

BEST TRANSPORTATION IMPROVEMENTS FOR MIDCOUNTY CORRIDOR AREA



2018

BEST TRANSPORTATION IMPROVEMENTS FOR MIDCOUNTY CORRIDOR AREA

TAME Coalition's 3-Part Series:

- The Case for Cancelling Midcounty Highway Extended (M-83) and Investing in More Effective and Sustainable Alternatives
- The Environmental and Economic Case for Removing Midcounty Highway Extended (M-83) from the Master Plan of Highways & Transitways
- Best Transportation Improvements for Midcounty Corridor Area

TAME COALITION'S RESEARCH: On Midcounty Corridor Study (MCS) Area

- 1. ROAD PROJECTS IN & AROUND MCS AREA:** We searched beyond MCS boundaries, & found transportation plans located in & around MCS area. Collectively they could provide significant traffic improvements for Upcounty area without needing a 9A road.
- 2. DRAFT ENVIRONMENTAL EFFECTS REPORT (DRAFT EER) & PREFERRED ALTERNATIVE CONCEPTUAL MITIGATION (PA/CM) REPORTS:** We attest to current data supporting Environmental Protection Agency's (EPA) criticism of Draft EER & PA/CM reports; which did not fully address potential for disproportionate effects on low income and/or minority populations in study area. Using geographic maps & recent demographic data, we were able to confirm EPA's concerns about Environmental, & Environmental Justice, inequalities of Alt 9A in Draft EER & PA/CM reports.
- 3. SUPPLEMENTAL REPORT:** We compared development costs for MCDOT's recent Study of Scenarios (with No Build). We showed each cost breakdown; **Scenario 1** - The combination of Alt 2 & 5 with transit (BRT on MD 355), **Scenario 2** - The combination of Alt 9 (2 lanes) with transit (BRT on MD 355) (3rd lane unknown cost) &, **Scenario 3** - The original Alt 9A Preferred (4 lanes) without BRT.
- 4. CONCLUSION: The best course of action has become clear with Scenario 1.** We identify the most affordable choice, that meets purpose & needs of the MCS study, LEDPA & Environmental Justice criteria.

BACKGROUND:

Action items and criteria for a wetland permit

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MCDOT'S DRAFT EER & PA/CM REPORTS:

They selected 5 Alternatives retained for detailed study (**ARDS**). MCDOT prepared PA/CM Report for the 9A Preferred application to USACE for a Permit *.

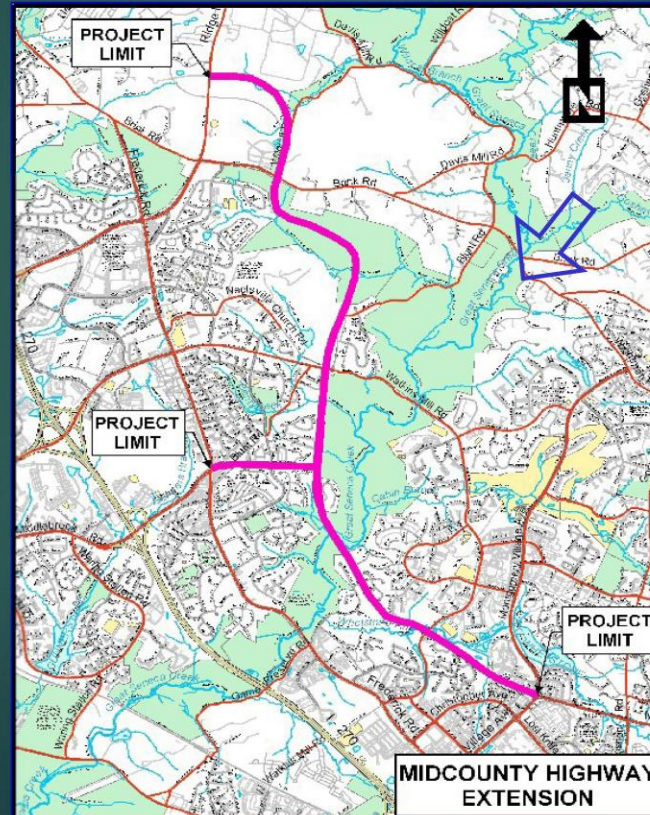
- ▶ **National Environmental Policy Act (NEPA):** NEPA Law compels Permitting Agencies to find the least environmentally damaging practicable alternative (LEDPA) as the choice for a given project & to avoid non-tidal wetlands. It also asks, "Federal actions to address Environmental Justice in minority populations & low-income populations" (EO 12898)
- ▶ **Maryland Non-tidal Wetlands Protection Act (MNWPA):** Oversees the Permit process for construction projects affecting non-tidal wetlands.
- ▶ **Primary Permitting Agencies:** US Army Corp of Engineers (**USACE**), US Environmental Protection Agency (**EPA**), & the Maryland Department of the Environment (**MDE**).
- ▶ **Permit Applicant:** Montgomery County Department of Transportation (**MCDOT**)

