

2004 CORRIDOR MONITORING AND TRIGGERING REPORT

January 2005



TABLE OF CONTENTS

INTRODUCTION 1

MONITORING

 Land development 2

 Traffic..... 5

 Corridor preservation 8

 Highway safety..... 9

 Transit service 10

 Project status 11

 Impact of projects completed in 2004 14

 Other projects in the region 14

TRIGGERING..... 16

 Assessment of monitored conditions

 Recommendations

PUBLIC INVOLVEMENT..... 17

 Activities during 2004

 Activities planned for 2005

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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 fifth year. This fifth 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 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 regular meetings of the site review team, which consists of representatives from DeIDOT, 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 2004, there were 13 new development plans (four major, five minor, and four resubdivision) submitted to New Castle County for review in the Route 40 corridor. This level of development activity is significantly less than the past two years. Table 1 provides a description and status of the four 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 fourteen major developments proposed before 2004 continued this year. Among those plans, six of those were recorded during 2004. Among the remaining eight major development plans, six have received preliminary plan approval and two are in the preliminary plan review stage. Additional impacts of other developments on the Plan are as follows:

- Among the new major development plans for 2004, the most significant is the Hershberger Property, which proposes to construct 84 apartments in four new buildings on Blue Ridge Boulevard south of Old Baltimore Pike.
- Becks Woods Medical Plaza, another new major development plan for 2004, proposes to construct 67,000 square feet of medical office space at the intersection of US 40 and Becks Woods Drive. The developer will likely contribute toward a signal at that location.
- Miller's Post, which is a proposed residential community along the east side of Salem Church Road near Reybold Road, will be required to provide a sidewalk connection to the proposed Newtown Trail project.
- DeIDOT continues to work with Bank One 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 Bank One data center.
- Among many of the minor development plans new for 2004 and previously reviewed, DeIDOT and New Castle County continue to consolidate access and recommend cross access agreements where feasible.
- 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. Plans for these improvements have been reviewed by DeIDOT and the developer is required to complete the improvements before building permits can be issued for the site.

