

# 2005 CORRIDOR MONITORING AND TRIGGERING REPORT

*August 2006*



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## INTRODUCTION

The Route 40 Corridor Improvements Project was initiated by the Delaware Department of Transportation in partnership with New Castle County and WILMAPCO in September 1998. Completion of the first four steps of this project produced a community-supported 20-year transportation plan prepared under the direction of a Steering Committee composed of civic leaders, elected officials, and business interests. Technical support for plan development was provided by a project team, composed of the project partners' staffs and their planning and engineering consultants. The Route 40 Corridor 20-Year Transportation Plan (the Plan) was adopted on June 19, 2000.

The Plan addresses the conditions that are expected to result from projected growth in housing, employment and traffic over 20 years. The Plan contains projects, separated into three phases (Phase I 2000-2007, Phase II 2008-2013, Phase III 2014-2020), that address projected transportation problems. By phasing projects over 20 years and using a monitoring and triggering mechanism, projects will be built only as conditions dictate, addressing one of the main goals of Steering Committee.

The fifth and final step of the project, the implementation of the Plan recommendations, is now in its sixth year. This sixth annual Corridor Monitoring and Triggering Report is an essential component of this step. To assure that all projects in the Plan are implemented as conditions dictate—neither prior to the anticipated need, nor subject to unnecessary delay after need is identified—the Plan included an implementation strategy consisting of five components:

- Corridor preservation
- Monitoring
- Triggering
- Citizen involvement
- Project implementation

Citizen involvement is accomplished through a Corridor Monitoring Committee. This committee typically meets three or four times each year with the project team to review conditions in the corridor, which the project team monitors throughout the year. The monitoring efforts, which are summarized in this report, consider:

- Land development
- Traffic
- Corridor preservation

- Highway safety
- Transit service
- Project status
- Impact of completed projects
- Other projects in the region

Each of these factors is discussed in the following sections. The project team's assessment of these monitored conditions forms the basis for the triggering section of the report. Examples of triggering, as defined in the Plan, are listed below.

- Major land development activity would trigger immediate review of transportation needs: level of service implications and strategy, transit service needs or opportunities, safety concerns, and pedestrian and bicycle needs.
- Steady deterioration in level of service to D or worse would trigger a response in the form of strategies to stabilize/reduce demand (i.e. travel demand management measures or transit improvements) or increase capacity.
- Safety improvements recommended by the Highway Safety Improvements Program review team would trigger an evaluation by the project team of the compatibility of the proposed improvements with the Plan and of the need to make adjustments to the Plan.
- Transit service changes proposed by DTC would trigger an evaluation by the project team of any ancillary improvements needed to complement the service changes, such as sidewalks or shelters, that should be advanced in the Plan's implementation.
- Transportation improvements that are not part of the Plan but that impact the corridor and are proposed for implementation (for example, widening of Interstate 95) would trigger an evaluation by the project team. The evaluation would focus on compatibility of the proposed improvements with the Plan and the need to make adjustments to the Plan.

Assessment of these potential changes may trigger one of the following options to best respond to the new conditions:

- Continue with a Plan project or projects as currently scheduled in the TIP/CTP.
- Move a project(s) forward in the TIP/CTP schedule and determine appropriate level of effort for design activities.
- Move a project(s) back into the out years of the TIP/CTP schedule.

## MONITORING

### Land Development

#### Site Review Team

Development activity is monitored through meetings of the site review team, which consists of representatives from DelDOT, the New Castle County Department of Land Use, and the Delaware Transit Corporation. At these meetings the team reviews development proposals for consistency with and impact to the Plan. The team's comments include recommendations in such areas as corridor preservation, access management, and cost-sharing opportunities.

#### Summary of Development Activity

During 2005, there were 34 new development plans (2 major, 16 minor, and 16 resubdivision) submitted to New Castle County for review in the Route 40 corridor. This level of development activity is more than last year; however there has been a consistent downward trend in the number of major plans submitted each year since the Route 40 Plan's adoption in 2000. This trend is also consistent with other nearby corridors in the state. Table 1 provides a description and status of the current major development proposals, as well as other previously-submitted major plans discussed during the year. Major development locations are shown in Figure 1.

Review of sixteen major developments proposed before 2005 continued this year. Among those plans, five were recorded during 2005. Among the remaining eleven major development plans, two are in the record plan submittal stage, two have received preliminary plan approval, three are in the preliminary submittal plan review stage, one has received exploratory plan approval, two are in the exploratory submittal plan review stage, and one is expired. Additional impacts of other developments on the Plan are as follows:

- Among the new development plans for 2005, the most significant is La Grange, which proposes to construct 224 residential lots along with more than 50,000 SF of commercial development on an existing 234-acre parcel, the former Barczewski farm, north of US 40 and west of SR 896.
- DelDOT continues to work with JP Morgan Chase to coordinate the SR 7 improvements currently under construction and the proposed McMullen Farm Park that will be part of the site development on the land adjacent to the recently constructed data center.

- DelDOT continues to work with the proposed Bear-Glasgow YMCA development to complete the design and construction of George Williams Way, a roadway segment providing a connection between Aiken Avenue and Abbey Boulevard.
- Construction of East Scotland Drive extension to Porter Road is essentially complete. All design and construction costs for that project were contributed by the developer of St. Andrews.
- As part of the preliminary approval for the Meridian Crossing II site, the developer is required to provide roadway improvements along Old Porter Road near the site entrance. One of these improvements includes realignment of the curve east of Lauren Farms. Final design is complete and an agreement with DelDOT is in progress. Based on that agreement, the developer is required to complete the improvements before building permits can be issued for the site.
- Among many of the minor development plans new for 2005 and previously reviewed, DelDOT and New Castle County continue to consolidate access and recommend cross access agreements where feasible.
- During 2005, New Castle County added a provision to its Unified Development Code allowing a waiver from the traffic impact study (TIS) process based on certain conditions. The most recent waiver applies only in Transportation Improvement Districts where a plan is already in place, such as Route 40. The intent of such a waiver is to use the long-range transportation plan, rather than a TIS, to determine which transportation improvements should be the developer's responsibility. Active development plans within the Route 40 corridor that have requested a TIS waiver include St. Andrews Addition, Dasher Farm and La Grange.

#### Developer Agreements

In addition to those noted above, more than 40 land development projects in the Route 40 Corridor have developer agreements with the State or County regarding transportation improvements in the corridor. These improvements range from sidewalks to widening of roadways, signal agreements and significant right-of-way dedication. New Castle County continues to work with DelDOT on a comprehensive tracking system for these agreements, which is used to coordinate private and DelDOT-sponsored roadway improvements.