*Before any development of a road in non-tidal wetlands, as prescribed by Law, the applicant's project must meet Permit criteria with the Permitting Agencies.

GEOGRAPHY:

Scenario 2 is the Alt 9A route located through Great Seneca Creek Watershed (in green)

- **RECENT MCDOT MAP** of Midcounty Highway Extended – Alt 9A is a conceptual line in several MoCo Master Plans.
- **ROUTE** for M-83 was originally in the 1966 Germantown Master Plan. Its design was 8.7 miles. The remaining 9A Route will parallel and cross several Seneca Creek wetlands, streams, floodplains, forests, habitats & will negatively impact downstream



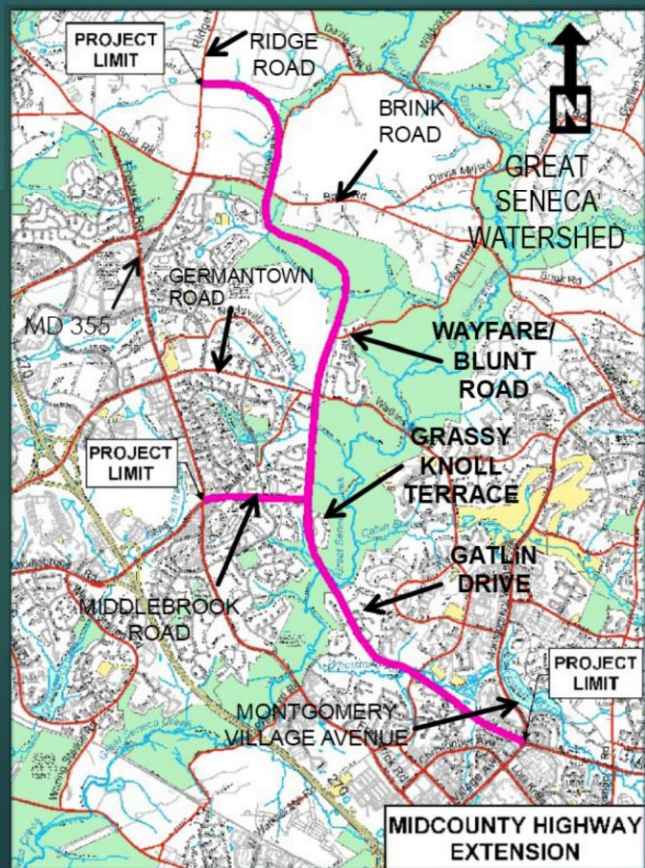
- **ENVIRONMENTAL IMPACTS** in Alt 9A have never met LEDPA criteria under NEPA
- **DRAFT PA/CM REPORT** shows Alt 9A alignment has extensive mitigation sites located upstream as park replacement, but insufficient plans downstream for storm water management.