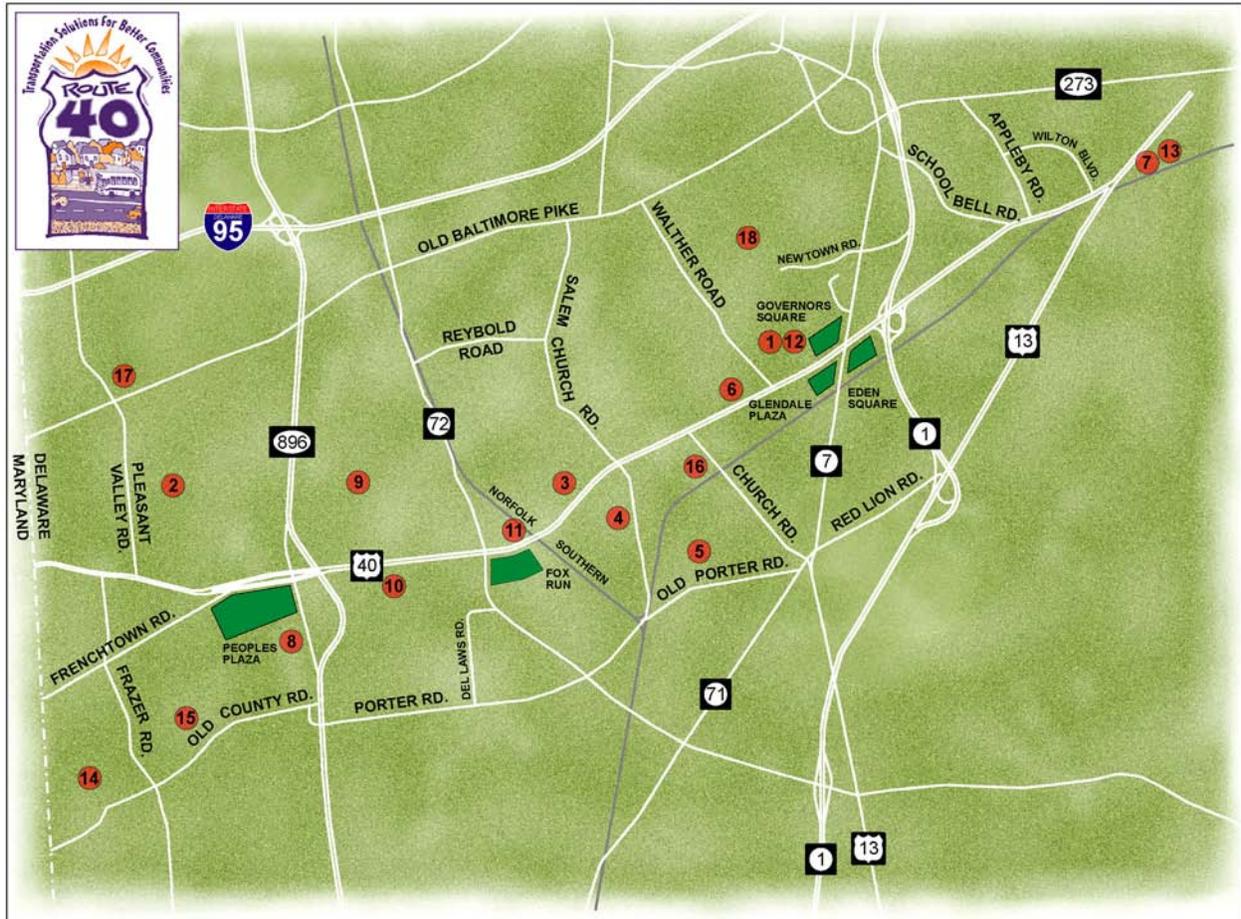
Developer Agreements

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. One of the most significant agreements of 2004 included the developers of Governors Square II, along the north side of US 40 between Walther Road and Governors Square. As a result of traffic impacts associated with that development, US 40 was widened to six lanes from the vicinity of the Glendale Connector to west of Walther Road. New Castle County continues to work with DeIDOT on a comprehensive tracking system for these agreements, which is used to coordinate private and DeIDOT-sponsored roadway improvements.

Table 1. Major Plans Received and/or Reviewed During 2004.

Site	Description	Remarks	New plan in 2004?
Calvarese Farms	145 single-family houses	Recorded	No
St. Andrews Addition	263 mixed residential units (rezoning)	Recorded	No
Meridian Crossing II	50 mixed residential units (rezoning)	Recorded	No
Giacchino Dealership	30,865 square feet commercial	Recorded	No
Entrepreneurs Park	125,000 square feet industrial	Recorded	No
The Village of Fox Meadow	194 single-family houses	Preliminary approval	No
Cann Village	102 active adult units (rezoning)	Preliminary approval	No
Steeple Glen	110 mixed residential units	Preliminary approval	No
Atlantic Business Park Phase 2	125,432 square feet warehouse	Preliminary approval	No
Glasgow Commons/ W.L. Gore site	1,646,157 square feet industrial/office	Preliminary submittal	No
Estates at Long Branch/Kang Farm	70 single-family houses	Preliminary submittal	No
YMCA	89,500 square feet + athletic fields	Exploratory approval	No
Farmington Phase 3	11 single-family houses	Expired	No
Governors Square Residential/Governors Field	18 single-family houses	Preliminary approval	Yes
Becks Woods Medical Plaza	67,500 square feet medical office	Exploratory submittal	Yes
Lighthouse Baptist Church	14,870 square-foot church	Exploratory submittal	Yes
Dasher Farms	53 single-family houses	Exploratory submittal	Yes
Hershberger Property	84 apartments	Pre-exploratory submittal	Yes

Figure 1. Development location map.



- | | |
|------------------------------|--------------------------------------|
| 1. Calvarese Farms | 10. YMCA |
| 2. Pencader Corporate Center | 11. Atlantic Business Park |
| 3. Becks Woods Medical Plaza | 12. Governor's Square Residential |
| 4. St. Andrews Addition | 13. Entrepreneurs Park |
| 5. Meridian Crossing II | 14. Estates at Long Branch/Kang Farm |
| 6. The Village of Fox Meadow | 15. Farmington Phase 3 |
| 7. Giacchino Dealership | 16. Steeple Glen |
| 8. Cann Village | 17. Lighthouse Baptist Church |
| 9. Glasgow Commons/W.L. Gore | 18. Hershberger Property |

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 2003. Average daily traffic (ADT) volumes are summarized in Table 2.

The 2003 Corridor Monitoring and Triggering Report speculated that traffic volumes were increasing at a slightly lower rate than projected by the Route 40 Plan. The 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. New data proves growth rates near projected at about 1.9 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 2004. 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 analysis are summarized in Table 3. As indicated, the levels of service degraded, with ten intersections showing minor degradation from 2003 levels and only two showing slight improvement.

In the 2001 and 2002 reports, the intersection of US 40 with SR 7 operated at LOS F in the AM peak hour, and the SR 72 intersection operated at LOS E in the morning. In 2002, the PM peak hour level of service at SR 72 dropped from D to E. As shown in Table 2 and Figure 2, levels of service improved at both of these intersections in 2003. SR 72 operated at LOS D in both the AM and PM peak hours, and the morning LOS at SR 7 improved to E.