**Table 1.** Major Plans Received and/or Reviewed During 2005.

Site	Description	Remarks	New plan in 2005?
Atlantic Business Park Phase 2	125,432 square feet warehouse	Recorded	No
Calvarese Farms	122 single family homes and 23 patio homes	Recorded	No
Cann Village	102 active adult units(rezoning)	Recorded	No
Governors Square Residential / Governors Field	18 Single Family houses	Recorded	No
Village of Fox Meadow	194 single family homes	Recorded	No
Bible Fellowship Church of Newark	42,856 square feet Church	Record Submittal	No
Steeple Glen	110 mixed residential units	Record Submittal	No
Bear-Glasgow Family YMCA	90,000 square feet commercial	Preliminary Approval	No
Old Baltimore Pike, L.L.C.	32 lot age restricted residential	Preliminary Approval	No
Dasher Farm	53 Single Family Homes	Preliminary Submittal	No
Estates at Long Branch/Kang Farm	70 single-family houses	Preliminary Submittal	No
St. Andrews Addition	Add school and 261 mixed residential units	Preliminary Submittal	No
Becks Woods Medical Plaza	67,500 square feet medical office	Exploratory Approval	No
Lighthouse Baptist Church	21,322 square feet Church	Exploratory Submittal	No
Royal Farms	5,607 square feet commercial	Exploratory Submittal	No
Glasgow Commons/ W.L. Gore Site	1,646,157 square feet industrial/office	Exploratory Submittal	Yes
La Grange	224 lot commercial/residential	Exploratory Review	Yes
Hershberger Property	84 Apartments	Expired	No

Figure 1. Development Location Map.



- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Atlantic Business Park Phase 2</li> <li>2. Calvarese Farms</li> <li>3. Cann Village</li> <li>4. Governors Square Residential/Governors Field</li> <li>5. The Village of Fox Meadow</li> <li>6. Bible Fellowship Church of Newark</li> <li>7. Steeple Glen</li> <li>8. YMCA</li> <li>9. Old Baltimore Pike L.L.C.</li> <li>10. Dasher Farm</li> </ol> | <ol style="list-style-type: none"> <li>11. Estates at Long Branch/Kang Farm</li> <li>12. Glasgow Commons/ W.L. Gore Site</li> <li>13. St. Andrews Addition</li> <li>14. Becks Woods Medical Plaza</li> <li>15. Lighthouse Baptist Church</li> <li>16. Royal Farms</li> <li>17. La Grange</li> <li>18. Hershberger Property</li> </ol> |
|--|---|

## Traffic

To monitor traffic growth, the project team conducted full-day traffic counts on road segments using automatic tube counters. These segment counts were used to monitor overall trends, as opposed to intersection counts, which were used to measure levels of service. The segment counts were compared with the traffic information utilized during development of the Plan, which was developed from counts conducted primarily in 1998 and 1999, as well as counts conducted for Corridor Monitoring and Triggering Reports during 2000 through 2004. Average daily traffic (ADT) volumes are summarized in Table 2.

The Route 40 Plan anticipated that at the five locations shown in Table 2, traffic would increase by an average of about 1.8 percent per year through 2020. Current data indicate growth rates of about 1.7 percent per year, thus confirming current schedules and phasing of Plan projects (see Figure 3).

To compare current levels of service for intersections along US 40 to the levels of service used during the Plan development process, the project team conducted intersection counts during peak traffic hours at all signalized intersections on US 40 in November 2005. Unsignalized intersections were not counted because no improvements are included at these intersections in the Plan. It is assumed that any future signalization of these intersections, whether required due to land development or traffic growth, will have to meet intersection signalization warrants as required by DeIDOT.

The traffic volumes collected at the signalized intersections were analyzed in a manner consistent with the traffic impact study process used by New Castle County and DeIDOT. The results of the level of service (LOS) analysis are summarized in Table 3. As indicated, seven intersections had minor degradation in levels of service from 2004 and seven had slight improvement.

- The intersection of US 40 and SR 72 returned to LOS E in the AM peak after improving in 2003 and 2004. The intersection remained at LOS E in the PM peak.
- While under construction in 2005, the SR 7 intersection remained at LOS F in the AM peak. The intersection worsened to LOS D in the PM peak period after improving in 2004.
- The LOS at US 40 and SR 896 returned to LOS D in the morning and worsened to LOS E in the PM peak period for the first time.
- The intersection of US 40 with Glasgow Avenue worsened to LOS E for the first time in the PM peak but remained steady at LOS C in the AM.
- All other signalized intersections on US 40 operated at acceptable levels of service (D or better) during both peak hours.

The Route 40 Project Team initiated a “traffic signal audit” program in late 2005 to reduce congestion and travel times and improve safety along the entire length of Route 40. Opportunities to improve signal timing and other intersection operations will be identified. Given the relatively low cost of this type of improvement, it will be possible to implement some of the study recommendations in 2006 in spite of DeIDOT’s current fiscal constraints.

**Table 2.** Average Daily Traffic.

Location	Plan volumes (1998/1999)	2000 counts	2001 counts	2002 counts	2003 counts	2004 counts	Projected 2005 volumes	Actual 2005 volumes	Percentage over (under) projected	2020 forecast
East of Perch Creek Drive	34,000	29,000	36,700	36,800	35,800	37,100	38,500	33,800	-12.2%	48,000
West of SR 72	29,000	27,000	31,400	28,900	30,000	32,600	35,700	30,500	-14.6%	50,000
West of Salem Church Road	32,000	34,000	42,200	38,600	36,500	42,700	38,400	39,500	+2.9%	52,000
West of Walther Road	41,000	43,000	44,400	42,400	41,800	47,000	46,400	46,400	0.0%	58,000
West of Wilton Boulevard	27,000	27,000	30,900	26,000	28,000	26,400	28,900	28,600	-1.0%	33,000