GEOGRAPHY:

Scenario 2 will have 3-lane undivided sections for three 'Landlocked' Communities in MCS Supplemental Report

SCENARIO 2 therefore, becomes more complicated than a two lane undivided reversible Parkway on Alt 9A route

- It will have 3-lane undivided sections at Wayfarer/Blunt Road, Grassy Knoll Terrace & Gatlin Drive
- These 3-lane sections must maintain 2 way traffic at all times
- This greatly complicates driver judgments and concerns for safety



Missing details about 3rd lane accesses

- Size of 3rd lane footprint
- Effects on traffic flow past landlocked communities
- Lane change rules at 3rd lane sections
- How will residents cross the 2-lane Parkway to/from Landlocked Communities
- Neighborhood impacts

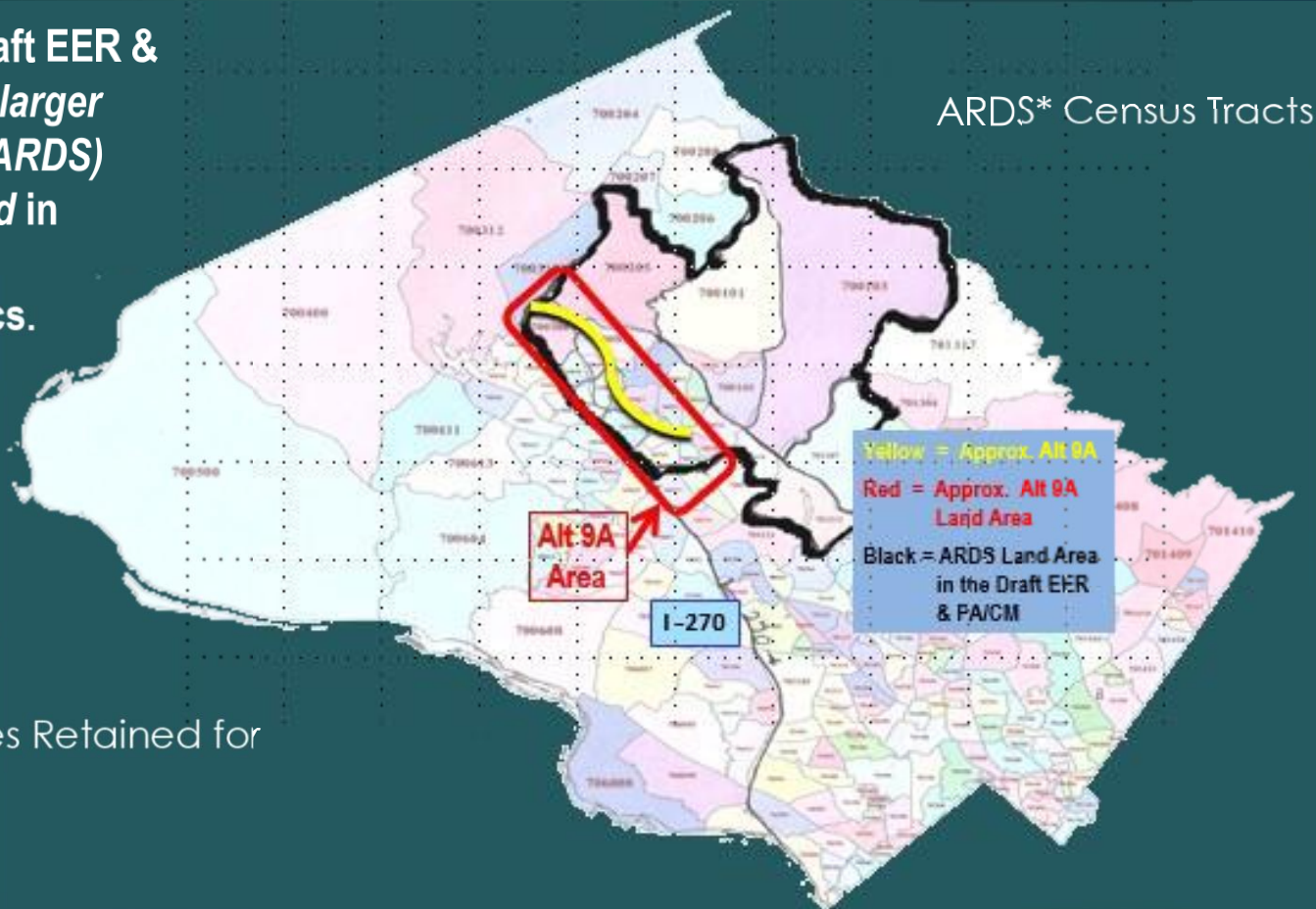
GEOGRAPHY: Actual land mass of Alt 9A Alignment

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When preparing Draft EER & PA/CM reports, *the larger geographic areas (ARDS) tracts were included in the evaluation for Alt 9A demographics.*

This distorts the effects of Alt 9A on communities living adjacent to the proposed road.