In 2004, the intersection of US 40 and SR 7 returned to a LOS F in the AM peak after improving in 2003. Additionally, the intersection of US 40 and SR 72 returned to LOS E during the PM peak. US 40 and SR 896 worsened to LOS E for the first time in the AM peak, but remained steady in the PM. Results are shown in Table 2 and Figure 2. All other signalized intersections on US 40 operated at acceptable levels of service (D or better) during both peak hours.

Table 2. Average Daily Traffic.

Location	Plan volumes (1998/1999)	2000 counts	2001 counts	2002 counts	2003 counts	Projected 2004 volumes	Actual 2004 volumes	Percentage over (under) projected	2020 forecast
East of Perch Creek Drive	34,000	29,000	36,700	36,800	35,800	37,300	37,100	-0.5%	48,000
West of SR 72	29,000	27,000	31,400	28,900	30,000	34,000	32,600	-4.1%	50,000
West of Salem Church Road	32,000	34,000	42,200	38,600	36,500	36,800	42,700	+16.0%	52,000
West of Walther Road	41,000	43,000	44,400	42,400	41,800	45,100	47,000	+4.0%	58,000
West of Wilton Boulevard	27,000	27,000	30,900	26,000	28,000	28,400	26,400	-7.0%	33,000

Table 3. Signalized Intersection Level of Service Summary.

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

Note: Red denotes a worse level of service than 2003; green denotes improvement in level of service over 2003.

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

Figure 2. Level of Service Comparison at Selected Intersections.