**Table 3.** Signalized Intersection Level of Service Summary.

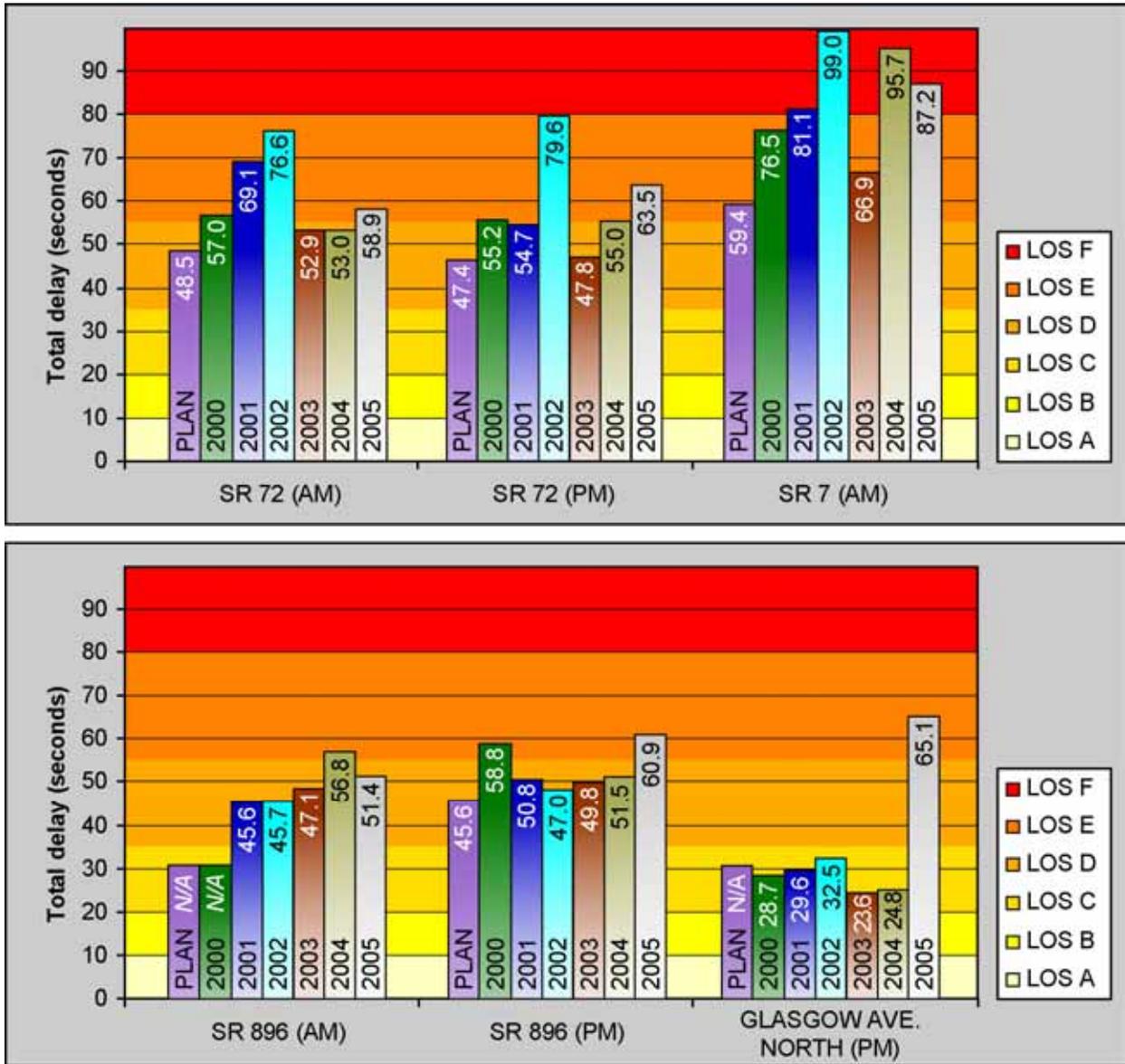
INTERSECTION	PEAK HOUR LEVEL OF SERVICE															
	Base (1998/1999)		2000		2001		2002		2003		2004		2005		2020 w/o the Plan	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Frazer Road	-	-	-	-	-	-	-	-	-	-	C	B	C	B	-	-
Pleasant Valley Road	C	C	C	C	C	C	C	D	C	D	C	D	C	D	F	F
Perch Creek Drive	-	-	B	A	B	B	B	B	B	B	B	B	B	B	-	-
Peoples Plaza north	B	C	A	B	B	C	A	B	A	A	A	C	A	A	B	C
Peoples Plaza south	B	B	B	C	B	C	B	C	B	C	B	C	C	D	B	C
Glasgow Avenue north	C	C	C	C	C	C	C	C	D	C	C	C	C	E	C	F
Glasgow Avenue south	C	D	B	C	B	C	C	C	C	B	C	C	C	D	C	E
SR 896	D	D	D	E	D	D	D	D	D	D	E	D	D	E	F	F
Aiken Avenue	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-
SR 72	D	D	E	E	E	D	E	E	D	D	D	E	E	E	F	F
Scotland Drive	C	B	B	B	C	C	C	C	B	C	C	D	C	C	D	E
Salem Church/Porter Road	C	C	D	D	D	D	D	C	D	C	D	D	D	D	D	F
Brookmont Drive	B	B	B	B	B	B	A	B	A	B	B	B	B	B	B	E
Church Road	D	C	D	C	D	C	D	D	C*	B*	D	C	C	C	E	F
Walther Road	C	D	D	D	D	D	D	D	D	D	C	C	C	C	F	F
Governors Square	B	C	C	C	C	C	C	C	C	D	D	C	C	D	C	E
SR 7/Eden Square	E	D	E	D	F	C	F	D	E	D	F	C	F**	D**	F	F
SR 1 SB Ramps	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B
SR 1 NB Ramps	B	B	B	A	C	B	B	B	C	B	C	B	B	A	B	E
Buckley Boulevard	-	-	B	B	B	B	B	B	B	B	B	B	B	C	-	-
School Bell Road	B	B	C	A	B	B	B	B	B	B	C	A	B	A	B	C
Wilton Boulevard	B	B	C	C	B	C	B	B	B	C	C	C	B	C	C	F
US 13	D	B	C	B	C	C	C	C	B	B	C	C	C	D	F	F

Note: Red denotes a worse level of service than 2004; green denotes improvement in level of service over 2004.

