

### MidCounty Corridor Study Briefing

Department of Transportation

Division of Transportation Engineering





### History

1960s

Midcounty Highway (M-83) appears in the transportation master plan. Over the years, 3.1 mile section of

1980s

Maryland Route 355 Corridor Study concludes improvements to BOTH MD 355 and M-83 are required within the next 10-15 years to alleviate traffic congestion.

**Great Seneca** Highway (8.1 miles) from Middlebrook to Darnestown Roads is constructed.

2004

Midcounty Highway (M-83) Study is reinitiated,

roadway is built.

early 2000s

Transportation Policy Review Group considers M-83.

1994-2000

SHA upgrades MD 355 [MVA-Middlebrook Rd] from a 2 to 6 lane divided highway. M-83 is placed on hold.

1986-92

**Preliminary** Engineering is performed for Midcounty Highway Extended and rightof-way is dedicated.





### Purpose of the Study

- Initial M-83 (Midcounty Highway) alignment had significant wetland impacts
- County Council questioned if the project was permitable
- Federal Action (wetland permit) requires review of the project under the National Environmental Policy Act (NEPA)
- NEPA requires evaluation of alternatives





## Project History/Process

Task	Timeframe
Planning Study Initiated	2004
Project Scope Expanded – to meet NEPA requirements	2006
Purpose and Need	2007
Preliminary Engineering of Alternatives	2007-2010
Alternatives Retained for Detailed Study (ARDS) Approval	January 2011
Draft Environmental Effects Report (EER)	May 2013
Public Review of Draft EER	May-August 2013 We are here!





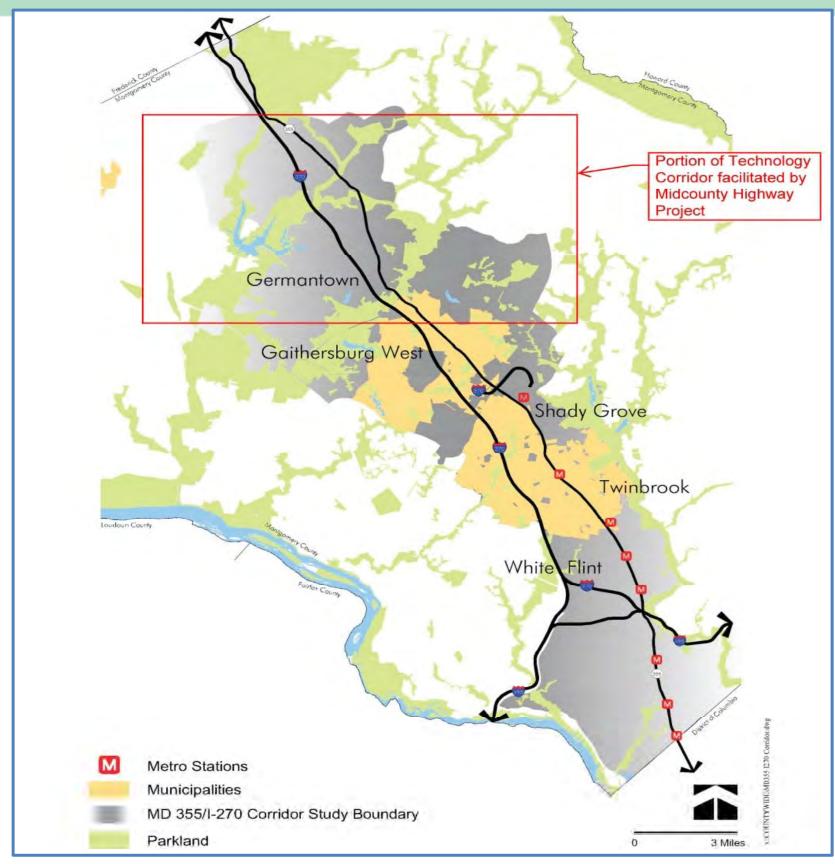
### Purpose and Need

- Reduce congestion
- Improve safety
- Improve connections between economic centers
- Accommodate future growth
- Provide bicycle and pedestrian connections
- Improve emergency response time
- Reduce commute time
- Implement in an environmentally sensitive manner



http://www.montgomerycountymd.gov/midcountycorridorstudy

### **Technology Corridor**







### Technology Corridor

### **Projected Growth in Montgomery County**

The Technology Corridor accounts for:

- 60% of the County's jobs,
- 73% of the County's industrial acreage,
- 81% of its office space,
- 56% of retail sales

The Technology Corridor will provide:

- 72% of the County's future housing growth and
- 83% of the County's future job growth

#### **Projected Growth in Study Area**

	2010 – 2040			
	Households	Jobs		
Clarksburg	9,811	16,465		
Germantown	9,291	29,349		
Gaithersburg	15,421	46,752		
Montgomery Village/Airpark	75	2,946		
Study Area Growth (% of total growth	34,598	95,512		
in Tech Corridor)*  *Projections from TPAR April, 2010	(43%)	(50%)		





### Development of Alternatives

- 11 preliminary alternatives were presented at a Dec 2007 public workshop
- 4 presentations were held for Montgomery Village Foundation and the Greater Goshen Civic Association
- Agency and public feedback was utilized to develop the six Alternatives Retained for Detailed Study (ARDS) in Jan 2011





# Alternatives Retained for Detailed Study

Alternative 1: No Build

**Alternative 2:** *Minor Intersection Improvements* 

Alternative 4 Brink-Wightman-Snouffer School-Muncaster

Modified: Mill Roads

Alternative 5: MD 355 Widening With Service Roads

Alternative 9: Master Plan Alternative

Alternative 8: Master Plan Truncated at Watkins Mill Road



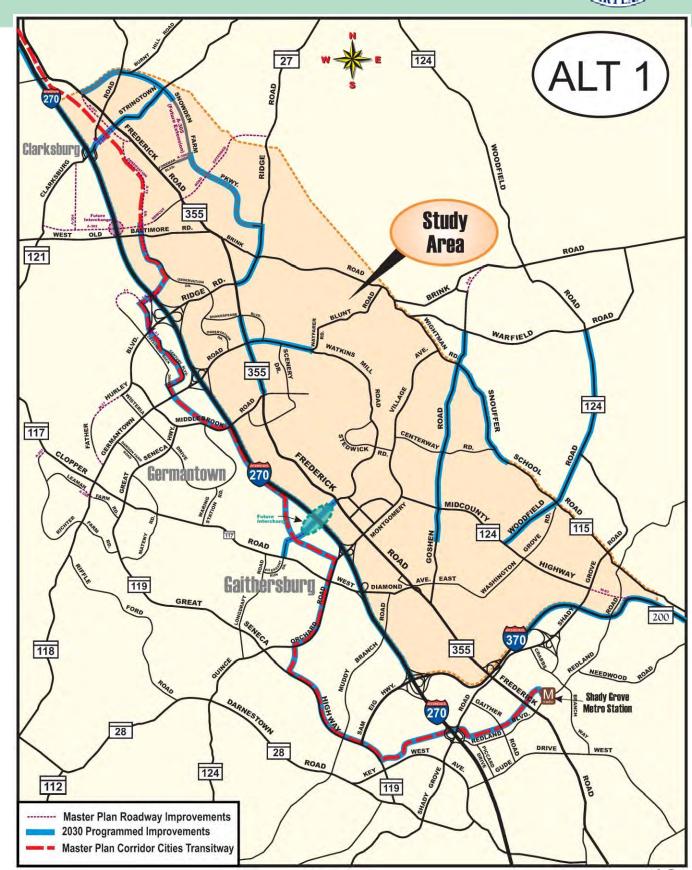




#### **Alternative 1: No Build**

#### **2030** *Traffic Projection:*

- Includes planned and programmed projects
- I-270 volumes increase 46%
- MD 355 volumes increase 40%
- 25% of the intersections in the study area will not meet the County's Congestion Standard
- MD 355 travel times increase 28-35%
- Does not meet purpose and need



