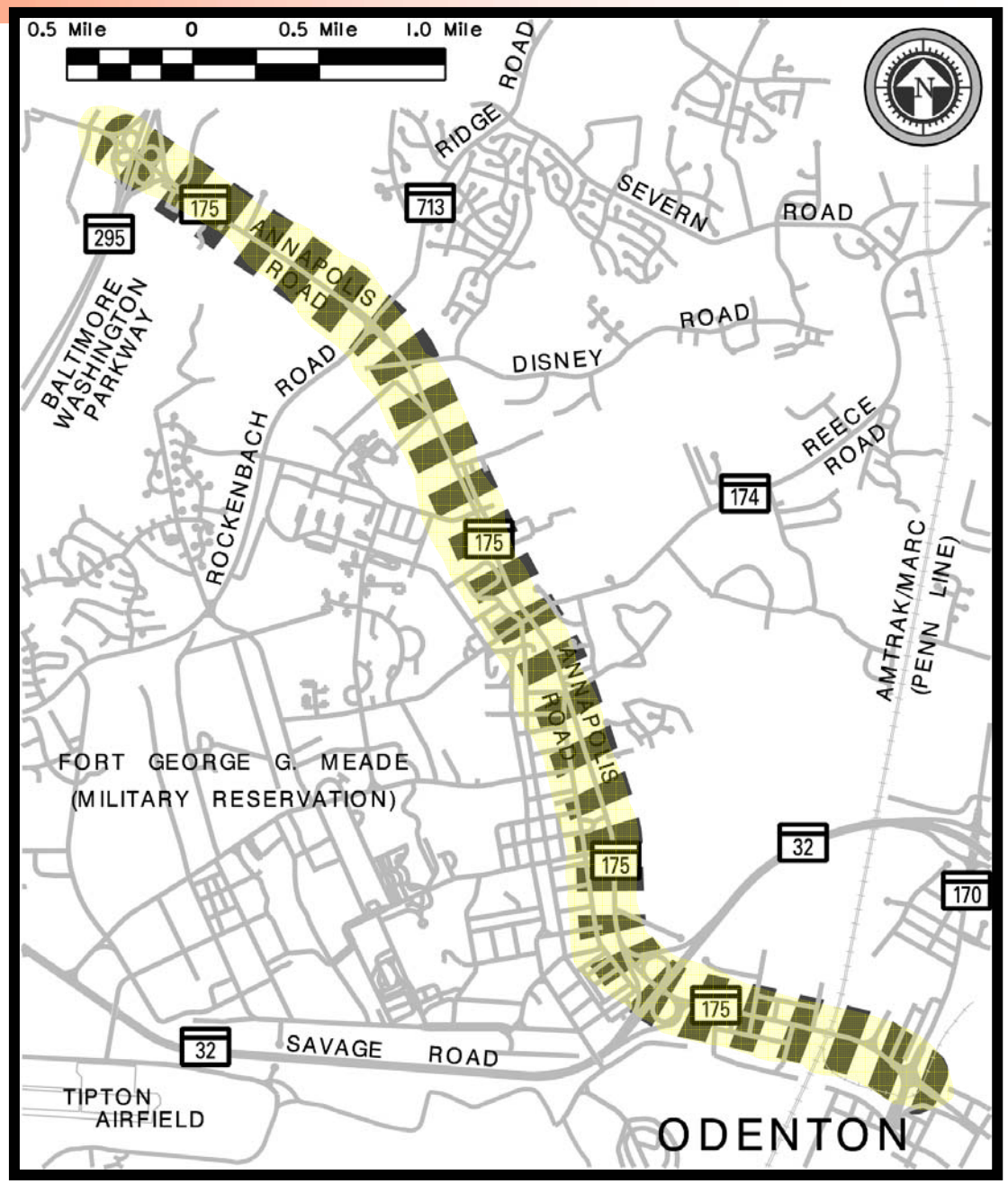
MD 175 PROJECT PLANNING STUDY

West Anne Arundel County Chamber of Commerce

September 21, 2006

STUDY AREA


0.5 Mile 0 0.5 Mile 1.0 Mile
RIDGE ROAD
SEVERN ROAD
ROAD
DISNEY ROAD
REECE ROAD
BALTIMORE WASHINGTON PARKWAY
ROCKENBACH ROAD
ANNAPOLIS ROAD
AMTRAK/MARC (PENN LINE)
FORT GEORGE G. MEADE (MILITARY RESERVATION)
SAVAGE ROAD
TIPTON AIRFIELD
ODENTON
295
175
713
174
32
170

PROJECT BACKGROUND

- MD 175 can be seen on the Maryland State maps from as early as 1860.
- Odenton was founded in 1868 with the arrival of the Baltimore & Potomac (B&P) Railroad.
- Very little development until arrival of Fort Meade in 1917.
