

MI-270/US 15 **Issue No. 5 SPRING 2000** Multi-Modal Corridor Study

Shady Grove Metrorail Station to Biggs Ford Road

Greetings

Greetings from the I-270/US 15 Multi-Modal Corridor Project Team! Thank you for your interest and involvement in this comprehensive multi-modal planning study. The purpose of this newsletter is to inform you of the recent project development activities.

WHO: The I-270/US 15 Multi-Modal Corridor Study was initiated as a jointly sponsored project between the State Highway Administration (SHA) and the Mass Transit Administration (MTA).

WHAT: The Project Team, which consists of a multi-jurisdictional team of federal, state and local governmental agencies, has been evaluating several transportation strategies and alternates to relieve current and projected congestion and improve safety conditions along the I-270/US 15 Corridor.

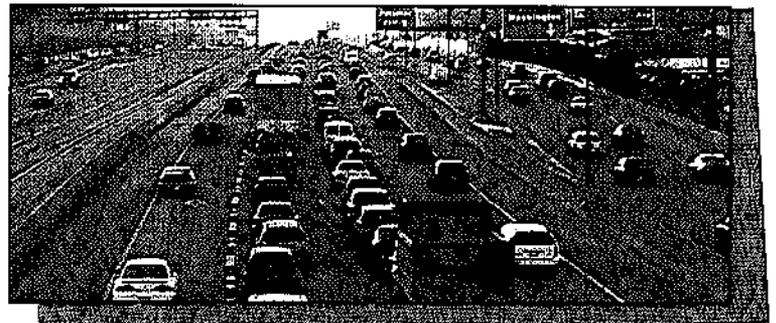
WHERE: Extending from the Shady Grove Metrorail Station to the US 15/Biggs Ford Road intersection, this "Technology Corridor" provides a critical link between the Washington, D.C. metropolitan area and both central and western Maryland, and is an essential corridor for carrying local and long distance trips, both within and beyond the Corridor.

WHY: If nothing is done, transportation congestion, traffic operations and safety conditions will worsen significantly with many roadways and intersections being forced to handle more volume than the current capacity allows, thus significantly increasing travel times.

WHEN: See I-270/US 15 Planning Process (page 7)

Traffic & Travel Demand

Updated traffic counts were collected in 1998 and are being used as base conditions, (continued on page 2)



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Table 1: Average Daily Traffic (ADT) Volumes & Peak Period Levels of Service (Baseline Alternate)

Location	1998 ADT Volumes	2020 ADT Volumes	% Growth	Peak Period LOS (Mainline Lanes)	
				1998 AM/PM	2020 AM/PM
I-270 between Shady Grove Road and I-370	174,700	251,900	44%	TBD	TBD
I-270 between MD 124 and Middlebrook Road	119,600	218,700	83%	E/E	F/F
I-270 between MD 118 and Father Hurley Boulevard	83,100	144,600	74%	D/E	E/E
I-270 between the County Line and MD 80	68,350	93,900	37%	F/F	F/F
I-270 between MD 80 and MD 85	71,250	103,700	46%	F/F	F/F
US 15 between Opossumtown Pike and MD 26	68,700	89,400	30%	E/E	E/F
US 15 between Hayward Road and Biggs Ford Road	35,700	44,300	24%	C/C	C/C

(Traffic from page 1)
 as shown for some segments along I-270 and US 15 (Table 1). The 1998 existing average daily traffic (ADT) volumes along the I-270/US 15 Corridor vary greatly depending upon location, with traffic volumes generally increasing approaching Washington, D.C. In addition, peak hour Levels of Service (LOS) show many links within the Corridor failing.

Level of Service is a measure of traffic operations during a peak travel hour, and is designated using a grading system. LOS "A" indicates free flowing traffic, while "F" indicates failure characterized by bumper-to-bumper congestion and delays. Generally, LOS "D" is regarded as the lowest acceptable operating condition.

Traffic conditions are projected for the design year of 2020, using the regionally adopted (Metropolitan Washington Council of Governments) model with the adopted land use from local master plans. Significant population and employment growth within the Corridor is expected through the year 2020.