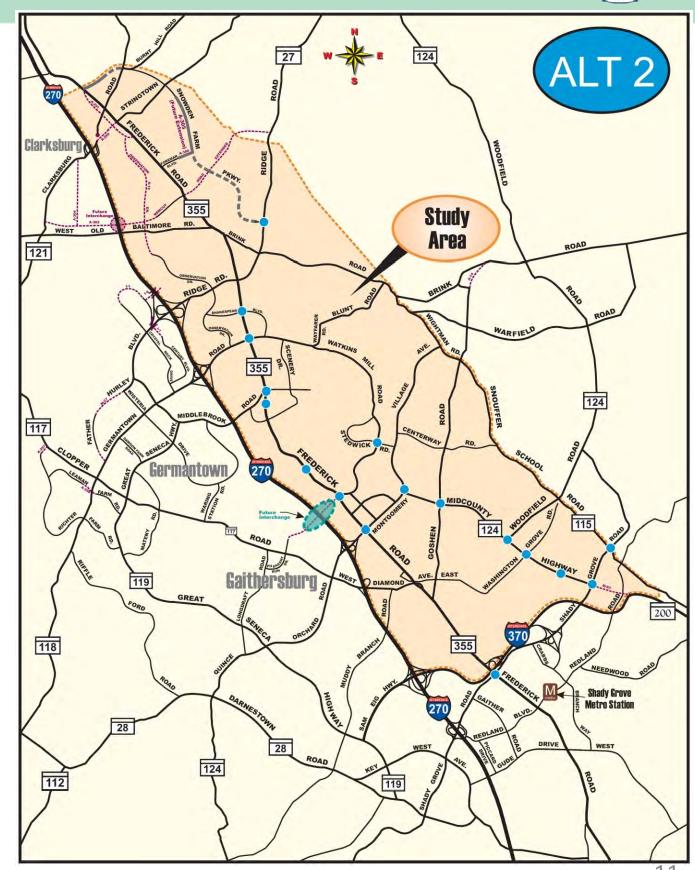


http://www.montgomerycountymd.gov/midcountycorridorstudy



## Alternative 2: Minor Intersection Improvements

- Quick Fix: focused on improving the 16 failing intersections, with no right-of-way acquisition
- Reduce congestion at 8 of the 16 intersections
- Does not meet other project needs; i.e. safety, connections between economic centers, planned growth, pedestrian/ bicycle improvements, emergency response, commuting time.
- No environmental impact
- No property impact
- Estimated Cost = \$41 M