*ARDS: Alternatives Retained for Detailed Study



DEMOGRAPHICS:

EPA concerns about demographics In MCDOT reports

- **THE EPA IDENTIFIED CONCERNS:**

Response letters to MCDOT about Environmental Justice were not fully addressed to their satisfaction. Responses to reports show that:

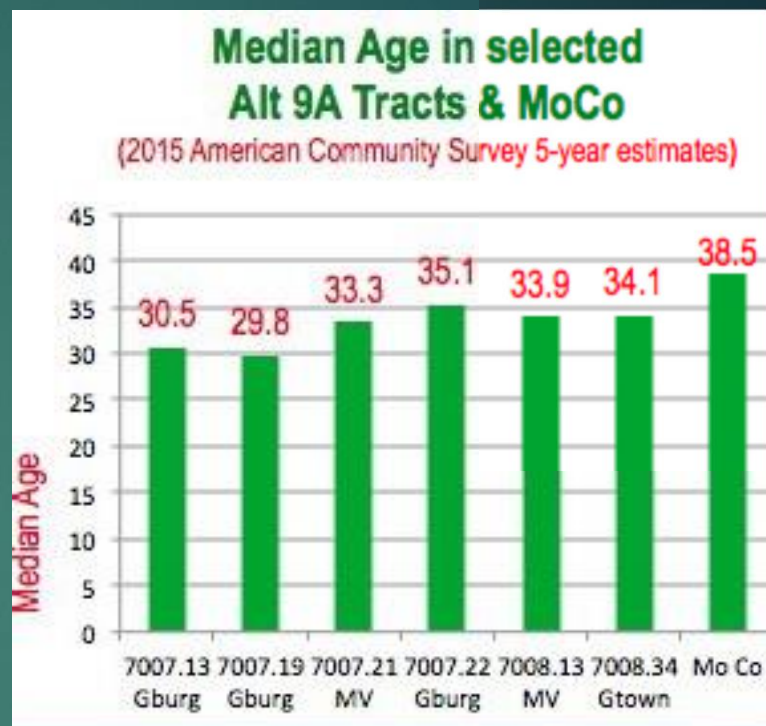
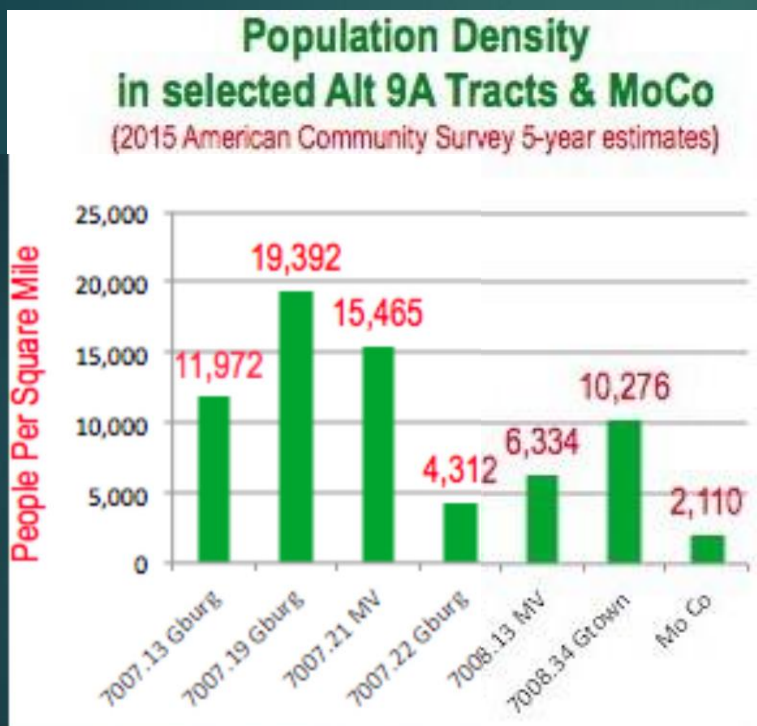
“...populations may not have been adequately categorized, additional documentation of impacts on populations of concern may be needed, and that there may be inputs to populations of concern.” (2013 Draft EER)