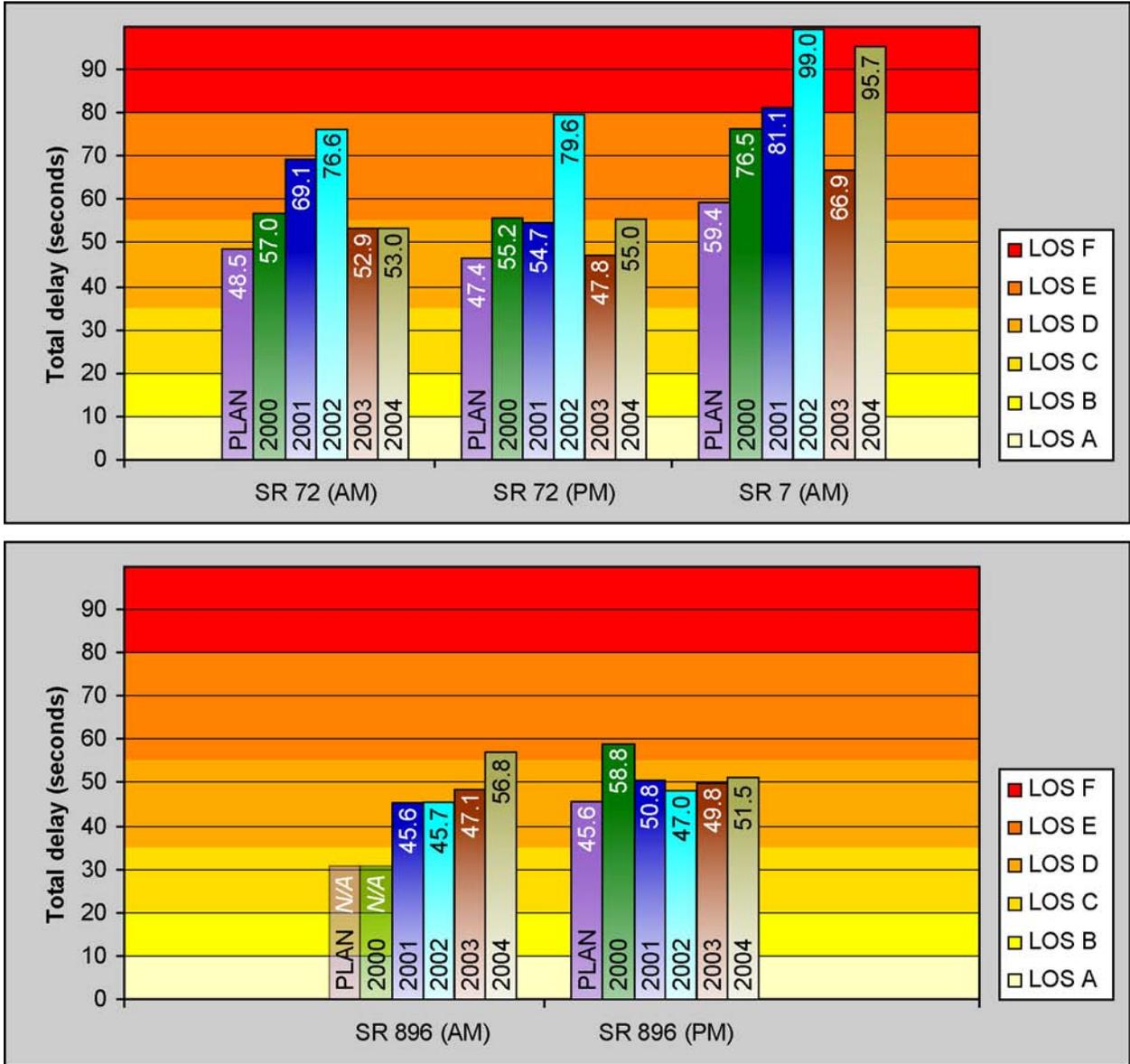
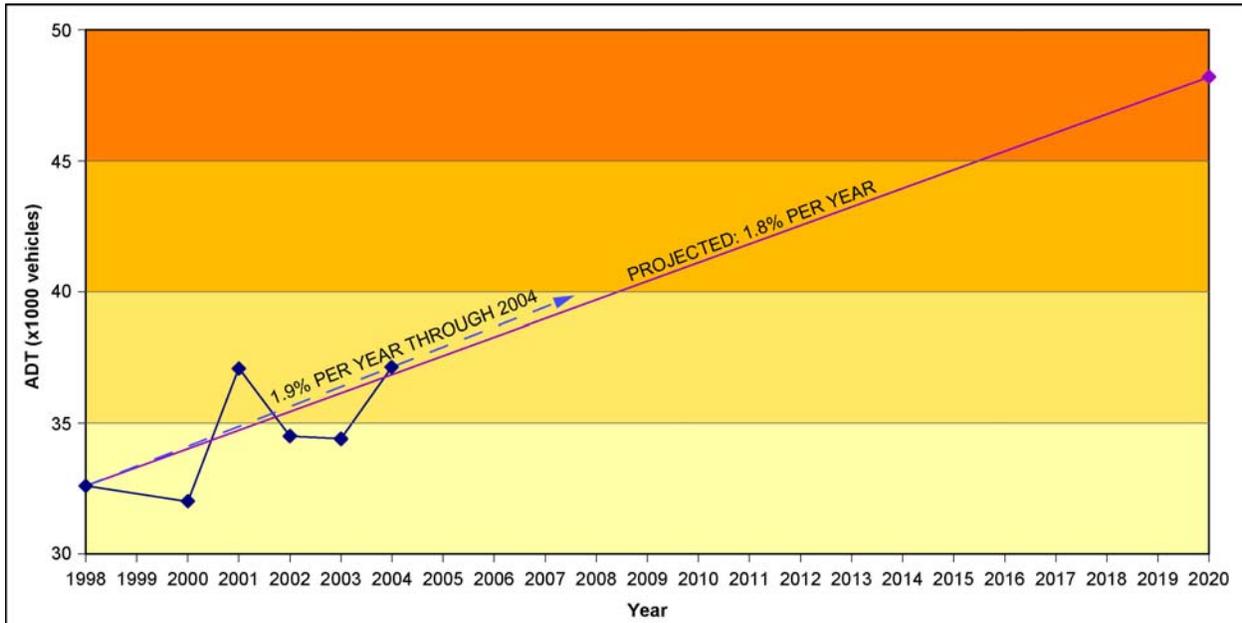


Figure 3. Traffic Growth Along US 40 (average of five count locations).



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. In fulfillment of this directive, concept design continues for 21 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 2004 as compared to previous years, this philosophy continues to guide the Route 40 team through the site review process.

Highway Safety

Review of Conditions in 2004

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 ninth year of accident data studied in the corridor.

Three intersections where the most recent crash data was more than 50 percent higher than the previous seven-year average were prioritized. Furthermore, one of the intersections met the same criteria in 2003, so it was given highest priority.

Based on this analysis, the following intersections are recommended for further study:

First priority

- US 40 at Salem Church Road/Porter Road

Second priority

- US 40 at Church Road
- US 40 at School Bell Road
-
- It is important to note that the intersection of US 40 and Church Road was under construction during 2003 and 2004 and the increase in accidents may be partially attributed to construction impacts. There is a project along School Bell Road in final design that includes significant improvements at the intersection of US 40 and School Bell Road. It is expected that the geometric improvements associated with this project could reduce the number of accidents.