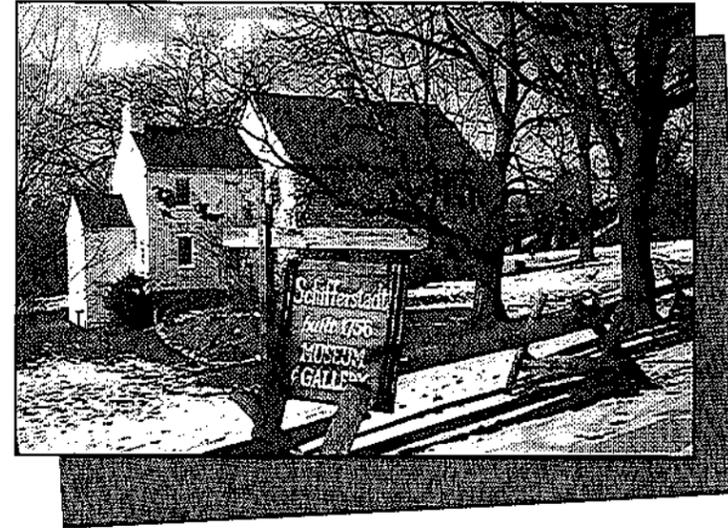
This growth will create travel demand exceeding what the existing transportation system can handle, resulting in increased congestion, travel times and accidents.

The Project Team is involved in evaluating the detailed travel demand runs for each of the Combination Alternates. A preliminary quality review has raised some questions that may lead us to change some of the network assumptions. We look forward to sharing the results of the travel demand analyses at the next Informational Public Workshop, tentatively scheduled for Fall, 2000.

Alternates Retained For Detailed Study

The study has concluded that no single stand-alone transportation strategy would solve the transportation needs in the Corridor. Therefore, several of the trans-

portation strategies were packaged together into Combination Alternates. Seven alternates have been approved by the federal and state regulatory



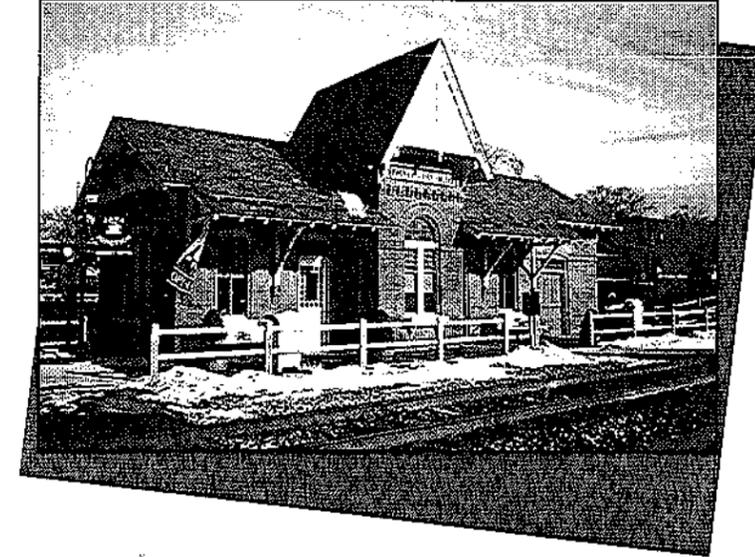
agencies for further, detailed travel demand, engineering and environmental evaluation.

All build alternates (Combination Alternates A, B, C) include Transportation System Management and Transportation Demand Management (TSM/TDM) strategies, interchange improvements, widening structures to accommodate any highway or transit widening and new interchanges at US 15/Biggs Ford Road, US 15/Trading Lane, I-270/MD 85 (improved), I-270/MD 75 Extended, I-270/Newcut Road, and I-270/Watkins Mill Road Extended (part of a separate planning study).

New Strategies Studied

Based on interest from the general public, the Focus Group and Project Team representatives, two new components have been incorporated into this study.

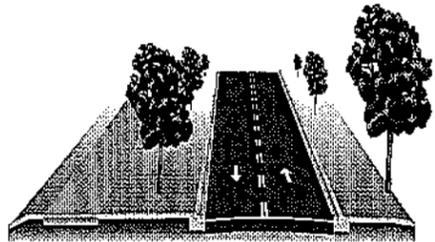
The first new component includes the evaluation of a Bus Rapid Transit (BRT) mode along the Corridor Cities Transitway (CCT). Bus Rapid Transit is a busway that provides an integrated bus system with significantly faster speeds, improved reliability and increased convenience. This can be accomplished through an exclusive bus alignment, traffic signal preferences, shorter passenger stops (speedy fare collection and/or no steps for boarding), special infrastructure (stations similar to light rail stations), integrated bus services and transit oriented land use already being developed by the local jurisdictions for all CCT transit modes. The second new component includes the evaluation of High Occupancy Toll (HOT) lanes. HOT lanes are lanes reserved for