“EPA recommends that the Corps [USACE] conduct additional analysis on Potential for disproportionate effects on low income and/or minority populations in the Study as well as ensure meaningful engagement of affected communities.”

(2015 Draft PA/CM)

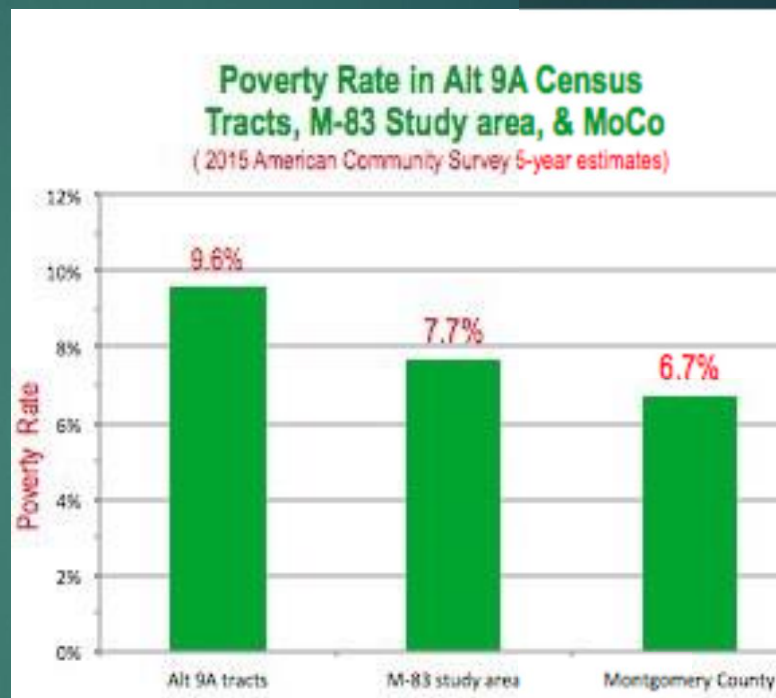
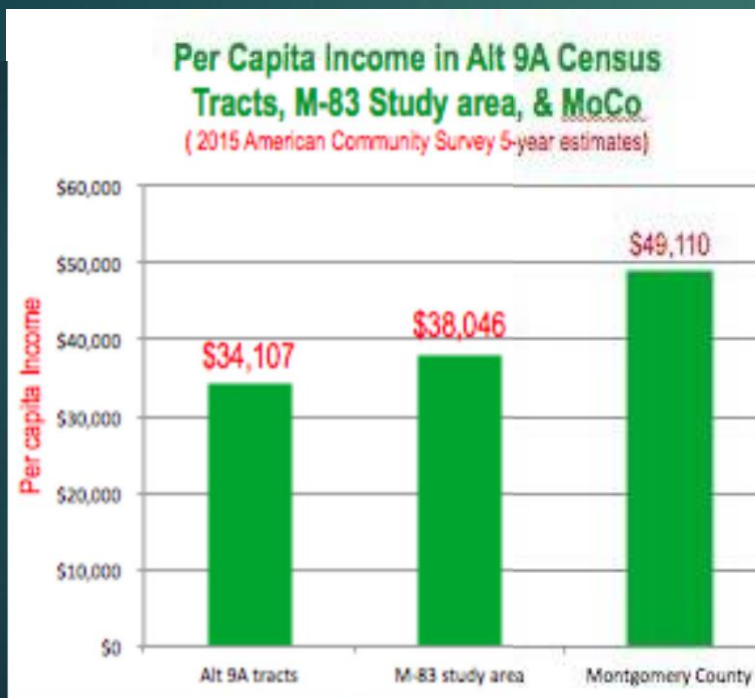
DEMOGRAPHICS:

Comparison of Census Tracts with Montgomery County;
Tracts within Alt 9A are more dense and younger



DEMOGRAPHICS:

Comparison of Census Tracts with Montgomery County;
Tracts within Alt 9A provides clear evidence that proposed
M-83 will impact low-income communities



DEMOGRAPHICS:

List of Census Tracts in above data for M83 study area (ARDS), and Alt 9A area

These are the census tracts in the M83 study area:

7001.01 Laytonsville	7007.22 Gaithersburg
7001.03 Laytonsville	7007.23 Gaithersburg
7001.04 Laytonsville	7008.10 Montgomery Village
7001.05 Gaithersburg	7008.11 Montgomery Village
7002.05 Clarksburg	7008.12 Montgomery Village
7003.04 Germantown	7008.13 Montgomery Village
7007.10 Redland	7008.30 Germantown
7007.13 Gaithersburg	7008.32 Germantown
7007.15 Gaithersburg	7008.33 Germantown
7007.16 Flower Hill	7008.34 Germantown
7007.19 Gaithersburg	7008.35 Germantown
7007.20 Gaithersburg	7012.12 Redland
7007.21 Gaithersburg	7013.07 Redland

These are census tracts in Alt 9A area selected from census tracts in the M83 study area:

7002.05 Clarksburg*	7007.13 Gaithersburg
7007.16 Flower Hill	7007.19 Gaithersburg
7007.21 Gaithersburg	7007.22 Gaithersburg
7008.12 Montgomery Village	7008.13 Montgomery Village
7008.33 Germantown	7008.34 Germantown
7008.35 Germantown	

*Census tract including Ag Reserve north of Clarksburg & north of Brink Rd., southern Damascus & Clarksburg Village/Aurora Hills (including Snowden Farm Pkwy west from Ridge Rd to Little Seneca Creek). 2020 Census will show update data.

MCS SUPPLEMENTAL REPORT: Estimated Costs of MCDOT's Three Scenarios**



Supplemental Report Cost Estimate	Scenario	Alt 2	Alt 5	Alt 9A	Mitigation	7 Grade Separated Intersections	BRT	Total
Alt 2 & 5 with BRT on 355*	1	0.041	0.120		0		0.475	636M
Modified Alt 9A with BRT on 355*	2			0.371	0.056	0.700	0.475	1.602B
Alt 9A only (No BRT, Alt 2 & 5)	3			0.371	0.056	0.700		1.127B

* BRT Alt 3B: New BRT service would be mostly on dedicated median lanes from Redgrave Place to Bethesda Station along MD 355.

**Estimated cost amounts taken from 2013 Draft EER Executive Summary and 'The Case for Cancelling the Mid-County Highway Extended. Mitigation costs estimated at 15% of Alt 9A.

MCS SUPPLEMENTAL REPORT: Economic Sustainability - Scenario 1

- ▶ The alternative with the lowest cost that meets the purpose and needs and is consistent with permitting criteria is the desirable one.
- ▶ ***The lowest cost Combined Alternative is Scenario 1***
 - ▶ Scenario 1 improves a major commercial corridor (MD355) with a transit component.
 - ▶ It improves intersections with a poor Level of Service (LOS)
 - ▶ It includes a TSM/TDM alternative that, when designed, maximizes the efficiency of the existing transportation system by improving on the capacity of the local street network.
- ▶ The Supplemental Report included additional projects funded in the CIP that separately provide significant traffic improvements.

MCS SUPPLEMENTAL REPORT: Cost Difference

- ▶ The cost difference between Scenario 2 and Scenario 1 is approximately \$966M.
- ▶ Assuming all the difference were debt financed, we'd then have to add about 10% (\$96M) to the county's annual debt payments.
- ▶ Scenario 1 gives much more programmatic flexibility to budgeting processes in the out years.