- The focus of Fort Meade expanded in the 1950s with the establishment of the National Security Agency (NSA).

PREVIOUS STUDIES

MD 175 & ODENTON TOWN CENTER PLAN – 1999

Objectives:

- To improve the function and appearance of MD 175
- To improve the safety of the roadway by reducing the number of access points on the north side of the roadway
- To improve pedestrian and bicycle access

MD 175 & ODENTON TOWN CENTER PLAN
October 1999

Issues:

- Security for Ft Meade, setbacks, fences
- Safe and convenient access to commercial development
- Safety improvements—access management
- Flexibility of design (promote revitalization-redevelopment)

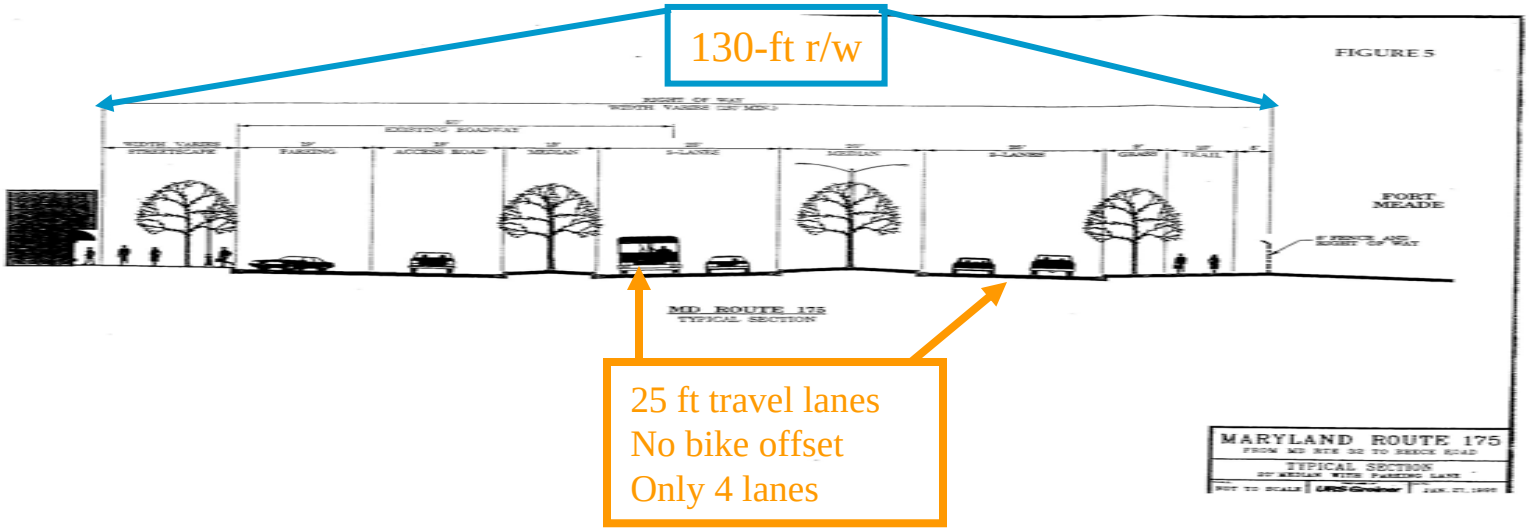
MD 175 & ODENTON TOWN CENTER PLAN
October 1999