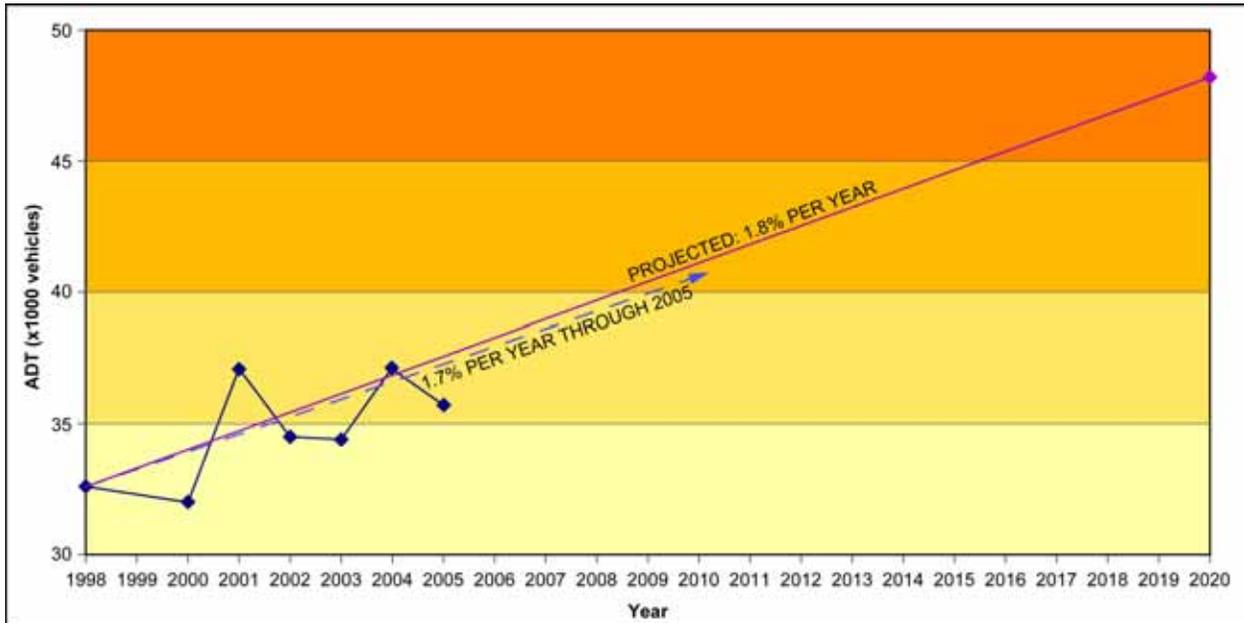
\* - During most of 2003, Church Road was closed to through traffic south of US 40.

\*\* - During all of 2005, SR 7 was under construction.

Figure 2. Level of Service Comparison at Selected Intersections.



**Figure 3.** Traffic Growth Along US 40 (average of five count locations).



### Corridor Preservation

As noted in the Land Development section, all development proposals in the corridor are acted upon by the site review team. For projects on US 40, sufficient right of way is required to accommodate widening to the outside and to provide area for sidepaths for pedestrian and bicycle use. The following specific corridor preservation efforts were also undertaken.

**Concept Design:** The Plan recommended preparing concept designs in the first stage of implementation to identify right of way needs. Although progress has been slowed by reduction of funds under DeIDOT’s capital program, concept design continues for five Plan projects along US 40 between SR 896 and SR 1. An environmental assessment is being prepared for this area to obtain approval of the preferred widening alternative from federal and state agencies based on the level of environmental impact. When this document is approved, right-of-way needs will be more clearly defined within the study area. Upon completion of ongoing environmental studies, a final

workshop will be held to present the preferred alternative to the public.

Concept design for a number of other projects is also underway, as detailed in the Project Status section of this report.

**Access Management on Developing Properties:** One of the goals of the Route 40 Plan was improved access, because clearly defined, properly spaced driveways improve highway mobility and safety. The site review team has had success in providing improved and/or shared access through the development process. Although fewer opportunities for access management were available in 2005 as compared to previous years, this philosophy continues to guide the Route 40 team through the site review process. One example from 2005 includes the proposed Goddard School development along the south side of US 40 near School Bell Road. In this case, the development is provided temporary right-in/right-out access to US 40 until an interconnection is constructed to adjacent development via a proposed service road.

## Highway Safety

### Review of Conditions in 2005

The goal of this report with respect to safety is to determine those intersections where crash rates increased in the past year, identify the reasons for those increases, and pass those sites on to the Route 40 Safety Committee for detailed study and improvement recommendations. To determine priorities for potential safety improvements, nine years of crash summary data were analyzed for all roadways in the Route 40 corridor. The number of crashes in the past year at each intersection was compared to the average number of annual crashes at that same location for all previous study years. This was the tenth year of crash data studied in the corridor.

Following the initial crash data analysis, DelDOT identified some potential issues with the reporting and entry of accident records into the Safety Data Management System (SDM) accident database. Combined these may have affected the overall completeness of the SDM. DelDOT is in the process of addressing the problem to specifically define the concerns as well as any potential remedies that might be needed.

As they continue their review of this matter, it should be noted that the information presented in the 2005 database might, at some point, be substantially amended with additional records. Until the full extent of the issue is known the results of the analysis completed for this report will not be provided. At such time the data is amended, this report will be revised.

### Results of Previous Studies

***US 40 at Salem Church Road/Porter Road.*** The 2004 Corridor Monitoring and Triggering Report identified the intersection at US 40 and Salem Church Road/Porter Road as a first priority. In addition, this segment of Salem Church Road, including the intersection at US 40, was identified by the 2006 DelDOT Highway Safety Improvement Program as having one of the highest crash rates in the state. As a result, an intersection safety study was completed to analyze existing conditions and determine appropriate countermeasures.

The study included crash data reported during a three-year study period from November 2001 to December 2004. Based on a review of the crash data, countermeasures for the following crash clusters were analyzed:

- 15 northbound Porter Road left-turn crashes at US 40 (7 injuries / 1 fatality)
- 12 northbound/westbound angle crashes at the Wawa entrance along Salem Church Road

Additional rear-end crash clusters along the eastbound/westbound US 40 approaches were identified; however, the quantity of rear-end crashes is consistent with the other signalized intersections in the corridor and can usually be attributed to congestion and driver inattentiveness.

The study recommendations included modifying the northbound Porter Road left-turn phasing from protected/permissive to protected only. This is expected to help reduce the occurrence and severity of left-turn crashes at the intersection.

Due to the high westbound left-turn volume exiting Wawa during peak hours, there is a concern that modifying the access at Salem Church Road will encourage illegal turning movements that may actually increase the quantity and severity of crashes at the entrance. DelDOT is currently studying alternative countermeasures to alleviate the crash problem at the Wawa access.

### The Route 40 Safety Committee

The safety committee composed of representatives from the project team, DelDOT's Traffic Section, the Office of Highway Safety, and the Corridor Monitoring Committee, did not meet in 2005.