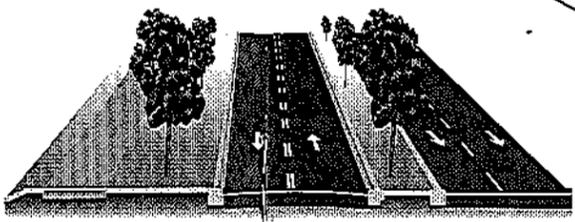
high occupancy vehicles, generally at no cost, while low occupancy vehicles would be able to use these restricted lanes for a fee. The goal of an HOT lane is to more efficiently manage the available capacity of the HOV lanes during the peak commuting periods.

(continued on page 6)

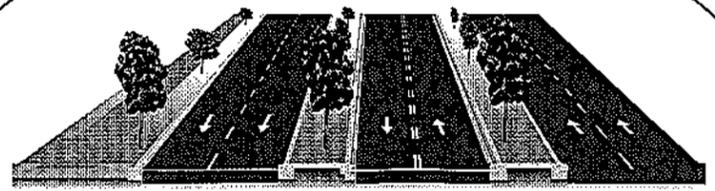
I-270/US 15 Multi-Modal Corridor Study Combination Alternates - Transitway Options COMSAT to Shady Grove Metro Station



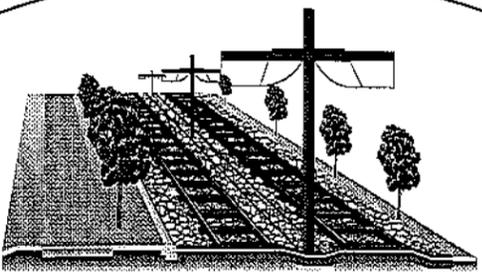
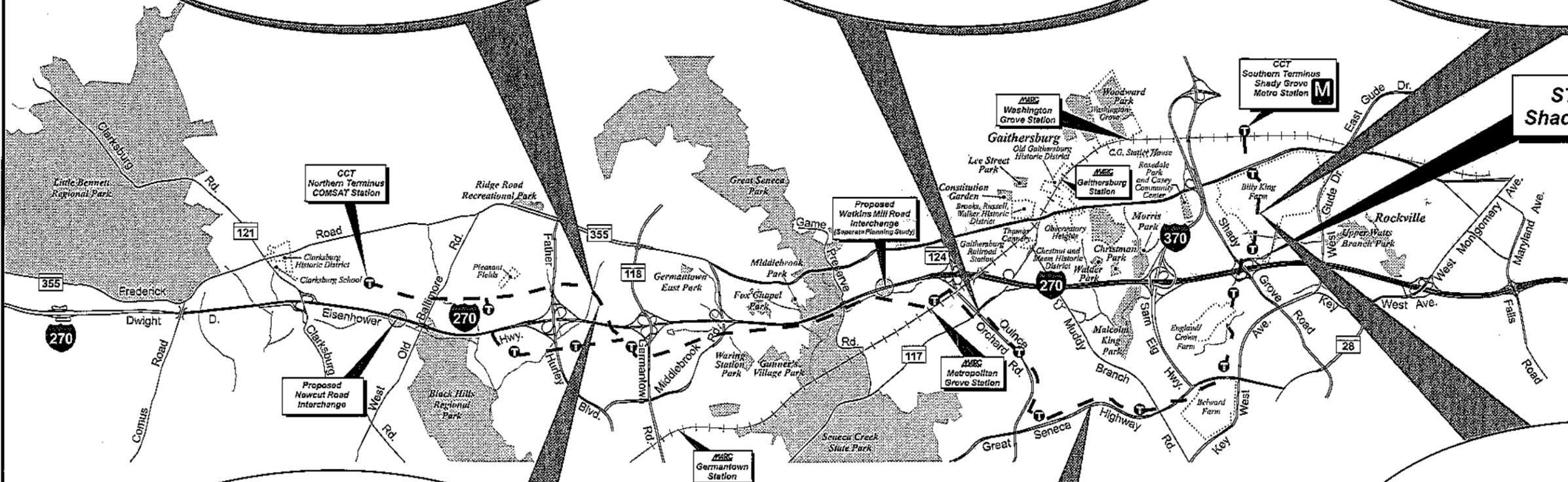
Combination Alternates A & C
Bus Rapid Transitway on New Location
COMSAT to Shady Grove Metro Station