Study Findings:

- Project ADT in 2018 (not forecasted) was 25,200 and all intersections operate at acceptable level of service excluding MD 175 at MD 32 and MD 175 at Morgan Road
- Required 80 feet of additional right-of-way from Fort to accommodate full typical section including parking, approximately 130 foot total
- Improved access, permitted parking along north side (commercial strip development)

MD 175 & ODENTON TOWN CENTER PLAN
October 1999

MD 175 Typical Section



PREVIOUS STUDIES

MD 175 Feasibility Study – March 2006

Objectives:

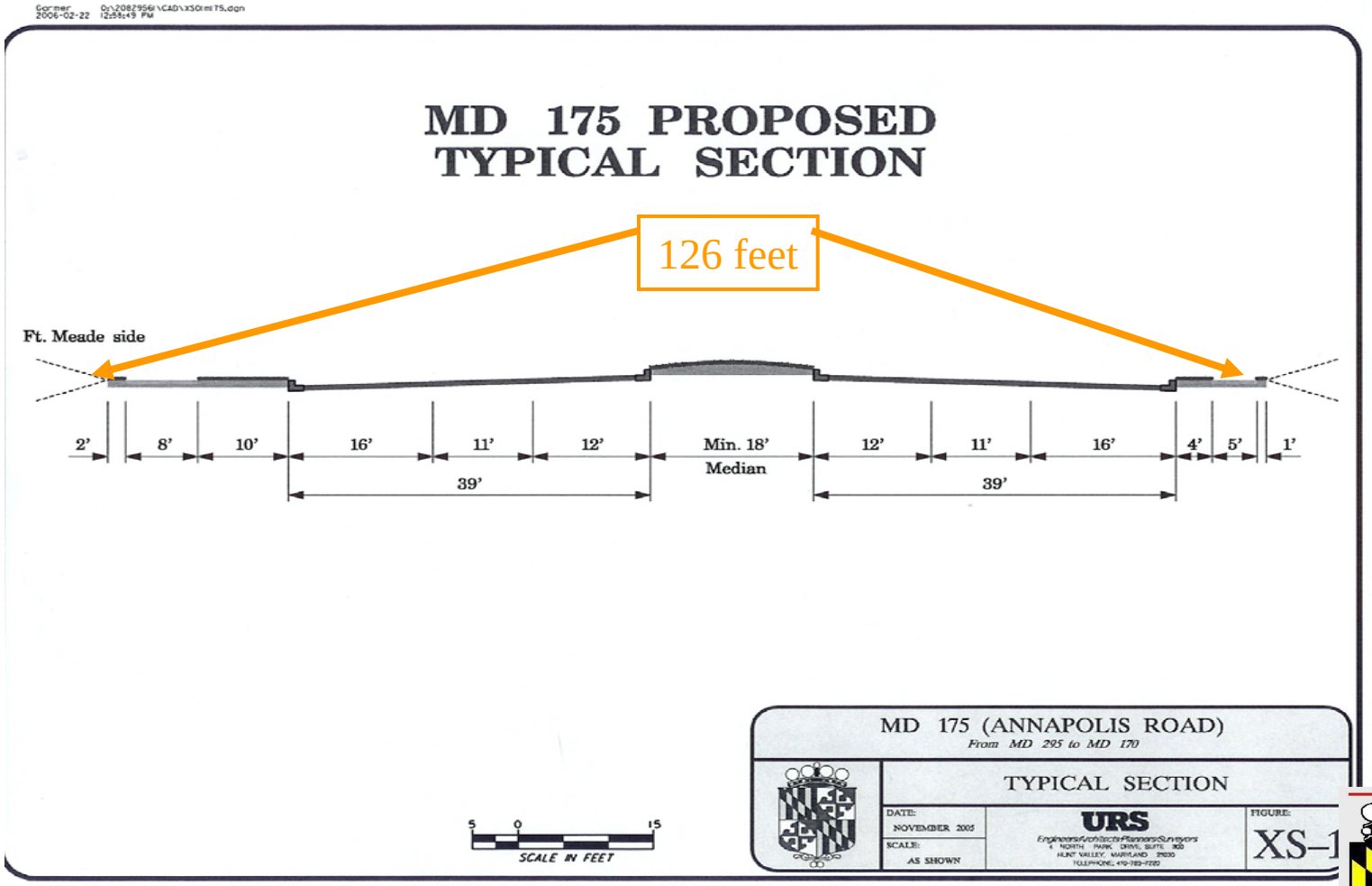
- To evaluate the existing conditions
- To forecast future travel demand
- To develop the typical section of roadway to support travel demand
- To determine preliminary right-of-way needs
- To determine future levels of service
- To develop the Draft Purpose & Need