### Highway Safety Improvement Program Sites

The following sites within the corridor were part of DelDOT's statewide 2004, 2005 and 2006 Highway Safety Improvement Program (HSIP). Crash rates were based on events that took place during the three preceding calendar years (e.g. 2001 – 2003 for the 2004 HSIP). The recommendations from the HSIP review team and status of implementation are summarized below:

- 2004 Site C – Frazer Road, north of McDaniel Lane to south of US 40: Based on preliminary study, no additional improvements are recommended. It was determined that the recent installation of four-way STOP control at Frazer Road and Frenchtown Road corrected the most significant crash problem.
- 2004 Site D – SR 896, north of US 40 to north of Cobble Creek Curve: A study determined that revised signal phasing for northbound and southbound SR 896 left turns could help reduce the

crash severity at Four Seasons Parkway/Old Cooches Bridge Road.

- 2004 Site N – SR 72, north of Willamette Drive to north of Pinewoods Boulevard: No additional improvements were recommended as part of the study.
- 2004 Site V – SR 1, ½ mile south of SR 273 to I-95: It was determined that improvements are currently planned along SR 1 to address the capacity issues identified by the study.
- 2005 Site O – Old Baltimore Pike, west of Deerborne Trail to east of Ironside Road. The HSIP committee recommended the following improvements to reduce crashes at the intersection of Old Baltimore Pike and Pleasant Valley Road/Otts Chapel Road.
  - Restripe the westbound shared through/right-turn lane as an exclusive right-turn lane.
  - Remove a portion of the concrete island to increase the length of the westbound Old Baltimore Pike left-turn bay.

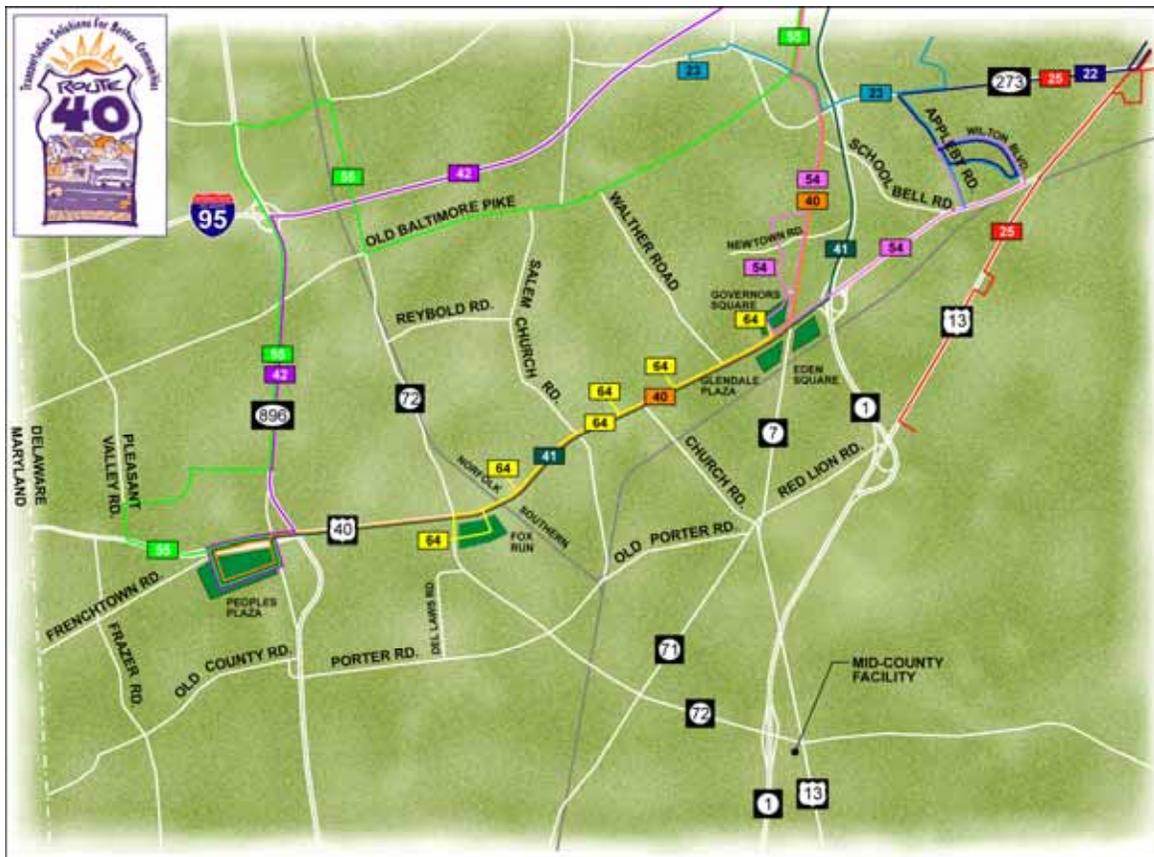
- 2006 Site C – Smalleys Dam Road, SR 7 to Victoria Boulevard. The preliminary study is currently underway.

### Transit Service

Statewide transit ridership increased by almost seven percent in 2005, with ridership in the US 40 corridor up almost thirteen percent. DART First State routes 40, 41, and 42 continue to provide service between Peoples Plaza and Wilmington, route 54 links the Taylortowne and Wilton areas with Christiana Mall, and route 55 connects Glasgow with Christiana Mall and downtown Wilmington via Old Baltimore Pike. Finally, route 64 provides local feeder service to neighborhoods along Route 40 between Governors Square and Fox Run. See Figure 4 for route locations.

There have been some service changes to the Route 64 service, but initial data suggests that those changes have not adversely impacted ridership. The new bus stop along East Scotland Drive is ready for service. Saturday service has been added to Routes 54/55 and initial ridership has been strong for that service.

Figure 4. Transit Route Map.



## Project Status

Progress continued on eighteen projects in the Route 40 corridor during 2005. Much of that progress relates to concept and final design for projects awaiting construction funding in the future. Figure 5 shows the status of projects in the corridor as of the end of 2005. Detailed descriptions of projects are provided below.

### SR 7, US 40 to Newtown Road

This project is part of transportation improvements required as part of an agreement between DeIDOT and JP Morgan Chase, which is developing 153 acres on the east side of SR 7 north of US 40. JP Morgan Chase, which began a substantial portion of the road work, including drainage and a stormwater management pond, has completed construction of their Core Data Center. DeIDOT's contractor began construction in 2004; it is expected to be complete in summer 2006.

Another, related project along SR 7 is a new entrance for JP Morgan Chase and St. Elizabeth Ann Seton Church opposite Rivers End Drive. The church's current unsignalized entrance north of Rivers End Drive has been a source of concern on Saturday evenings and Sundays. The joint entrance, to be constructed by JP Morgan Chase and paid for jointly by the bank and DeIDOT, will improve church access. A construction schedule for the new entrance has not yet been established.