Results of Previous Studies

Last year's Corridor Monitoring and Triggering Report identified two top-priority intersections along US 40 in terms of safety improvements: at SR 72 and Salem Church Road/Porter Road. The following improvements are proposed:

- US 40 at SR 72: Traffic and safety analyses were conducted to determine appropriate measures for improvements to the intersection.

Results were organized and presented to a variety of audiences to assist in the decision making process. This intersection is currently part of an active project. (see Project Status, page 11).

- US 40 at Salem Church Road/Porter Road: Detailed analyses were not conducted during 2004. However, due to high priority based on accident history, data collection and more specific analysis are planned for 2005.

The Route 40 Safety Committee

The safety committee, composed of representatives from the project team, DeIDOT's Traffic Section, the Office of Highway Safety, and the Corridor Monitoring Committee, did not meet in 2004.

Highway Safety Improvement Program Sites

The following sites within the corridor were part of DeIDOT's statewide 2003, 2004 and 2005 Highway Safety Improvement Program (HSIP). Accident rates were based on events that took place during the three preceding calendar years (e.g. 2000 – 2002 for the 2003 HSIP). The recommendations from the HSIP review team and status of implementation are summarized below:

- 2003 Site B – US 13, US 40 to Rogers Road: Only the southern end of this site falls within the Route 40 corridor. All recommendations of the HSIP study are for areas north of the corridor.
- 2003 Site V – SR 72, south of Dayett Mill Road to Dawson Drive: Signing improvements are recommended, as well as minor median improvements to minimize left-turning vehicles blocking the SR 72 through lanes at Old Baltimore Pike during peak hours.
- 2003 Site AA – US 13, north of Federal School Lane to south of Llangollen Boulevard: The primary concern at this site was the unsignalized intersection of US 13 and Schafer Boulevard. It was determined that the developer of the Mallard Pointe subdivision would be responsible for constructing the recommended improvements.
- 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 accident 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 accident 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. This site is currently under review as part of the HSIP program.

Transit Service

Statewide transit ridership increased by more than four percent in 2004, with ridership in the US 40 corridor up over seven 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.

As of the end of 2004, no transit service changes are proposed in the Route 40 corridor. Expansion of route 64 may be considered in the next few years because new developments along Route 40 are being better designed for transit service. DART has also begun discussions for potential extension of route 64 to the proposed Glasgow Park and YMCA sites at Aiken Avenue.