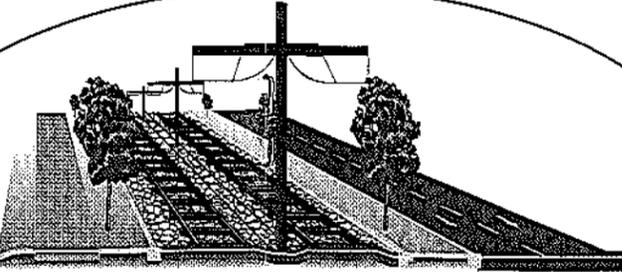
Combination Alternates A & C
Bus Rapid Transitway Adjacent to Existing Roadway
COMSAT to Shady Grove Metro Station



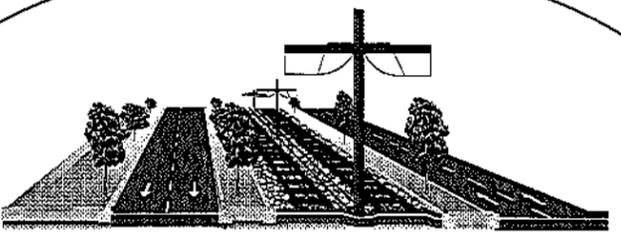
Combination Alternates A & C
Bus Rapid Transitway in Median
COMSAT to Shady Grove Metro Station



Combination Alternates A & C
Light Rail Transitway on New Location
COMSAT to Shady Grove Metro Station

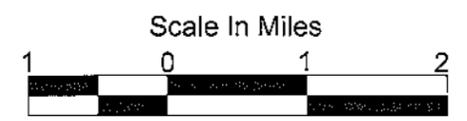


Combination Alternates A & C
Light Rail Transitway Adjacent to Existing Roadway
COMSAT to Shady Grove Metro Station



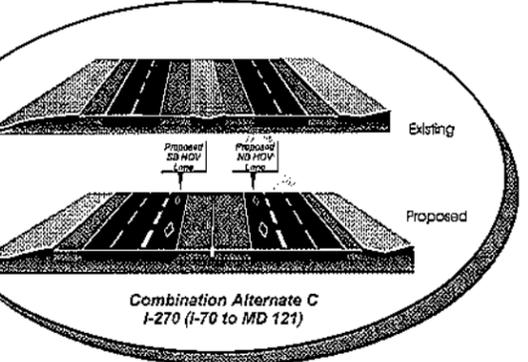
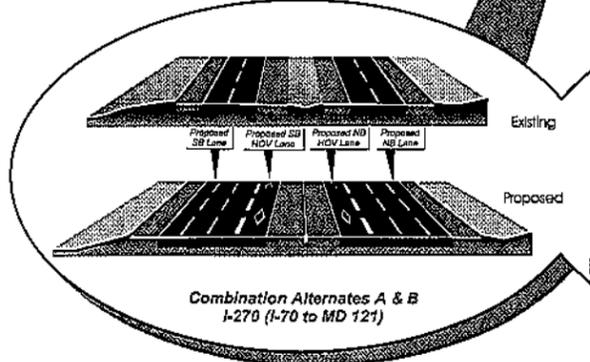
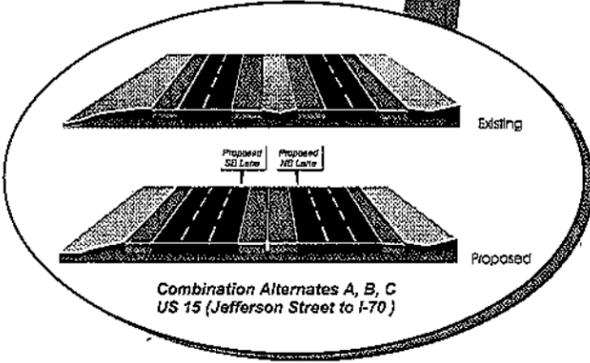
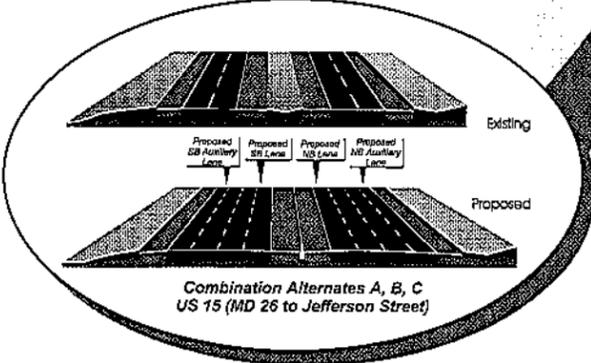
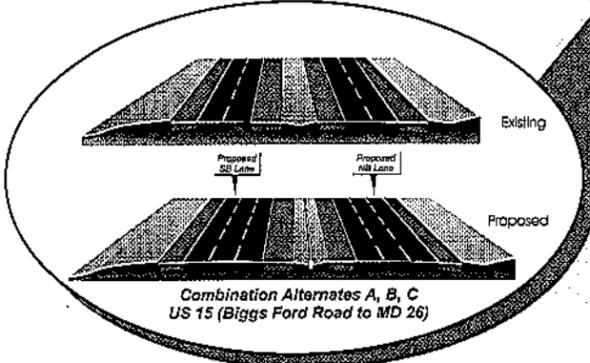
Combination Alternates A & C
Light Rail Transitway in Median
COMSAT to Shady Grove Metro Station

