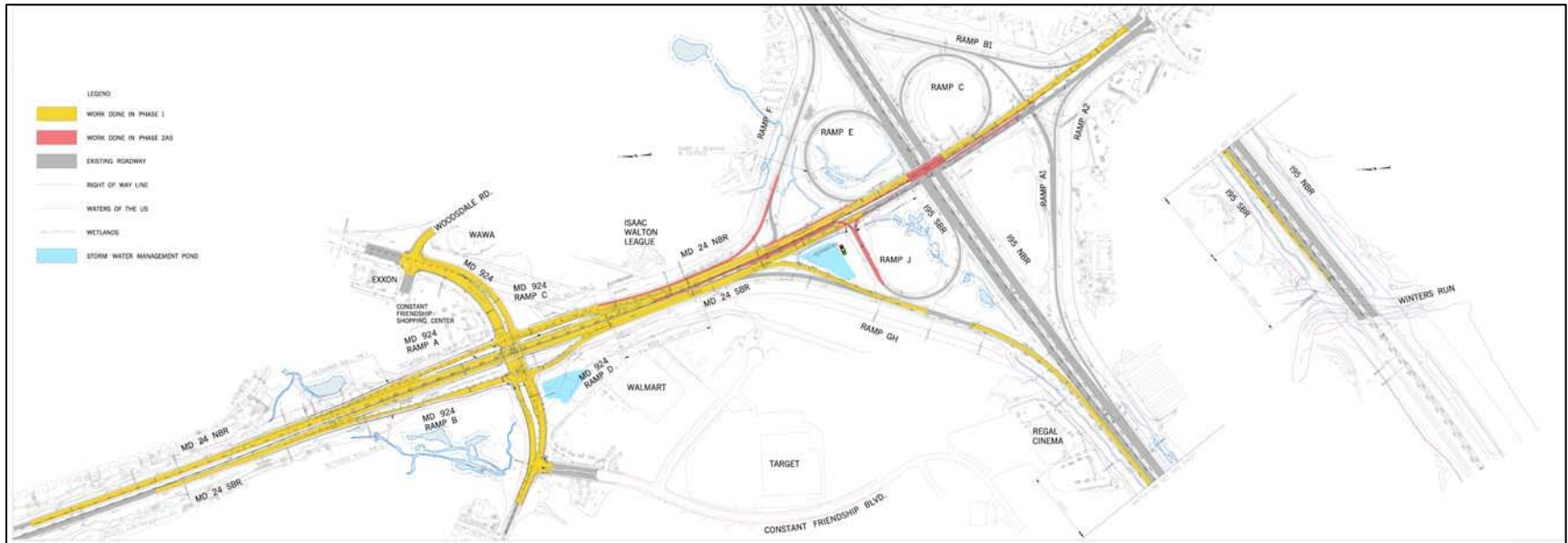
GPL Options

Option 2

ETL Options

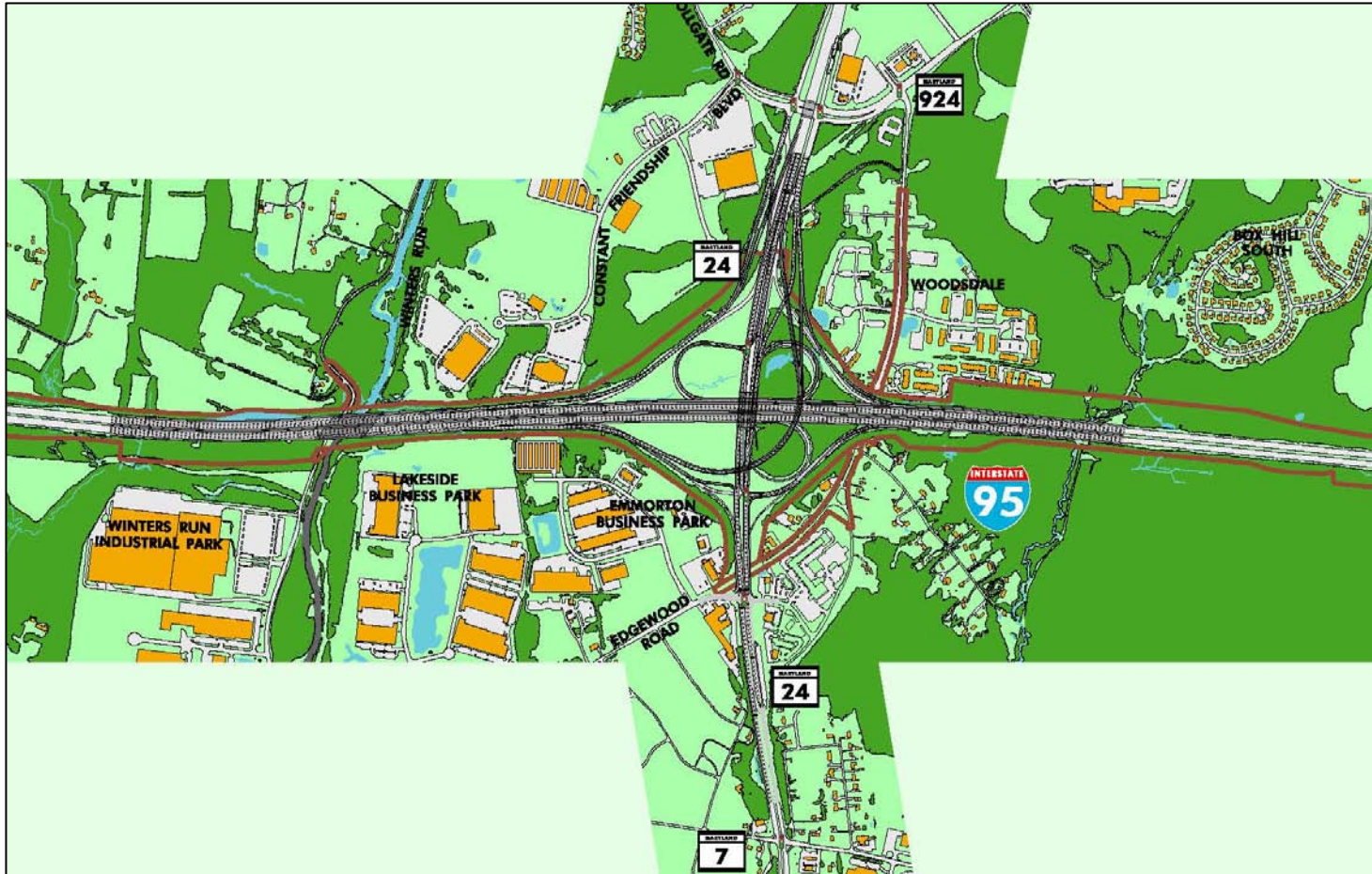
Option 2A

I-95/MD 24/MD 924 Improvements



- First Phase Toward Ultimate Section 200 Improvements
- Advertise for Bids in March 2007
- Notice to Proceed for Construction on June 30, 2007
- Construction Completed in Fall 2009

MD 24 GPL Option 2



MD 24 ETL Option 2A



MD 543 No Build Option



MD 543 Build Options

GPL Options

Option 1

Option 7

ETL Options

Option 6A

Option 7A

MD 543 GPL Option 1



MD 543 GPL Option 7



MD 543 ETL Option 6A



MD 543 ETL Option 7A



Maryland House Travel Plaza



MD 22 No Build Option



MD 22 GPL Option 1



Project Schedule

<input checked="" type="checkbox"/>	Agency Scoping Meeting	November 15, 2005
<input checked="" type="checkbox"/>	Environmental Data Collection	Winter 2005 to Fall 2006
<input checked="" type="checkbox"/>	Focus Group Meeting #1	April 5, 2006
<input checked="" type="checkbox"/>	Focus Group Meeting #2	May 24, 2006
<input checked="" type="checkbox"/>	Public Workshop	June 22, 2006
<input checked="" type="checkbox"/>	Focus Group Meeting #3	April 26, 2007
<input type="checkbox"/>	I-95 Open Houses	June 26 & 28, 2007
<input type="checkbox"/>	Final Technical Reports	Spring/Summer 2007
<input type="checkbox"/>	Alternates Retained for Detailed Study	Summer 2007
<input type="checkbox"/>	Public Hearing	Fall 2007
<input type="checkbox"/>	Final Environmental Document	Spring 2008
<input type="checkbox"/>	Final Decision Document	Fall 2008
<input type="checkbox"/>	Design/Construction	To Be Determined

June Open House

Dates: June 26th & 28th, 2007

Locations: Baltimore County: To Be Determined

Harford County: Old Post Road Elementary School

■ Information Presented During the Open House:

- I-95 Express Toll Lanes Construction
- I-95/MD 24/MD 924 Improvements Construction
- Section 200 Planning Study – Detailed Alternates
- Travel Plaza Improvements
(Maryland House and Chesapeake House)
- Hatem Bridge Redecking
- E-ZPass
- How Can You Stay Informed?