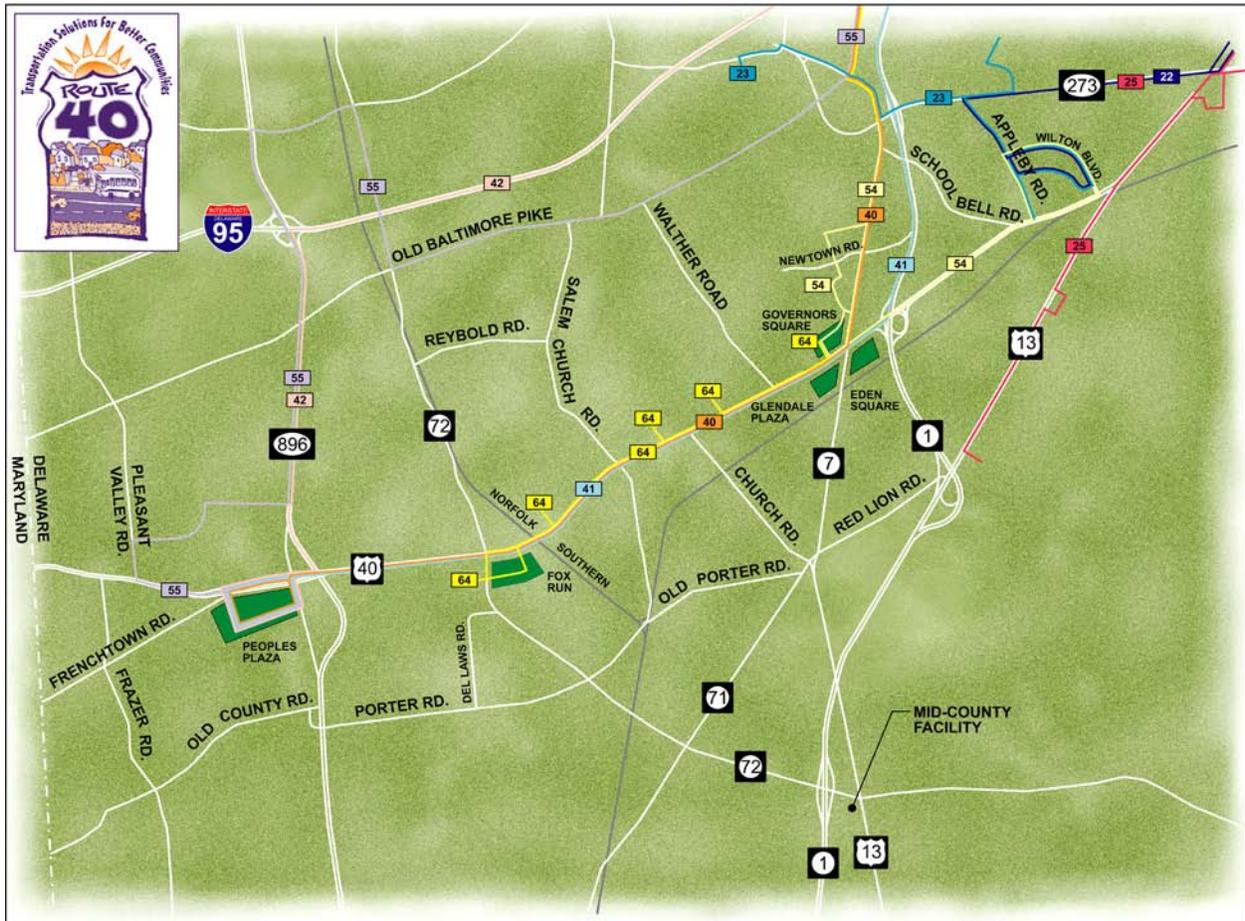
Bus Stop Improvements

Final design of about 60 improved bus stops throughout the Route 40 corridor is underway. Funding of \$675,000 has been programmed for fiscal year 2004 to construct bus stop improvements and associated sidewalk segments, crosswalks, and pedestrian signals to improve access to transit. A more detailed construction schedule has not yet been established.

Mid-County Facility

On December 17, 2004, DTC opened the new mid-county transit facility at the intersection of US 13 and SR 72. The site was formerly the home of the St. Georges Auto Auction. This facility, as recommended by the Transit Working Group of the Route 40 Steering Committee, provides better reliability for service in the area. The maintenance and operations facility includes a one-story operations building for maintenance, a fueling facility, a bus wash building, administrative space, and parking for 96 buses. During 2005, DTC may enhance service along SR 72 as a result of the new facility.

Figure 4. Transit route map.



Project Status

Substantial progress was made on nearly 20 projects in the Route 40 corridor during 2004. Figure 5 shows the status of projects in the corridor as of the end of 2004. Detailed descriptions of projects are provided below.

Church Road (N382, US 40 to Wynnefield)

The final design for improvements to Church Road south of US 40 included a three-lane section on Church Road approaching US 40 and a two-lane connector road through Rockwood. The connector road was completed in 2003 and construction of Church Road was completed in early 2004.

SR 7, US 40 to Newtown Road

This project is part of transportation improvements required as part of an agreement between DeIDOT and Bank One, which is developing 153 acres on the east side of SR 7 north of US 40. Bank One, 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 and is expected to be complete in late 2005.

Another, related project along SR 7 is a new entrance for Bank One 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 paid for and constructed by Bank One, will improve church access.

Wilton Boulevard/Appley Road Sidewalks

Construction of sidewalks along the entire length of Wilton Boulevard and Old Forge Road, as well as the portion of Appley Road between Wilton Boulevard and SR 273 began in June 2004. In addition to the original scope of the project, DeIDOT has included a pavement rehabilitation project and traffic calming improvements along Old Forge Road that were completed in fall 2004. Construction along the

remaining portions of the project is expected to continue through summer 2005.

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 underway. Construction, originally scheduled for summer 2004, will be delayed until 2005 to eliminate conflicts with the adjacent SR 7 contract described above.

In March 2004, a study was completed at the intersection of Wellspring Drive and SR 7 to address safety and congestion concerns of residents from Kensington. The recommendation resulting from that study was to install a signal at Bear-Tybouts Road during the construction of the Eden Square Connector. This signal work would also include upgrades to the signal control and gates at the Norfolk Southern railroad crossing located immediately north of Bear-Tybouts Road.

US 40, Bear-Glasgow Bus Stop Improvements

As noted in the transit section of this report, improvements will be made to about 60 bus stops throughout the Route 40 corridor. Funding of \$675,000 has been programmed for fiscal year 2004 to construct bus stop improvements and associated sidewalk segments, crosswalks, and pedestrian signals to improve access to transit. Final design is underway.

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 from Newtown Road south, which is expected to be complete in late 2005. Construction on the north section is expected to start in 2007.