Note: Transit improvements consist of the Corridor Cities Transitway (CCT) from the Shady Grove Metro Station to COMSAT as a separate alignment for a busway or light rail transit system. Both the light rail transit (LRT) and bus rapid transit (BRT) modes are being evaluated as part of the CCT Alignment.



I-270/US 15 Multi-Modal Corridor Study Combination Alternates - Highway Options Biggs Ford Road to Shady Grove Road

STUDY LIMIT
Biggs Ford Road



Proposed Biggs Ford Road Interchange

Proposed Trading Lane Interchange

Proposed MD 26 Interchange Improvements

Proposed Frederick Rail Station (Future)

Proposed Monocacy Rail Station (Future)

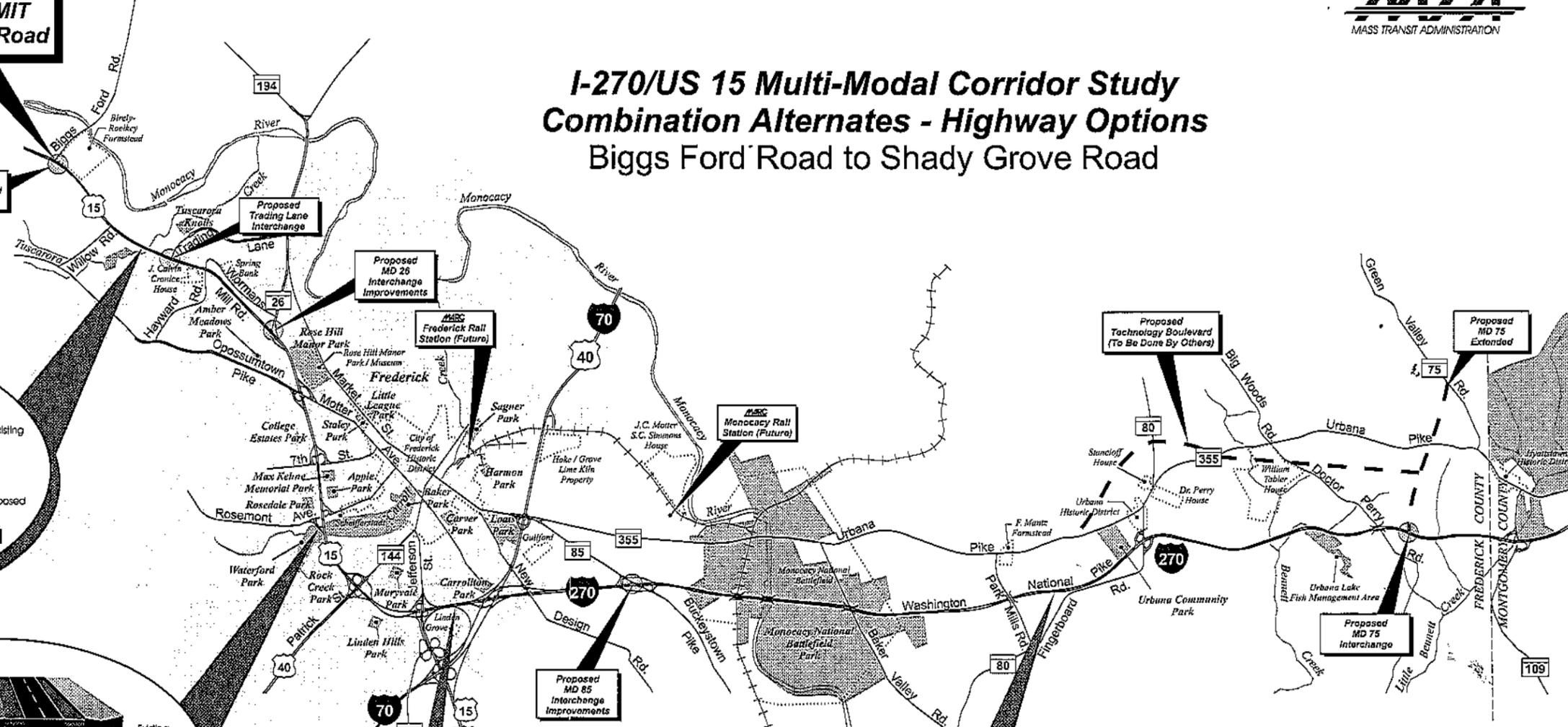
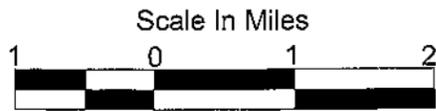
Proposed MD 85 Interchange Improvements