MD 175 FEASIBILITY STUDY
March 2006

Study Findings:

- Road and intersection improvements necessary
- Travel demand growth will need six-lane section
- Six-lane section right-of-way no greater than earlier study
- Gate congestion probable
- Other improvements (MD 198) are necessary

PROPOSED TYPICAL SECTION
MD 175 FEASIBILITY STUDY



INITIATION OF SHA'S PROJECT PLANNING STUDY

March 2006:

- SHA initiated the MD 175 Project Planning Study – Federal funds are used on the project and it enters the National Environmental Policy Act of 1969 (NEPA) Process

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)

- The principles or essential elements of NEPA decision making include:
  - Assessment of the social, economic, and environmental impacts of a proposed action or project
  - Analysis of a range of reasonable alternatives to the proposed project, based on the defined Purpose and Need for the project
  - Consideration of appropriate impact mitigation: avoidance, minimization and compensation

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA)

- NEPA Essential Elements Continued:
  - Interagency participation: coordination and consultation
  - Public involvement including opportunities to participate and comment
  - Documentation and disclosure.
- The NEPA process allows transportation officials to make project decisions that balance engineering and transportation needs with social, economic, and natural environmental factors.

HIGHWAY DEVELOPMENT PROCESS

PROJECT PLANNING*

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FINAL DESIGN

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RIGHT-OF-WAY

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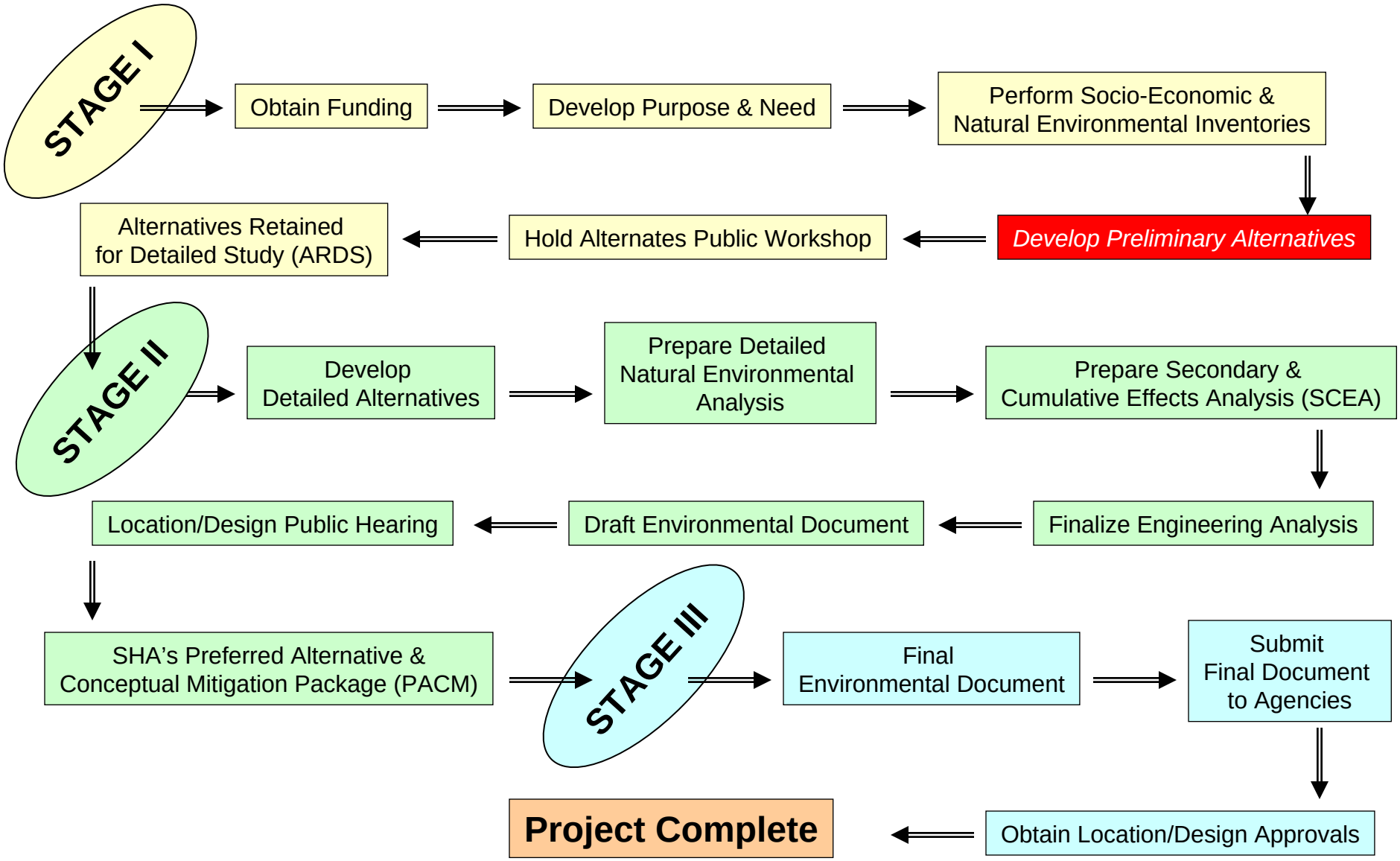
CONSTRUCTION