Section 200 Traffic Studies

- Safety Needs
- New Traffic Model
- 2000 Versus 2005
- 2025 Versus 2030



Section 200 Park & Ride Study

Purpose of Study:

- In association with the Section 200 planning study, the MdTA, in coordination with MTA & SHA, initiated a study to determine the needed improvements to the park & ride facilities serving the I-95 from MD 43 to MD 22. This study will:
 - Evaluate Existing Conditions & Usage Trends
 - Identify Needed Improvements
 - Identify Potential Sites/Property Search
 - Preliminary Site Layouts
 - Preliminary Cost

Section 200 Park & Ride Study

- Methodology
 - Long Range Plans (Including BRAC)
 - Associated Traffic Studies
 - Proposed Development
 - Trend Analysis for 10 Years
 - Existing Conditions
 - Inter-Modal Accommodations for Transit
 - Travel Demand

Section 200 Park & Ride Study

MD 43:

■ Findings

- No Impacts to Existing Site
- MTA Maintained Facility
- Available Spaces – 755
- Not at Full Capacity

Section 200 Park & Ride Study

MD 24:

■ Findings

- Desire to Maintain Existing Site to the South
- Develop a New Site to the North
- Desire for Transit Service
 - MTA's Top Priority
- Statistics:

	Existing Spaces	Spacing Goal
Current Site	53	53
New Northern Site	-	175-200

Section 200 Park & Ride Study

MD 543 & MD 22:

■ Findings

■ MD 543

- No Impacts to Existing Site
- Usage Trends:

Existing Spaces	2006 Utilization	Projected Utilization
133	9	27

■ MD 22

- No Impacts to Existing Site
- Usage Trends:

Existing Spaces	2006 Utilization	Projected Utilization
64	10	32

Police / EMS / Maintenance Access

- Identify Existing Coverage Limits
- Identify Access Modifications
 - All existing median openings will be closed
 - Barrier separated ETLs
- Identify Potential Access Points
 - Interchanges
 - Overpass Crossovers
 - Barrier openings
- Share Alternates with Responders

Overpass Crossovers



- Connect To Overpassing Roadway
- Allow Change In Direction Along I-95
- Provide Additional Point Of Access to I-95
- Automatic Gates Restrict Unauthorized Access
 - Card Or Siren Activated

Environmental Update

- Identification of Resources
 - Natural Environmental
 - Cultural and Historic
 - Social and Economic
 - Hazardous Materials
 - Noise and Air Quality
- Consideration during Alternates Analysis



Anticipated Construction Activities

- Pavement Resurfacing
- Full Depth Pavement Construction
- New Signing and Marking
- New Storm Drain Systems
- New Stormwater Management Facilities
- New Bridge Structures
- New Retaining Wall Structures
- New Interchange Lighting
- Utility Relocations



No-Build Alternate

Typical Roadway Section – New Forge Road to MD 24



Typical Roadway Section – MD 24 to MD 22



- 12' to 14' Shoulder
- General Purpose Lanes
- 2' to 100' Median

General Purpose Lane Alternate

Typical Roadway Section – New Forge Road to MD 24





Typical Roadway Section – MD 24 to MD 543



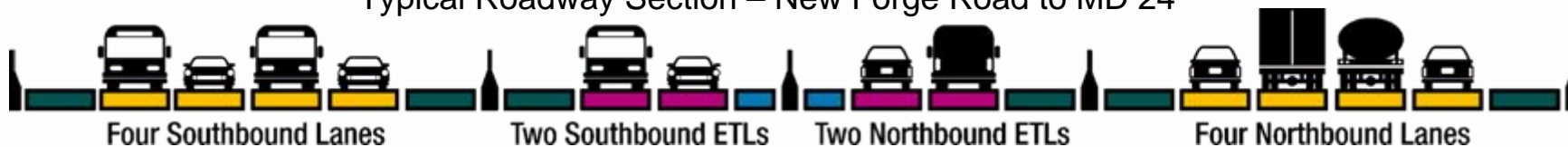
Typical Roadway Section – MD 543 to MD 22



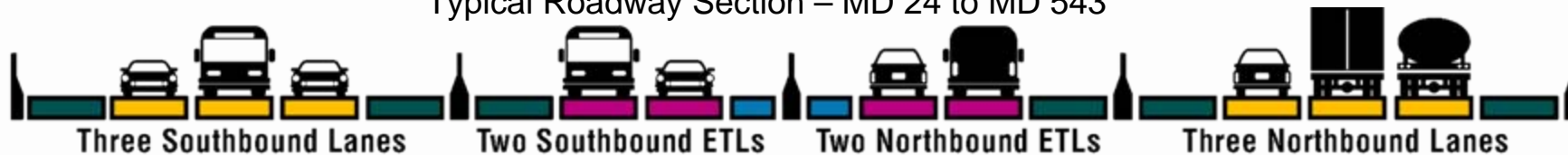
-  12' to 14' Shoulder
-  General Purpose Lanes

Express Toll Lanes Alternate

Typical Roadway Section – New Forge Road to MD 24







Typical Roadway Section – MD 24 to MD 543



Typical Roadway Section – MD 543 to MD 22



-  Express Toll Lanes
-  General Purpose Lanes
-  6' Shoulder
-  12' to 14' Shoulder