Proposed Technology Boulevard (To Be Done By Others)

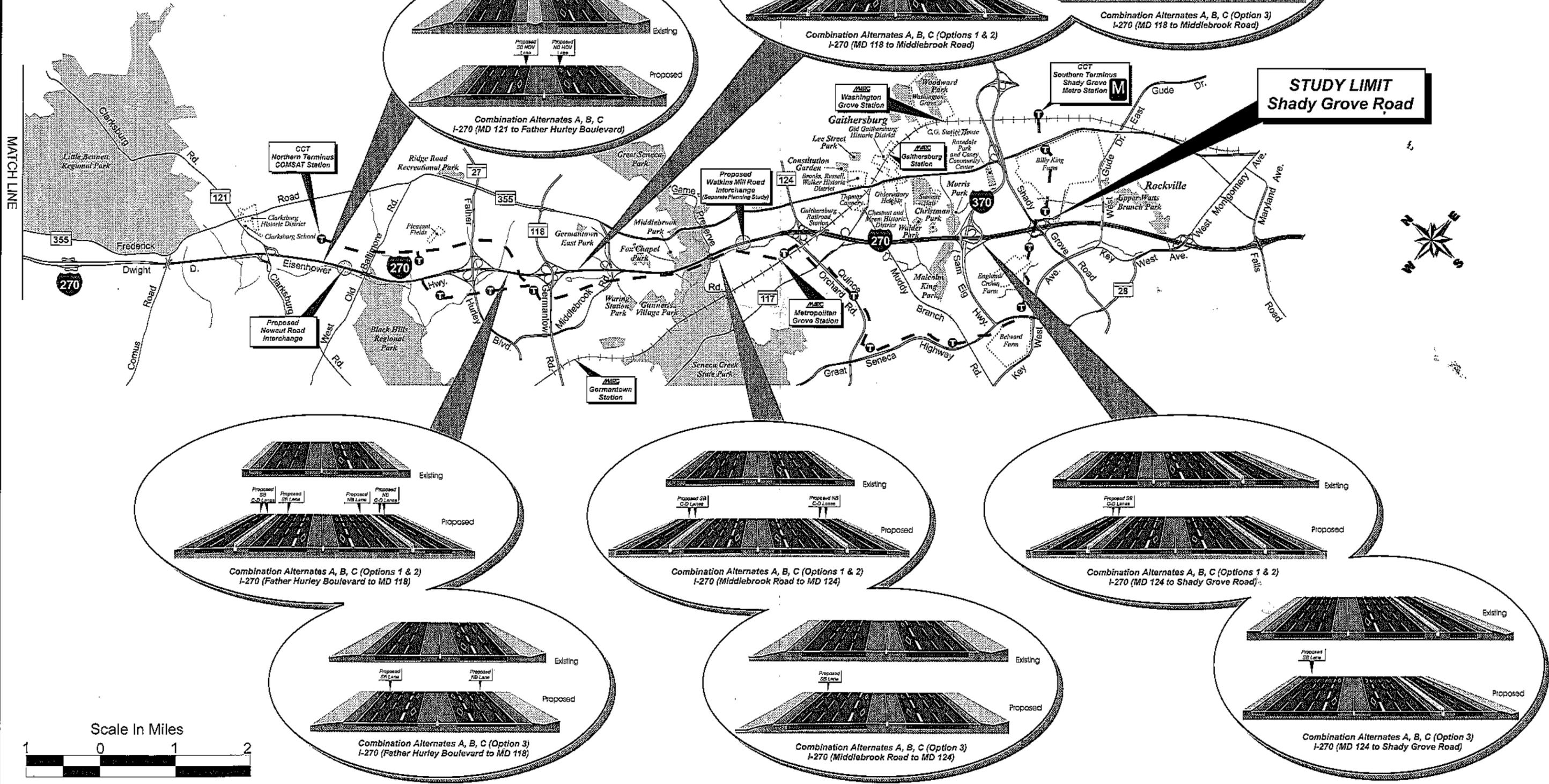
Proposed MD 75 Extended

Proposed MD 75 Interchange

MATCH LINE



I-270/US 15 Multi-Modal Corridor Study Combination Alternates - Highway Options Biggs Ford Road to Shady Grove Road



1. Baseline (No-Build) Modified Alternate

Consists of the elements adopted from the 1997 Constrained Long Range Transportation Plan (e.g. MARC commuter train extension from Point of Rocks in Frederick County to the City of Frederick). The Baseline has been modified to reflect more accurately current and programmed conditions within the I-270/US 15 Corridor. Therefore, the south-bound HOV lane between MD 121 and I-370 would be excluded since it is part of several Combination Alternates. No major capacity improvements would be made on I-270 or US 15. Only routine maintenance and spot improvements are included.

2. TSM/TDM Strategies Alternate

- Highway Widening - None.
- TSM/TDM Strategies - Consists of ridesharing, telecommuting, vanpooling, additional park and ride lots, a hiker/biker trail, and Intelligent Transportation Systems (ITS) Technology. * Please note that each alternate includes the same TSM/TDM strategies which will be defined as needed.
- Transit Improvements - Consists of improved bus service including new routes and increased frequency on existing routes.

3. Combination Alternate A

- Highway Widening - Consists of additional general use lanes in both counties, extended HOV lanes, auxiliary and Collector-Distributor (C-D) lanes and interchange improvements.
- Transit Improvements - Consists of the Corridor Cities Transitway (CCT) from the Shady Grove Metro



Station to COMSAT as a separate alignment. Both the light rail transit (LRT) and bus rapid transit (BRT) modes are being evaluated as part of the Corridor Cities Transitway Alignment. Therefore, both Combination Alternate A-1 (LRT) and Combination Alternate A-2 (BRT) will be evaluated.