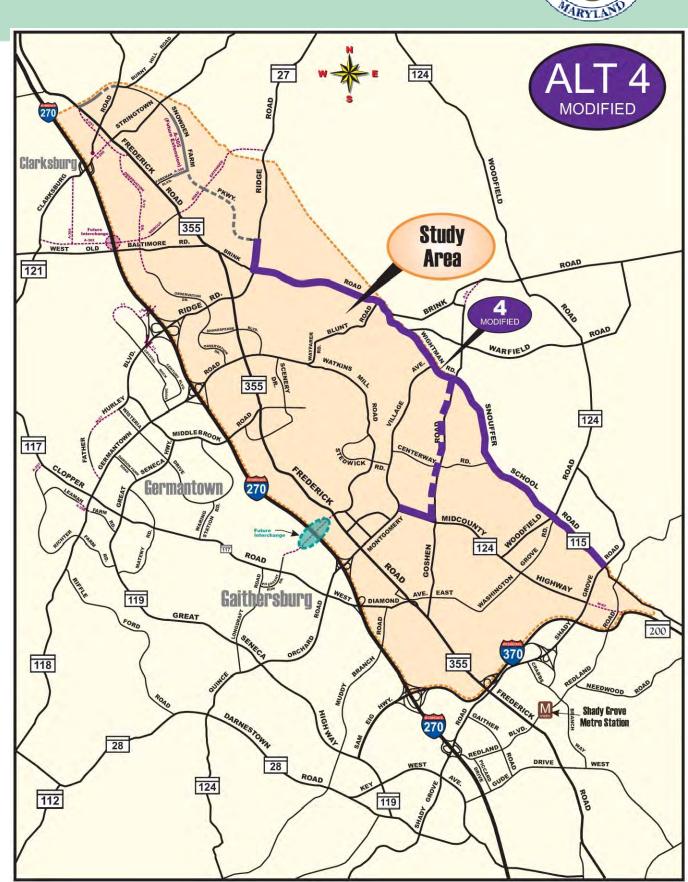


#### http://www.montgomerycountymd.gov/midcountycorridorstudy



### Alternative 4 Modified: Brink-Wightman-Snouffer School-Muncaster Mill Roads

- Greatest number failing intersections (16)
- 128 intersections and driveways slow travel time and increase potential for accidents
- Furthest from Technology Corridor
- Increases highway capacity but traffic volumes would double
- Significant bicycle and pedestrian improvements
- Changes character of existing corridor
- Greatest residential property impacts (242)
- Impacts 67 business properties
- Displaces 2 residential properties
- Highest noise impacts (417 residences)
- Greatest amount of piped stream (1,282 feet)
- Fewer impacts to wetland/forest/SPA than Alt. 8/9
- Impacts 19.4 acre of parkland
- Requires Master Plan Amendment
- Estimated cost = \$251 M



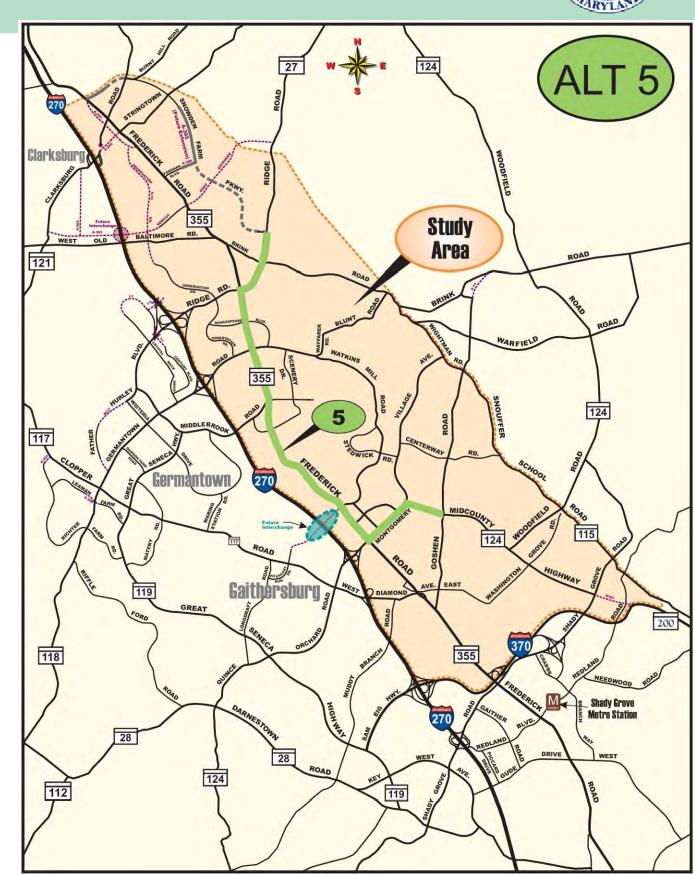


#### http://www.montgomerycountymd.gov/midcountycorridorstudy



### Alternative 5: MD 355 Widening With Service Roads

- Provides minor increase in highway capacity
- Reduces congestion and travel time along MD 355
- Service roads improve safety
- Reduces right-of-way available for planned Bus Rapid
   Transit
- Minor bicycle/ped improvements
- Impacts 92 residential properties
- Highest business property impacts (82)
- Displaces 3 businesses
- Increases noise impacts to 228 residences
- No wetland impact
- Fewer impacts to forest/SPA than Alt. 4/8/9
- Impacts 0.2 acres of parkland
- Require Master Plan Amendment
- Estimated cost = \$120 M