** The project is **<u>only</u>** funded for this phase.*

PROJECT PLANNING PROCESS



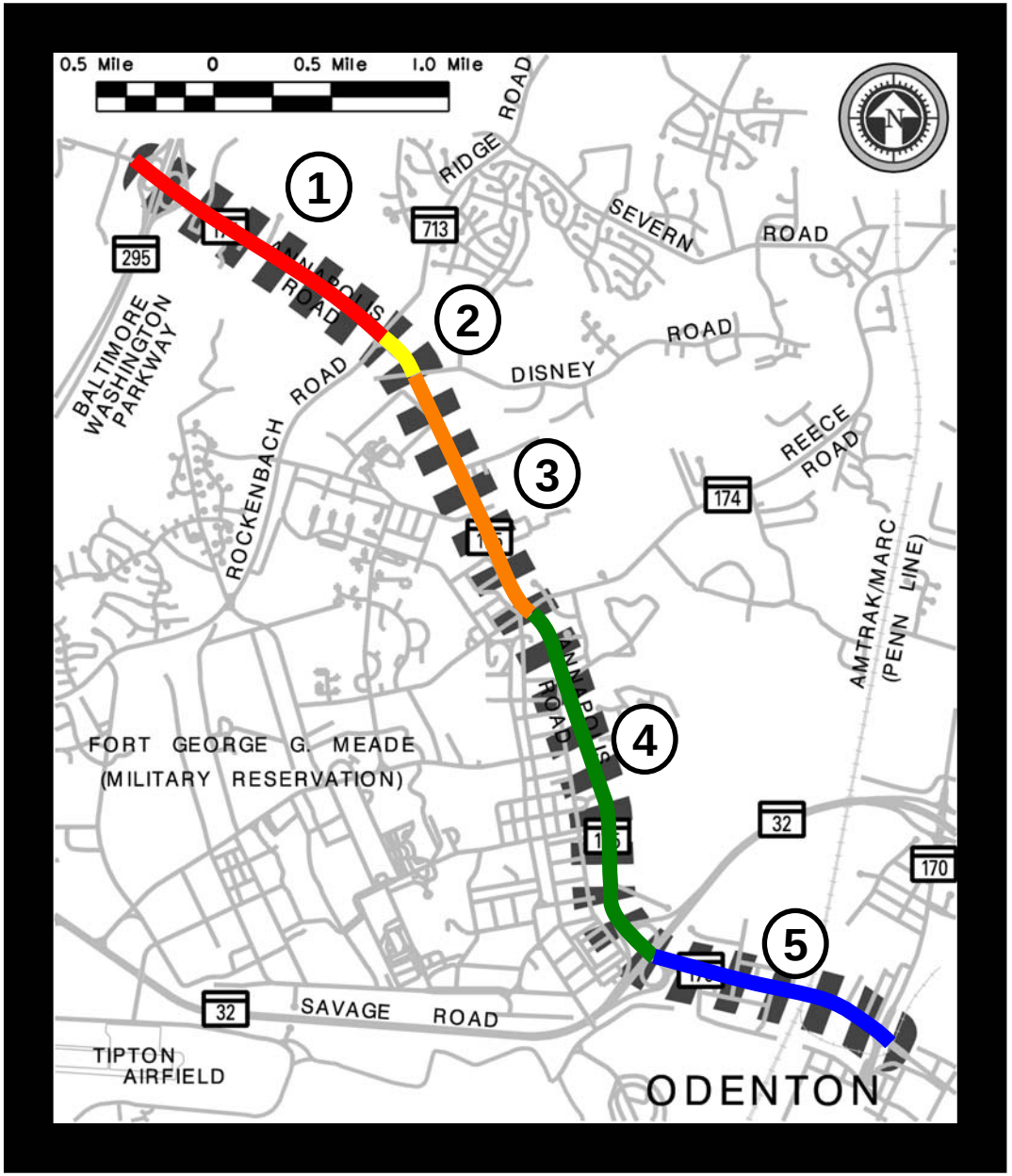
EXISTING CONDITIONS

- Classified as an Urban Minor Arterial (State & Federal)

Intersection of MD 175 and (from west to east)	Typical Section	Speed	Lanes	Median Type
MD 295 to Rockenbach/Ridge Road	Undivided	45	2	None
Rockenbach/Ridge Road to Disney Road	Divided	45	5	Center Turn Lane
Disney Road to Reece Road	Undivided	45	2	None
Reece Road to MD 32	Undivided	45	5	Center Turn Lane
MD 32 to MD 170	Undivided	45	4	None

SEGMENT

1. Segment 1 – MD 295 to Rockenbach/Ridge Road
2. Segment 2 – Rockenbach/Ridge Road to Disney Road
3. Segment 3 – Disney Road to Reece Road
4. Segment 4 – Reece Road to MD 32
5. Segment 5 – MD 32 to MD 170



PURPOSE

To improve the existing capacity, traffic operations, motor vehicle, bicycle and pedestrian safety, while supporting existing and planned development in the area.

PROJECT NEED

- The area around Fort Meade is one of the fastest growing areas of Anne Arundel County.
- Numerous developments including Arundel Mills Mall, growth of BWI Business District, and growth of Fort Meade have contributed to increased traffic volumes in the area.
- Large increase in employment and development expected as a result of the 2005 Base Realignment and Closure (BRAC) process.