4. Combination Alternate B

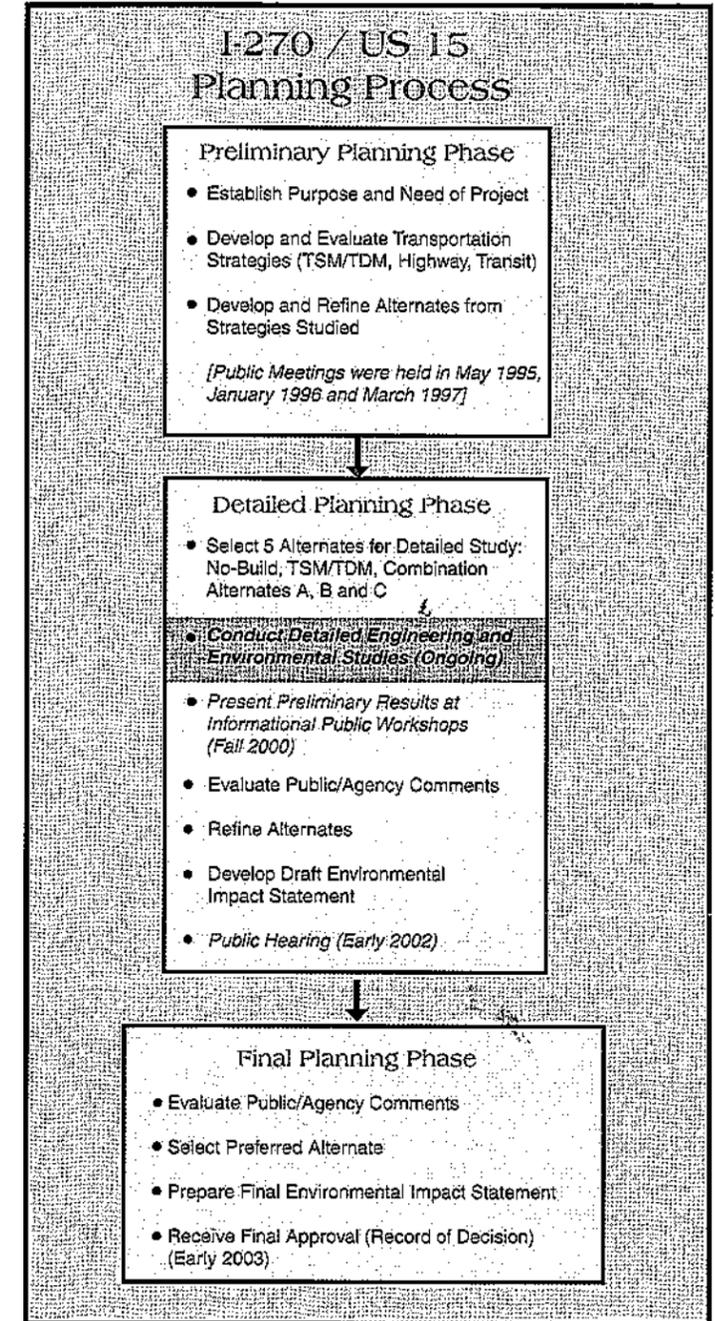
- Highway Widening - Consists of additional general use lanes in both counties, extended HOV lanes, auxiliary and Collector-Distributor (C-D) lanes, and interchange improvements. For this alternate, both high occupancy vehicles and express "premium" bus services would utilize the inside HOV lane. By adding the HOT option, this alternate could evaluate the possibility of single occupancy vehicles purchasing their admittance into this lane for a premium, more reliable trip, based on the "value" of their trip and the traffic flow in the HOV/HOT lane. Therefore, Combination Alternate B with a HOT lane option will be evaluated.
- Transit Improvements - Consists of premium/express bus service from the Shady Grove Metro Station to Frederick as a busway along the HOV lanes with exclusive slip ramps into transit centers.

5. Combination Alternate C

- Highway Widening - Consists of additional general use lanes in both counties, extended HOV lanes, auxiliary and Collector-Distributor (C-D) lanes and interchange improvements. Consistent with the Montgomery County Master Plans, only one additional inside lane is being pursued on I-270 between MD 121 and I-70. This lane will be evaluated as either an HOV lane or a general use lane.
- Transit Improvements - Consists of the Corridor Cities Transitway (CCT) from the Shady Grove Metro Station to COMSAT as a separate alignment. Both the light rail transit (LRT) and bus rapid transit (BRT) modes are being evaluated as part of the Corridor Cities Transitway Alignment. Therefore, both Combination Alternate C-1 (LRT) and Combination Alternate C-2 (BRT) will be evaluated.

Upcoming Steps

The Project Team is performing detailed planning studies in order to better answer your questions on specific traffic, engineering and environmental issues. These studies should be completed over the next two years (see flow chart). An interim Informational Public Workshop is anticipated for the Fall of 2000. SHA and MTA will consider public input as a result of all public meetings, as well as agency comments in finalizing the alternates to be included in the Draft Environmental Impact Statement (DEIS). A Public Hearing is tentatively scheduled for early 2002.



A Record of Decision or Location Approval on "one" selected alternate granted by the Federal Highway and Federal Transit Administrations would subsequently be anticipated in early 2003, which would make the project eligible for Federal funding for final design, right-of-way acquisition and construction for various segments of the selected alternate.

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The Project Team thanks you for your continued interest and participation in the I-270/US 15 Multi-Modal Corridor Study. If you have any questions, please feel free to contact either Michelle Hoffman, the State Highway Administration's Project Manager, or Lorenzo Bryant, the Mass Transit Administration's Project Manager.

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Public Meetings Later This Year! Details To Be Announced.