SCENARIO 1: MCDOT Supplemental Report Overview

1. **Lowest VMT**
(vehicle miles traveled)
2. **Highest percentage of people in transit vehicles**
3. **Shortest travel**
AM and PM peak hour travel time on MD 355
4. **Fewest number of intersection delays at AM & PM peak hrs**

Criterion	No build	Scenario 1: BRT & Intersection Projects (Alt 2 &5)	Scenario 2: BRT & 2-lane on M-83 for Alt 9A	Scenario 3: (No BRT) 4-lane on M-83 for Alt 9A
VMT (million vehicle-miles)	118	115	143	149
% in transit vehicles	9.9%	22%	18.8%	8.6%
AM peak hour minutes per mile on 355	3.3	2.3	3.1	3.3
PM peak hour minutes per mile on 355	3.8	2.7	3.8	4.2
AM peak hour number of intersections with delay of >80 seconds per vehicle	8	5	8	6
PM peak hour number of intersections with delay of >80 seconds/ vehicle	7	3	15	5

Table "MD 355 Vehicle-Miles Traveled and Person-Throughput" released later to support "MCS Suppl. Rept. Feb 10, 2017" shows that either person throughputs for No-Build and Scenario 3 are too high or those for Scenarios 1 and 2 are too low. Either old estimates with different assumptions were brought forward from previous studies of No-Build and Scenario 3 or BRT was not correctly analyzed. Other incompatibilities of No-Build and Scenario 3 vs Scenarios 1 and 2 are also noticeable.

SCENARIO 1: Underestimating the Benefits of Alternatives 2 & 5 and Overestimating the Cost

ALTERNATIVE 2

Transportation Systems Management & Travel Demand Management (TSM/TDM)

The 2017 MCS Supplemental Report says that this Alternative consists only of intersection improvements. We question the absence of TSM/TDM.

ALTERNATIVE 5

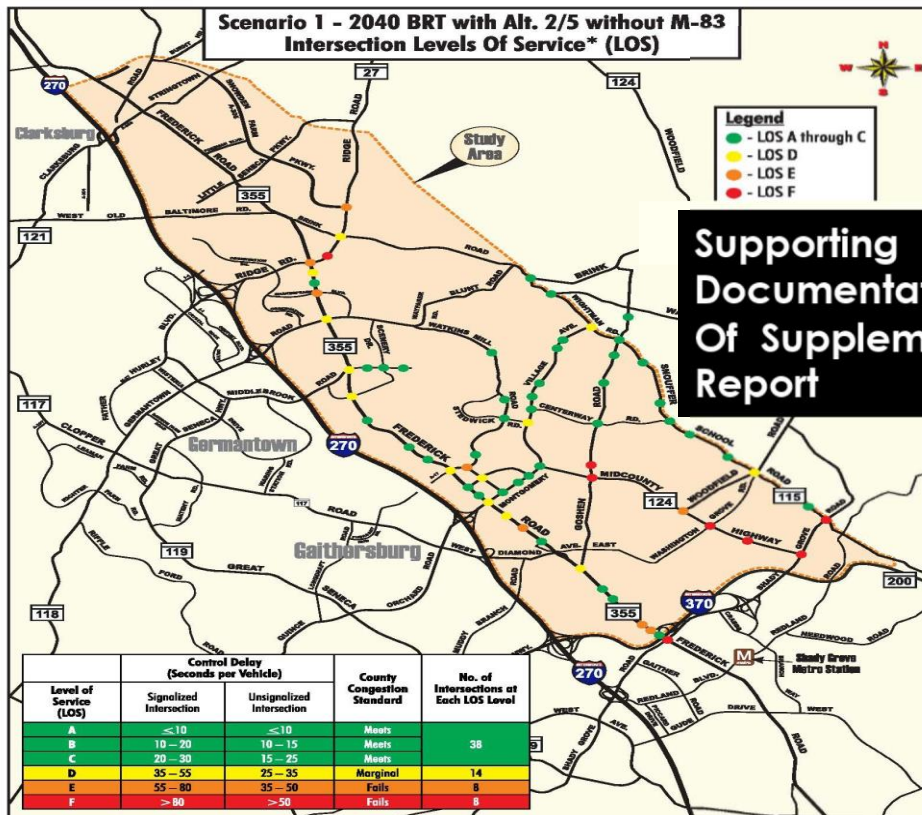
Improvements to MD 355 and nearby roads

Widens to six lanes parts of Ridge Road & MD 355. MCDOT proposes more service roads than are needed along MD 355 according to the EPA and others.