TRAFFIC OPERATIONS

2004 Existing Conditions

- Average Daily Traffic (ADT) volumes ranging from 23,500 to 91,200 vehicles per day (VPD)
- Truck percentages along MD 175 are 10% west of MD 295 and 4% east of MD 713.
- Two highest ADT's in study area are located on MD 295 on the EB and WB Weave ramps.
- The highest ADT on MD 175 occurs at the intersection of MD 175 and MD 170.

2004 Existing Level of Service					
Intersection of MD 175 and (from west to east)	**AM Peak LOS**	**V/C**	**PM Peak LOS**	**V/C**	**ADT**
Brock Bridge Road	**D**	**0.87**	**F**	**1.14**	**28,400**
Sellner/Race Road	**F**	**1.04**	**F**	**1.21**	**29,600**
MD 295 WB Merge	***F***	***1.02***	***A***	***0.53***	***29,600***
MD 295 WB Weave	***E***	***39.0****	***B***	***17.6****	***91,200***
MD 295 EB Merge	***B***	***0.65***	***F***	***1.09***	***31,500***
MD 295 EB Weave	***C***	***25.5****	***F***	***51.0****	***83,900***
Clark Road	**F**	**1.15**	**F**	**1.01**	**31,500**
Rockenbach/Ridge Road	**E**	**0.95**	**E**	**0.96**	**27,800**
Disney Road	**B**	**0.63**	**C**	**0.72**	**24,600**
Reece Road	**B**	**0.68**	**D**	**0.87**	**23,500**
Mapes Road	**A**	**0.58**	**C**	**0.74**	**24,900**
Llewellyn Ave.	**D**	**0.82**	**D**	**0.89**	**33,800**
MD 32 Ramp W (WB)	***A***	***0.32***	***A***	***0.48***	***37,600***
MD 32 Ramp W (EB)	***A***	***0.59***	***B***	***0.70***	***50,400***
Morgan Road/Town Center Boulevard	**A**	**0.55**	**C**	**0.77**	**34,400**
Winmeyer Ave.	**A**	**0.61**	**B**	**0.68**	**34,800**
MD 170	**C**	**0.77**	**E**	**0.96**	**35,300**

*Segment density as reported by the Highway Capacity Manual (passenger cars/mile/lane

Note: All intersections are signalized except the intersections of MD 175/Sellner/Race Road, MD 175/MD 295, and MD 175/Clark Road, which has a flashing light to allow access to the fire station.

TRAFFIC OPERATIONS

2030 No-Build Conditions

- Average Daily Traffic (ADT) volumes ranging from 35,600 to 112,700 vehicles per day (VPD)
- Two highest ADT's in study area are located on MD 295 on the EB and WB Weave ramps.
- The highest ADT on MD 175 occurs at the intersection of MD 175 and Winmeyer Avenue.
- All signalized intersections will fail within the AM/PM peak hours, except the MD 32 interchange

2030 No-Build Level of Service					
Intersection of MD 175 and (from west to east)	**AM Peak LOS**	**V/C**	**PM Peak LOS**	**V/C**	**ADT**
Brock Bridge Road	**F**	**1.14**	**F**	**1.20**	**40,500**
Sellner/Race Road	**F**	**1.92**	**F**	**2.10**	**43,350**
MD 295 WB Merge	***F***	***1.17***	***F***	***1.03***	***43,350***
MD 295 WB Weave	***F***	***51.9****	***F***	***50.9****	***112,700***
MD 295 EB Merge	***F***	***1.54***	***F***	***1.45***	***57,900***
MD 295 EB Weave	***F***	***56.5****	***F***	***69.1****	***100,300***
Clark Road	**F**	**2.03**	**F**	**2.31**	**57,900**
Rockenbach/Ridge Road	**F**	**1.61**	**F**	**1.55**	**43,800**
Disney Road	**D**	**0.84**	**F**	**1.15**	**38,400**
Reece Road	**F**	**2.27**	**F**	**1.97**	**35,600**
Mapes Road	**F**	**1.55**	**F**	**1.68**	**39,400**
Llewellyn Ave.	**F**	**1.24**	**D**	**0.90**	**50,000**
MD 32 Ramp W (WB)	***A***	***0.54***	***B***	***0.69***	***65,400***
MD 32 Ramp W (EB)	***D***	***0.89***	***D***	***0.82***	***71,500***
Morgan Road/Town Center Boulevard	**F**	**1.32**	**F**	**1.62**	**42,200**
Winmeyer Ave.	**F**	**1.16**	**E**	**0.99**	**52,800**
MD 170	**F**	**1.28**	**F**	**1.09**	**50,200**