### Wilton Boulevard/Appleby Road Sidewalks

Construction of sidewalks along the entire length of Wilton Boulevard and Old Forge Road, as well as the portion of Appleby Road between Wilton Boulevard and SR 273 began in June 2004 and was substantially completed in late 2005.

### East Scotland Drive

This project involves extending Scotland Drive to Porter Road. Construction for this project, funded by the developer of St. Andrews, The Reybold Group, was completed in 2005. The new roadway is expected to be open to traffic in early 2006.

### Eden Square Connector

A connection will be provided from SR 7 opposite the Glendale Connector to the rear of the Eden Square Shopping Center. This project will allow elimination of the left turn from Eden Square onto US 40, which is expected to improve traffic

operations in the area. The project will include slight widening of the Glendale Connector, installation of a traffic signal at the SR 7 intersection, and reconfiguration of the access to the Eden Support Services Center (the former Leasure School). Final design is complete. A construction schedule has not been established for this project.

### US 40, Bear-Glasgow Bus Stop Improvements

Final design of about 60 improved bus stops throughout the Route 40 corridor is currently on hold. The project includes bus stop improvements and associated sidewalk segments, crosswalks, and pedestrian signals to improve access to transit. A construction schedule has not yet been established.

### SR 7, Newtown Road to SR 273

In 2004, final design began for the widening of SR 7 to four lanes between Newtown Road and SR 273. These improvements will extend the widening between US 40 and Newtown Road, which is expected to be complete in summer 2006. A construction schedule has not been established for the northern section of SR 7.

### School Bell Road, SR 1 to US 40

Safety concerns and geometric deficiencies have been identified along School Bell Road between the SR 1 underpass and US 40. In response to public concerns, this project was accelerated from Phase II to Phase I of the Route 40 Plan. Final design is complete, utility relocations may begin in summer 2006 and construction is expected to start in spring 2007.

### Walther Road, North of US 40 to Old Baltimore Pike

Final design for sidewalks along Walther Road is complete. Sidewalk will be provided on both sides of the roadway from Old Baltimore Pike south to Glennwood Drive, where the proposed Newtown Trail (see below) will cross Walther Road. Sidewalk will then continue south along only the west side of the road as far as the Walther farm. Construction is scheduled to begin in spring 2007.

### Bear Area Pedestrian Improvements

This project was added to the Route 40 program at the request of the Corridor Monitoring Committee in 2003. The original project scope involved the construction of sidewalks along Rivers End Drive

and possibly along Providence Drive and Taylor Drive. A public workshop was held on July 15, 2004 to present the original project scope. As a result of the feedback received from the public workshop and a petition against sidewalks along Providence Drive from residents in the vicinity, Providence Drive was removed from the project scope. Taylor Drive remained in the project scope, however residents and DelDOT agreed that sidewalk on both sides was not necessary. Smalleys Dam Road was added to the project scope at the request of Representative Melanie George. This portion of the project will provide a connection among the Rivers End Drive and Taylor Drive sidewalks, recently-constructed sidewalks on Songsmith Drive, and the proposed Newtown Trail along Newtown Road. Final design continues for this project and is expected to be complete in 2006. A construction schedule has not been established for this project.

**Newtown Trail**

The Newtown Trail is a proposed bicycle and pedestrian path connecting Salem Church Road with SR 7. This trail provides a unique opportunity for bicycle and pedestrian transportation serving numerous residential communities, schools, parks, and employment centers between US 40 and Old Baltimore Pike. A public workshop was held on April 22, 2002 to introduce the project, and final design continues. A construction schedule has not been established for this project.

*Table 4 illustrates the status of all 81 projects identified in the Route 40 Corridor 20-Year Transportation Plan.*

**Projects In Concept Design**

Concept design is underway for the following projects.

- **US 40/SR 72 intersection.** Widening of SR 72 at US 40 is needed to alleviate existing capacity and safety concerns. To provide appropriate capacity and traffic operations at the intersection, the SR 72 widening will extend from north of Mabel Lane to GBC Drive. Minor realignment of Del Laws Road is also proposed to match the proposed entrance to the Fox Run Business Center. A public workshop was held on July 19, 2005 to present four alternatives to the public. *A preferred alternative was selected and concept design will be complete in 2006.*

- **Old Porter Road, Porter Road to SR 71.** Phase II of the Route 40 Corridor 20-Year Transportation Plan calls for bike lane improvements to the entire length of Old Porter Road. Realignment of the curve east of Lauren Farms is also anticipated and other minor roadway improvements associated with the development of Meridian Crossing II will be constructed by the developer. *Concept design was completed in early 2005; final design, right of way, and construction are not funded or scheduled.*

- **US 40/Pleasant Valley Road intersection.** Phase II of the Route 40 Corridor 20-Year Transportation Plan calls for turn lane improvements at the intersection of US 40 and Pleasant Valley Road. Specifically, a second left turn lane and second right turn lane are anticipated on the southbound Pleasant Valley Road approach and a second eastbound left-turn lane on US 40. *Concept design is expected to be completed in 2006; design, right of way, and construction are not funded or scheduled.*

- **Church Road, Wynnefield to SR 71.** Phase III of the Route 40 Corridor 20-Year Transportation Plan calls for bike lane improvements to Church Road from the south end of the current improvement project to SR 71. *Concept design is expected to be completed in 2006; design, right of way, and construction are not funded or scheduled.*

- **US 40 Sidepaths, Maryland State Line to SR 896.** Phase III of the Route 40 Corridor 20-Year transportation Plan calls for sidepaths along US 40 from the Maryland State Line to SR 896. *Concept design is expected to be completed in 2006; design, right of way, and construction are not funded or scheduled.*

**Additional Planning Studies**

- **McMullen Farm Park.** DelDOT’s agreement with JP Morgan Chase (see the SR 7 project descriptions above) included the purchase, at a discount rate, of 50 acres of the 153-acre JP Morgan Chase site as public parkland. This site, tentatively called the McMullen Farm Park in honor of the last family to own and farm the land, extends along the east side of SR 7 from Rivers End Drive to south of Newtown Road, providing a public amenity for the surrounding community. During 2004, DelDOT established a working group

to guide the development of a master plan for the park. With recent funding issues, this project has been placed on hold.

- **Glasgow Avenue “Main Street” study.** As recommended by the Steering Committee, this study will address means to make old SR 896 in Glasgow less of a through roadway and more of a “main street,” balancing transportation and community needs. At the conclusion of the study,

recommendations may be programmed for design, right of way, and construction funding. Preliminary recommendations were developed in 2004 to coordinate with the development of Cann Village, which constitutes one of the last remaining undeveloped parcels in the area. As of the end of 2005, this study is on hold pending completion of other priorities in the Route 40 corridor.