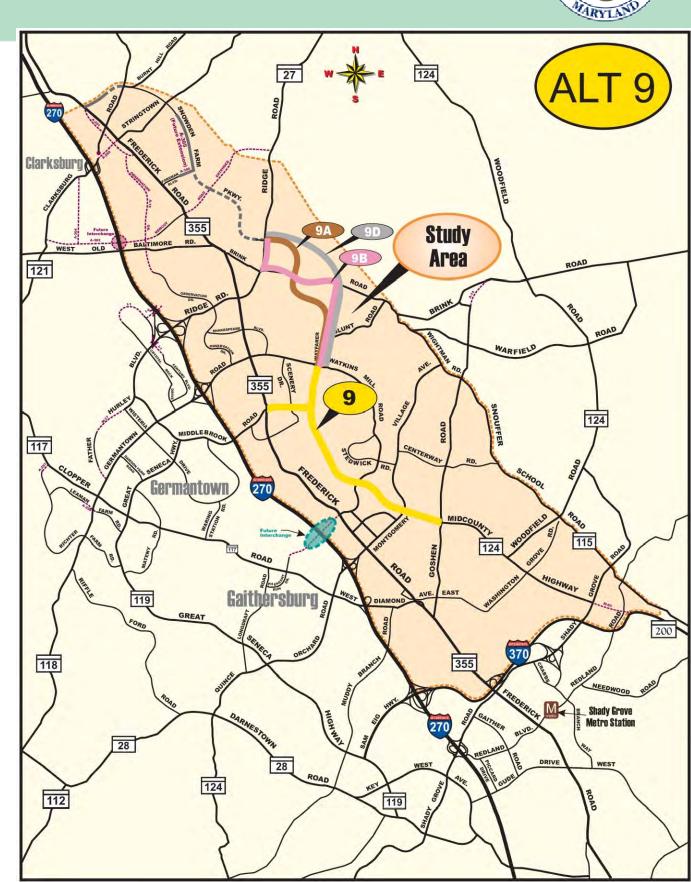


#### http://www.montgomerycountymd.gov/midcountycorridorstudy



#### Alternative 9: Master Plan

- Enhances highway grid to accommodate planned growth
- 40 % of traffic oriented to corridor cities
- Reduces congestion/traffic on MD 355
- Lowest projected accident rate
- Shortest travel times reduces travel time by half, compared to MD 355 under No Build scenario
- Provides superior access to Shady Grove Metro Station and the ICC, and supports express bus service
- Significant bicycle and pedestrian improvements –
   Connects to Seneca Creek Greenway Trail
- Impacts 125-149 residential & 14-16 business properties
- Increases noise impacts to 217-234 residences
- Option 9B & 9D requires one residential displacement and Master Plan amendment
- Wetland impacts less than one acre
- Greatest forest/SPA impacts
- Greatest parkland impacts (33-48 acres)
- Estimated cost = \$338 \$357M