US 40, West of Walther Road to Governors Square

A new shopping center, Governors Square II (formerly known as the Saienni property) has been proposed for the north side of US 40 just west of Governors Square. Through the site review process, DelDOT and New Castle County determined that the developer of the site must widen US 40 to six lanes from west of Walther Road to Governors Square.

For these improvements to meet the goals of the Route 40 Plan, additional right of way and utility relocations, which are outside the developer's control, will be required. The developer completed the limited improvements in 2004 to allow the shopping center to open.

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 will be completed in spring 2005 and construction is expected to start in fall 2005.

Walther Road, North of US 40 to Old Baltimore Pike

Final design continues for sidewalks along Walther Road. 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 late 2005.

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.

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 is underway.

Reybold Road, SR 72 to Salem Church Road

Minor shoulder improvements and resurfacing are anticipated to improve safety and facilitate bicycle access. Final design remains on hold due to legislative concerns.

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 may extend from north of Mabel Lane to Belltown Run. Minor realignment of Del Laws Road is also proposed to match the proposed entrance to the Fox Run Business Center. Public involvement and concept design should begin in spring 2005.
- **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; this will likely be constructed by the developer of Meridian Crossing II. *The concept design will be complete 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 to US 40. *This is a concept design effort only; 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 scheduled for summer 2005; design, right of*

way, and construction are not funded or scheduled.

- **Old County Road, Frazer Road to Glasgow Avenue.** A study of this section of Old County Road was initiated in late 2004 as part of a recent Bond Bill legislation. A public workshop was held on December 16, 2004 and the results of the comments received helped identify concept design issues. *Concept design is scheduled for 2005; 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 scheduled for summer 2005; design, right of way, and construction are not funded or scheduled.*

Additional Planning Studies

- **McMullen Farm Park.** DelDOT's agreement with Bank One (see the SR 7 project descriptions above) included the purchase, at a discount rate, of 50 acres of the 153-acre Bank One 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 sorely-needed public amenity for the surrounding community. During 2004, DelDOT established a working group to guide the development of a master plan for the park. This process is expected to be complete in 2005.
- **Glasgow Avenue "Main Street" study.** As recommended by the Steering Committee, this study, now underway, 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.
- **Old Baltimore Pike, SR 72 to SR 273.** A study identified by the Route 40 Plan is underway on Old Baltimore Pike. This study will assess existing conditions with respect to traffic, transit, safety, land use, and general adequacy of the

transportation system. The ability of the roadway to meet projected future travel demands will also be considered. After the study is complete, public involvement efforts will begin to identify potential improvements and seek funding for design, right of way, and construction. As of the end of 2004, this study is on hold pending completion of other priorities in the Route 40 corridor.

- **Corridor-wide park-and-ride study.** Future commuting needs will be studied to help identify potential park-and-ride locations in the corridor. The purpose of this study is to identify general locations where park-and-ride facilities will be needed, assess individual sites for suitability, and explore means to purchase those sites or otherwise preserve them for future use.

Impact of Projects Completed in 2004

Church Road (N382, US 40 to Wynnefield)

As previously described, roadway widening and pedestrian improvements were completed along Church Road early in 2004. These improvements were required to address capacity issues and maintain an acceptable level of service at the US 40 intersection.

US 40, West of Walther Road to Governors Square

These improvements included widening US 40 to provide a third travel lane in the westbound direction and improvements to the intersection at Walther Road. The improvements were constructed by the developer of Governor's Square II in order to address capacity issues resulting from traffic generation. These improvements will be upgraded to match the ultimate widening configuration along the Route 40 Corridor.

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 is available for construction of these improvements in FY 2006.
- **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. Although funds are not programmed for widening, funds will be available in FY 2006 for reconstruction of the existing toll plaza and administration facilities to allow for implementation of highway-speed E-ZPass lanes. Project planning was completed in 2004.
- **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. Funding is available for construction of these improvements in FY 2006.
- **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 pavement rehab project scheduled to begin in 2005 along this entire segment of SR 1.
- **US 301 Project:** The Major Investment Study (MIS) for this project was completed in January 2000; additional planning activities will begin in 2005. None of the improvements recommended by the study are currently programmed.

Figure 5. Project Status.



TRIGGERING

Assessment of Monitored Conditions

Generally, traffic congestion in the corridor increased in 2004. However, intersection levels of service, with the exception of the intersections of US 40 with SR 7, SR 72, and SR 896, remained acceptable. Six years of traffic data confirm the growth rates originally anticipated by the Plan.

During 2004, there were only 13 new development plans submitted to New Castle County for review in the Route 40 corridor, among them four new major development plans. An additional ten major development plans submitted prior to 2004 remained under review. For 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.