## Impact of Projects Completed in 2005

### Wilton Boulevard/Appleby Road Sidewalks

As previously described, pedestrian improvements along Wilton Boulevard, Appleby Road and Old Forge Road were substantially completed in late 2005. The improvements provided more than two miles of continuous sidewalk for better pedestrian access from residential communities to local retail centers. Improved transit facilities, including bus pads and shelters along with improved crosswalk signing and striping provide for safe and efficient access to bus stops. In addition, minor widening and restriping of roadways to delineate bicycle access encourages multimodal use.

### East Scotland Drive

These improvements include constructing a segment of new roadway to provide a connection between Scotland Drive and Porter Road. This provides additional access to surrounding residential development as well as the opportunity for expanding transit service.

## Other Projects in the Region

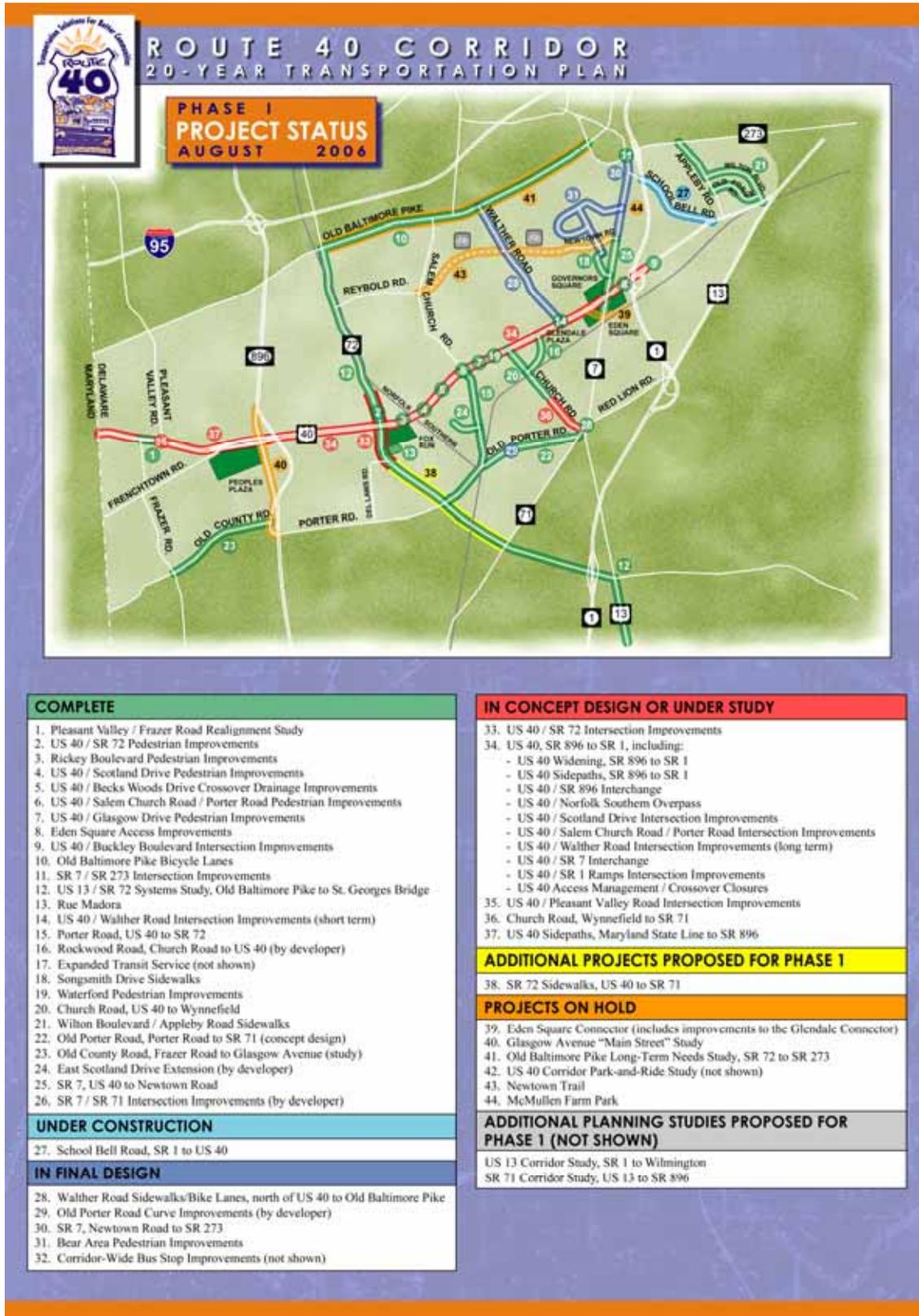
As noted in previous Corridor Monitoring and Triggering Reports, two future regional projects may have an impact on the Route 40 corridor: widening of I-95 and the US 301 project. The status of these projects is summarized below.

- **Widening of I-95, SR 1 to I-295:** The planning and environmental documentation was completed in 2004 for widening I-95 from eight to ten lanes between SR 1 and SR 141. Funding for

construction of these improvements is planned for FY 2007.

- **Widening of I-95, Maryland line to SR 1:** This segment of I-95 is not projected to be widened from eight to ten lanes until the 2016-2025 time period, based on the RTP.
- **I-95/SR 1 interchange improvements:** Planning was completed in 2004 for major interchange improvements, including two-lane ramps connecting the north leg of I-95 with the south leg of SR 1. Construction funding for this project will occur after construction is complete on the I-95 widening between SR 1 and I-295.
- **Widening of SR 1, US 13 to I-95:** This segment of SR 1 is not projected to be widened until the 2016-2025 time period, based on the RTP. The widening is projected to add one lane in each direction from US 13 to I-95. No planning or design is in progress. However, there is a short-term pavement rehabilitation project scheduled to begin in spring 2006 along this entire segment of SR 1. The timing for complete rehabilitation of this section of SR 1 depends on the life of the short-term improvement and the availability of future funding.
- **US 301 Project:** The Major Investment Study (MIS) for this project was completed in January 2000; corridor planning activities continued in 2005. Four alternatives have been retained for detailed study, each of which includes a connection from US 301 to SR 1 south of the Chesapeake and Delaware Canal. A preferred alternative should be selected by the end of 2006.

Figure 5. Project Status.



## TRIGGERING

### Assessment of Monitored Conditions

Generally, traffic congestion in the corridor did not increase substantially in 2005. Intersection levels of service, with the exception of the intersections of US 40 with SR 7, SR 72, SR 896, and Glasgow Avenue, remained acceptable. Seven years of traffic data confirm the growth rates originally anticipated by the Plan.