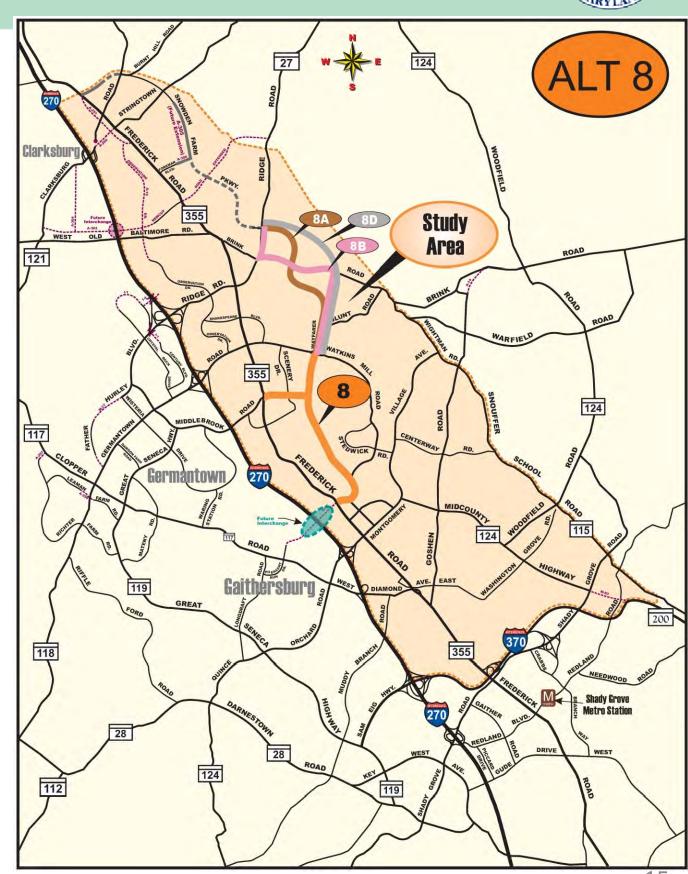


#### http://www.montgomerycountymd.gov/midcountycorridorstudy



## Alternative 8: Master Plan Truncated at Watkins Mill Road

- Enhances highway grid
- Gap in Midcounty Highway leaves 40 % more traffic on existing roads
- More traffic & congestion on MD 355 than under Alt 9
- No direct access to Shady Grove Metro and ICC.
- Improves pedestrian and bicycle access
- Impacts 96-120 residential & 15-17 business properties
- Increases noise impacts to 114-125 residences
- Option 8B & 8D requires one residential displacement and Master Plan amendment
- Wetland impacts less than one acre
- Fewer impacts to forest/SPA than Alt. 9
- Impacts 30-45 acres parkland
- Estimated cost = \$255 \$274 M







# Ability of Each Alternative to Satisfy the Purpose and Need

Duois et Nord	Alternative						
Project Need	Alt 2	Alt 4 Modified	Alt 5	Alt 8	Alt 9		
Reduce Congestion	High	Moderate	High	Moderate	High		
Improve Safety	Low	Moderate	Moderate	Moderate	High		
Connect Economic Centers	Low	Moderate	Moderate	High	High		
Planned Growth	Low	Moderate	Low	Moderate	High		
Bike and Pedestrian	Low	Moderate	Moderate	High	High		
Emergency Response	Low	High	Low	High	High		
Improve Commute Time	Moderate	Low	Moderate	Moderate	High		
Implement in an environmentally sensitive manner	High	Moderate	High	Low	Low		





## Impacts/Costs

	Alternatives Retained for Detailed Study									
Resource	<b>NI+ 1</b>	A   4   2	Alt 4 Modified	Alt 5	Alt 8			Alt 9		
	Alt 1	Alt 2			Α	В	D	Α	В	D
Wetland Fill	0 acre	0 acre	0.3 acre	0 acre	0.8 acre	0.8 acre	0.8 acre	0.9 acre	0.9 acre	0.9 acre
Forest Impacts	0 acre	0 acre	31 acres	2 acres	58 acres	53 acres	61 acres	73 acres	68 acres	77 acres
Parkland Impacts	0 acre	0 acre	19 acres	< 1 acre	45 acres	31 acres	30 acres	48 acres	34 acres	33 acres
Residences Relocated	0	0	2	0	0	1	1	0	1	1
Businesses Displaced	0	0	0	3	0	0	0	0	0	0
Properties Affected	0	0	353	180	131	157	133	161	187	163
Estimated Cost	\$0 M	\$41 M	\$251 M	\$120 M	\$274 M	\$255 M	\$267 M	\$357 M	\$338 M	\$350 M





### Summary

### Technology Corridor - the Economic Engine of Montgomery County

- Third largest biotech cluster in the nation
- By 2030, over half of the County's residents will live in the MD 355 / I-270
   Technology Corridor
- The study area will account for approx 50% of the Technology Corridor's projected growth

- Combination of transportation improvements to support planned growth:
  - Midcounty Highway
  - Corridor Cities Transitway
  - I-270 Improvements
  - Bus Rapid Transit on MD 355







### **Next Steps**

Task	Timeframe
USACE/MDE Joint Public Hearing	August 7, 2013
Obtain consensus on a Preferred Alternative	September 2013
Referral to County Council	October 2013
Additional Environmental Studies and Refinements of Preferred Alternative	Fall 2013/ Spring 2014
Final Environmental Document	Spring 2014
Agency Permitting	Summer 2014