MCDOT also proposes to widen Midcounty Highway from MV Avenue to Goshen Road, but not for Scenario 2. Why?

SCENARIO 1: Intersection Level of Service (LOS)

- LOS *only* measures VEHICLE delay
- LOS measures a bus carrying 80 people as equal to a car carrying one person
- LOS, by itself, fails to address the number of **PEOPLE** vs the number of **VEHICLES**
- Still, *Scenario 1* moves *more people* and has the *best Level of Service* compared to *Scenarios 2* or *3*



SCENARIO 1: Meets the Purpose & Needs

- Accommodates planned land use & future growth in area master plans of Clarksburg, Gaithersburg, Germantown & Montgomery Village
- Reduces traffic congestion at area intersections
- Best level of service for roadway intersections
- Provides upgraded signalization for travel safety
- Construction of future intersection improvements & MD 355 transit must conform to new County's Bicycle & Pedestrian Master Plan
- In addition to modern north-south transit, it creates improved intersections for existing east-west roadways
- Enhances homeland security within study area by improved mobility
- Enriches quality of life in study area by reducing travel times & congestion

CONCLUSION:

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- ▶ There are many transportation project plans located in & around Midcounty Corridor Study area that collectively could provide significant traffic improvements for the upcounty area without needing to build 9A.
- ▶ EPA's criticism of Draft EER & PA/CM reports pointed to (geographic) discrepancies, with its environmental & demographic data. Our evaluation on Alt 9A with updated demographics, informs County leadership about the dense population, minority & low income community that resides in Alt 9A area. Permitting requires both wetland & environmental justice discrepancies in these reports to be answered in the Permit process.
- ▶ Research from Supplemental Report found a logical choice in Scenario 1. It includes Transit (BRT on MD 355), Modified Alt 5 (widens MD 355, etc.) and Alt 2, intersection improvements (TSM/TDM?).
- ▶ Scenario 1 provides economic sustainability. Scenario 1 is the most affordable and the least environmentally destructive alternative and achieves high quality transportation for all communities in the Midcounty Corridor Study.

REFERENCE SITES:

1. <http://www.montgomerycountymd.gov/corridor/index.html>
2. <https://www.epa.gov/nepa>
3. Transportation Projects TAME compiled list of twenty-two MoCo Highway, Road and Transit Improvements from the start of Mid-County Corridor Study in 2002. CIP Projects List referenced in MCDOT's response to Edna Miller's August 2016 request of CIP Transportation Project Items (*Letter dated 9-6-16 from Andrew Bossi, Senior Engineer, Director's Office*)
4. www.usboundary.com. www.census.gov/programs-surveys/acs <https://www.census.gov/en.html>
5. <https://www.census.gov/programs-surveys/acs>
6. www.montgomeryplanningboard.org/agenda/.../ITEM9FinalStaffReport_111413.pdf
7. [www.montgomerycountymd.gov/BRT/Resources/Files/MD/Handout_Final\(1\).pdf](http://www.montgomerycountymd.gov/BRT/Resources/Files/MD/Handout_Final(1).pdf)
8. [www.montgomerycountymd.gov/corridor.Resources/Files/pdf/May2013_DraftEER](http://www.montgomerycountymd.gov/corridor/Resources/Files/pdf/May2013_DraftEER)
9. 'The Case for Cancelling the Mid County Highway Extended' CSC & TAME
10. Master Plan History of M-83 ITEM9 Attachment A.pdf
ITEM9FinalStaffReport_111413.pdf
11. <https://montgomerycountymd.budget.socrata.com/#!/year/2017/operating/0/service/Community+Development+and+Housing/0/departement/Housing+and+Community+Affairs/0/program?vis=barChart>
12. <http://www.montgomeryschoolsmd.org/budget-101/index.html>