Accident trends were studied and priorities identified for the Route 40 Safety Committee over the next year. One new HSIP site was identified for study in 2005.

Recent transit improvements are generally working well, resulting in increased ridership in the corridor. The recently-completed mid-county facility may provide additional opportunities for transit service in the future.

Essentially all projects comprising Phase I of the Route 40 Plan are in some phase of concept design, final design, construction, or completion. During 2004, construction of Church Road improvements and widening of US 40 from west of Walther Road to the Glendale Connector were completed. Construction continued for the SR 7 widening between US 40 and Newtown Road. Sidewalk construction began along Wilton Boulevard, Old Forge Road, and a portion of Appleby 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 2004:

Recommendations

General

- Continue funding of the Route 40 program in FY 2010 – FY 2012 to continue work on Phase II of the program. Note that because the Plan recommended expensive projects for Phase II (including US 40 widening and interchanges at SR 896 and SR 7), funding levels are recommended to increase per year to fund later years of program. This is estimated at about \$20 million per year beginning in FY 2008, not including additional funding through developer contributions.

Land development

- 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.

Traffic

- Continue the planning, design, and construction of improvements at the intersections of US 40 with SR 7 and SR 72.
- Consider accelerating improvements at US 40 and SR 896.

Corridor preservation

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

Highway safety

- Develop a plan and schedule for safety improvements at US 40 at Salem Church and Porter Roads.
- Reactivate the Route 40 Safety Committee.
- Involve the public in safety efforts in the corridor, including a program at the Boys and Girls Club, a safety “open house,” and a pedestrian signal brochure.

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

- Track recommendations of the safety studies at the intersections of SR 72 with Old Baltimore Pike and SR 896 with Four Seasons Parkway/Old Cooch's Bridge Road.
- Provide input into study of one 2005 HSIP site.

Planning, design, and construction

- Complete construction of sidewalks along Wilton Boulevard, Appleby Road, and Old Forge Road.
- Complete construction of the SR 7, US 40 to Newtown Road project.
- Begin construction of sidewalks along Walther Road from north of US 40 to Old Baltimore Pike.
- Begin construction on School Bell Road between SR 1 and US 40.

- Continue final design for the following projects:
 - Eden Square Connector
 - US 40, Bear-Glasgow bus stop improvements
 - Bear Area Pedestrian Improvements
 - SR 7 between Newtown Road and SR 273
- Complete concept design for the following projects:
 - Newtown Trail
 - US 40/SR 72 intersection
 - Old Porter Road, Porter Road to SR 71
 - US 40/Pleasant Valley Road intersection
 - Church Road, Wynnefield to SR 71
 - Old County Road, Frazer Road to Glasgow Avenue
- Complete the US 40 environmental assessment between SR 896 and SR 1.
- Complete master planning activities for McMullen Farm Park.

PUBLIC INVOLVEMENT

Activities During 2004

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 2004.

Public workshops—Corridor residents were given the opportunity to receive information and express their opinions at four public workshops during 2004.

- July 15, 2004 at St. Elizabeth Ann Seton Church to present concept designs for the Bear Area Pedestrian Improvements.
- August 10, 2004 at the Bear Library to review the recommendations of the 2003 Corridor Monitoring and Triggering Report.
- November 8, 2004 at the Christiana Fire Hall for the SR 7 widening project from Newtown Road to SR 273.
- December 16, 2004 at Hodgson Vo-Tech High School to present existing conditions and discuss potential concept design alternatives for Old County Road.

Presentations to community groups— On March 22, 2004, a presentation was given to the residents of Kensington, a 102-home development on the west

side of SR 7, south of US 40. The objective was address safety and congestion concerns at the single point of access along SR 7, Wellspring Drive. It was concluded that when the Eden Square Connector is constructed, consideration should be given to signal installation at the intersection of SR 7 and Bear-Tybouts Road. Any signal work done at Bear-Tybouts Road would need to accommodate full-operation lights and gates at the Norfolk Southern railroad crossing.

On August 17, 2004, a presentation was made to residents of the Fairwinds community about safety and traffic conditions pertaining to crossovers between Buckley Boulevard and School Bell Road. Also discussed were details on School Bell Road reconstruction. Residents were informed about the plan to close unsignalized crossovers to improve safety and preserve highway capacity. Four preliminary alternatives were summarized, but no final decisions were made as to what crossovers would be modified/closed. A public workshop to discuss these issues is planned for 2005.

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 DeIDOT 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 DeIDOT about various projects.

Web site, e-mail, project mailing address and telephone hotline—The Route 40 corridor Web site (accessed from the DeIDOT Web site at www.deldot.net) is frequently 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 2005

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 2004:

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 apprised 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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