During 2005, there were 34 new development plans submitted to New Castle County for review in the Route 40 corridor. This level of development activity is more than last year; however there has been a consistent downward trend in the number of major plans submitted each year since the Route 40 Plan's adoption in 2000. Among the plans submitted in 2005, there were only two new major plans; an additional 16 major development plans submitted prior to 2005 remained under review. For La Grange, Royal Farms, Meridian Crossing II, St. Andrews Addition, Calvarese Farms, Estates at Long Branch, YMCA, Cann Village, and Becks Woods Medical Plaza there are either current commitments for developer-funded roadway improvements or studies underway to determine which development commitments will be appropriate. The proposed W.L. Gore development in Glasgow Commons and Entrepreneurs Park are subject to recommended improvements from their respective traffic impact studies.

Safety trends were studied and priorities identified for the Route 40 Safety Committee over the next year. One new HSIP site was identified along Smalleys Dam Road for study in 2006.

Recent transit improvements are generally working well, resulting in increased ridership in the corridor.

Most projects comprising Phase I of the Route 40 Plan are in some phase of concept design, final design, construction, or completion. During 2005, sidewalk construction along Wilton Boulevard, Old Forge Road, and a portion of Appleby Road and the East Scotland Drive extension were completed. Construction continued for the SR 7 widening between US 40 and Newtown Road.

There are no regional highway or transit projects planned that would trigger the need for improvements in the corridor. However, impending improvements to I-95 will be monitored to determine their potential impacts to traffic along US 40.

Based on all of the foregoing considerations, the following recommendations are made for 2005:

### Recommendations

#### *General*

- Identify funding sources to implement as many of the recommendations below as possible and restore projects that have been placed on hold.

#### *Land development*

- Continue to monitor development activity to ensure compatibility with the Plan and maintain consistent developer contributions to transportation improvements.
- Monitor developer agreements for Meridian Crossing II, Calvarese Farms, St. Andrews Addition, Cann Village, YMCA, Estates at Long Branch, the Gore Glasgow Commons property, and Entrepreneurs Park to ensure the compatibility of developer-sponsored improvements with the Plan.
- Develop a more comprehensive and consistent approach to recommend fair share contributions from developers towards transportation improvement projects.

#### *Traffic*

- Complete the traffic signal audit to determine appropriate improvements in signal operations to improve traffic flow and safety. Identify available funds, if any, and implement improvements.

#### *Corridor preservation*

- Continue pursuing corridor preservation opportunities through the site review team process.

#### *Highway safety*

- Monitor crash data at US 40 and Peoples Plaza and US 40 and Wilton Boulevard to determine if recent trends require further study.
- Develop plan for implementing recommended safety countermeasures at US 40 and Salem Church Road/Porter Road. Continue to monitor crash trends at the intersection to determine if recommended northbound left-turn phasing changes improve safety.

#### *Transit*

- Continue to track ridership in the corridor and provide service enhancements where appropriate.

- Continue participation in the site review team to identify opportunities for developer-funded transit improvements.

*Coordination with other projects*

- Provide input into study of the 2006 HSIP site along Smalleys Dam Road.

*Planning, design, and construction*

- Complete construction of the SR 7, US 40 to Newtown Road project.
- Continue final design for the following projects:
  - US 40, Bear-Glasgow bus stop improvements

- Bear Area Pedestrian Improvements
- SR 7 between Newtown Road and SR 273
- Newtown Trail

- Complete concept design for the following projects:
  - US 40/SR 72 intersection
  - US 40/Pleasant Valley Road intersection
  - Church Road, Wynnefield to SR 71
  - US 40 Sidepaths, Maryland State Line to SR 896
- Continue the US 40 environmental assessment between SR 896 and SR 1.

## PUBLIC INVOLVEMENT

### Activities During 2005

In an ongoing effort to keep the residents of the Route 40 corridor informed of the decisions and progress made by the project team, the following public involvement initiatives were undertaken during 2005.

**Public workshops**—Corridor residents were given the opportunity to receive information and express their opinions at two public workshops during 2005.

- March 8, 2005 at Union United Methodist Church to present concept design alternatives for the closure and/or modification to four unsignalized crossovers along US 40 between Buckley Boulevard and School Bell Road.
- July 19, 2005 at Glasgow High School to present concept design alternatives for the US 40/SR 72 intersection improvements.

**Presentations to community groups**— On May 9, 2005, a presentation was made to the Gray Acres Community Association regarding potential improvements along Reybold Road. The presentation included a review of the public involvement process from 2001 until now. Residents were given an opportunity to voice concerns and review concept design alternatives presented at a workshop in May 2002.

The project team also made presentations throughout the year to various interested groups, including the 7&40 Alliance.

**Public workshop mailings**—Throughout the year, notices of DelDOT public workshops that were being held in the Route 40 corridor area were sent to the Route 40 mailing list. This provided interested stakeholders an additional opportunity to attend and provide feedback to DelDOT about various projects.

**Web site, e-mail, project mailing address and telephone hotline**—The Route 40 corridor Web site (accessed from the DelDOT Web site at <http://www.deldot.gov/static/projects/rt40/index.htm>) is updated to provide the latest information on implementation of the Plan. The Web site contains

information from newsletters, updates on project planning, design, and construction, and a schedule of public meetings and workshops. The project post office box and telephone hotline remain in service to provide residents with an opportunity to comment or ask questions.

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**Local press exposure**—Articles were published in the *News Journal*, giving added exposure to the accomplishments of the CMC and project team.

### Activities Planned For 2006

To ensure the community is kept up to date and involved in the progress of transportation improvements in the Route 40 corridor, the project team has put in place the following communications initiatives for 2006:

**Web site**—The Route 40 Web site will continue to be maintained and updated on a regular basis.

**Public workshops**—The Corridor Monitoring Committee will keep residents informed of corridor improvement projects through a public workshop in the summer. Corridor residents will have the opportunity to view exhibits detailing the progress of projects, as well as ask questions of CMC and project team members. Additional workshops will be held throughout the corridor as individual projects from the Plan proceed through the design process.

**Stakeholder updates/public notice mailings**—Interested stakeholders (the CMC, former Route 40 Steering Committee members, elected officials, civic associations and residents on the mailing list) will receive periodic updates as projects from the Plan are implemented. In addition, notices for public workshops or hearings for projects in the Corridor will also be sent to these stakeholders.

**E-mail, project mailing address and telephone hotline**—Residents will still be able to communicate with the project team through various channels—e-mail, mailing address, or telephone.



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