*Segment density as reported by the Highway Capacity Manual (passenger cars/mile/lane

Note: All intersections are signalized except the intersections of MD 175/Sellner/Race Road, MD 175/MD 295, and MD 175/Clark Road, which has a flashing light to allow access to the fire station.

SAFETY

- The crash history for MD 175 was divided into 4 segments: MD 295 to MD 713, MD 713 to MD 174, MD 174 to MD 32, and MD 32 to MD 170.
- The average total crash rates were between 252.3 and 282.7 per 100 million vehicle miles
- The segment from MD 295 to MD 713 total crash rate was significantly higher than the statewide rate.

CRASH SUMMARY

MD 175 Sections	3-Year Average Total Crash Rate (Per 100 Million Vehicle Miles)	Statewide Average Total Crash Rate for Similar Roadways (Per 100 Million Vehicle Miles)	Individual Crash Types Significantly Higher than Statewide Rate
MD 295 to MD 713	***252.3****	195.3	*Injury, Left Turn*
MD 713 to MD 174	252.5	218.5	*Left Turn*
MD 174 to MD 32	282.7	343.1	None
MD 32 to MD 170	265.4	307.8	None

* *Sections that have Significantly High Total Crash Rates*

INTERMODAL CONNECTIVITY

- MARC Odenton Station: 3rd largest utilized station within the systems
  - MDOT and MTA are constructing expanded parking north of MD 175 including a new platform to connect to the existing platform
  - MDOT and MTA are studying the feasibility of a parking structure to accommodate 2,500 to 3,500 additional spaces
  - Village at Odenton Station (transit-oriented development) across from the station is to be completed during 2007
- No MTA bus service within the study area
- 2-limited *Connect-A-Ride* (CAR) local bus routes provided by the Corridor Transportation Corporation

LAND USE PLANNING & ECONOMIC DEVELOPMENT

- It is located within the designated Priority Funding Area and contains neighborhoods designated for revitalization.
- The study area is identified as a prime area for economic growth in the Odenton Small Area plan.
- Land uses include: commercial, residential, mixed-use developments, Fort Meade property, Town Center, and industrial.
- Odenton, within the study area is one of the three Town Centers in Anne Arundel County.
- There are two large Planned Unit Developments (PUD)s within the Odenton Small Area Plan

ENVIRONMENTAL OVERVIEW

RELATED TRANSPORTATION PROJECTS

- MD 295 (Baltimore Washington Parkway)- Extends from I-195 to I-695; Funded for Design, Right-of-Way, and Construction
- MD 295 (Baltimore Washington Parkway) – Extends from MD 100 to I-95 and Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard); Funded for Project Planning

PRELIMINARY PUBLIC INVOLVEMENT PLAN/STRATEGY

- Alternates Public Workshop – Winter/Spring 2007
- Business Stakeholder Meetings – At Various Milestones
- Community/Civic Associations Meetings – As Requested
- Location/Design Public Hearing – Winter/Spring 2008

SCHEDULE

- Alternates Public Workshop – Winter/Spring 2007
- Alternatives Retained For Detailed Study Package – Summer 2007
- Location/Design Public Hearing – Winter/Spring 2008
- Location/Design Approval – Spring 2009

QUESTIONS