

2022 CORRIDOR MONITORING AND TRIGGERING REPORT

June 2023

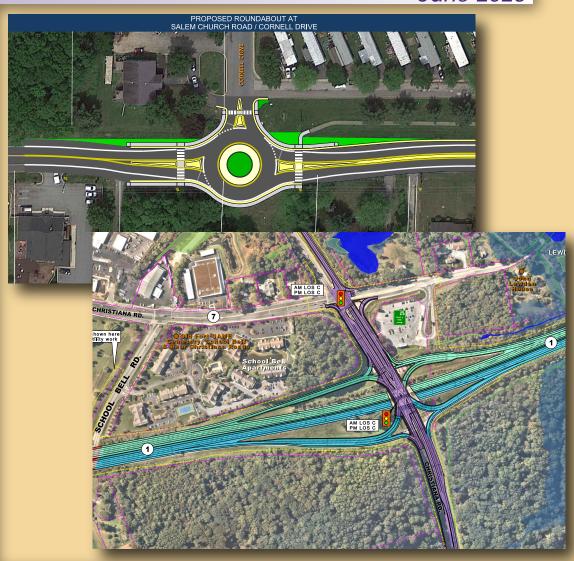










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2022 Corridor Monitoring and Triggering Report

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 the Steering Committee.

The fifth and final step of the project is the implementation of the Plan recommendations. This 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 (CMC). Until 2008, this committee typically met three or four times each year with the project team to review conditions in the corridor. The CMC met once in May 2022. Although the original Plan was completed in 2020, WILMAPCO continues to support the annual monitoring efforts to guide transportation improvements throughout the corridor beyond 2020.

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 multimodal capacity.

Safety improvements recommended by the Hazard Elimination Program (HEP), a component of the Highway Safety Improvement Program, would trigger an evaluation by the project team of the compatibility of the proposed improvements with 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 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 WILMAPCO Transportation Improvement Program (TIP) and/or DelDOT Capital Transportation Program (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.

2022 Corridor Monitoring and Triggering Report

MONITORING

Land Development

The New Castle County Department of Land Use reviews development plans for compliance with the Unified Development Code (UDC), including transportation aspects. The County requires review and approval of development plans by DelDOT, and review by DART when appropriate. If a major development plan is submitted in the corridor, the Route 40 Project Team may review plans for consistency with and impact to the Plan and provide comments to DelDOT and New Castle County.

Summary of Development Activity

During 2022, there were 21 new development plans (3 major/rezonings, 7 minor, and 11 resubdivision/other) submitted to the New Castle County Department of Land Use for review in the Route 40 corridor. This level of development activity is slightly higher than in 2021. Table 1 provides a description and status of the current major development proposals and rezonings, as well as other previously-submitted such plans reviewed during the year. Active major development locations are shown in Figure 1.

Review of 9 major developments proposed before 2022 continued this year. Among those plans, two (Garrett Woods and Governor's Glen) were recorded during 2022. Among the remaining seven plans, two are in the record plan submittal stage, and five are in the exploratory submittal stage.

Table 1. Major Development Plans/Rezonings Received and/or Reviewed During 2022

Site	Description	Remarks	New plan in 2022?
Vista at Red Lion Section One	Rezone from S to ST to construct 286 age restricted townhouse units on 56.71 acres.	Record Submittal	No
Vista at Red Lion Section Two	Rezone from S to ST to construct 289 single family units on 144.88 acres.	Record Submittal	No
Garrett Woods	Subdivide two parcels into an open space planned community consisting of 170 dwellings, 38 single family detached, 28 twin attached and 104 townhomes with associated improvements.	Recorded	No
Linden Grove (fka Red Lion - North)	Subdivide 10-053.00-030 and 10-049.00128 into 93 single family lots.	Exploratory Submittal	No
Governor's Glen (fka Red Lion - South)	Subdivide property into 87 age-restricted single-family lots.	Recorded	No
Valley Stream Village Apartments	Amend existing parcel DPUD from Professional Office to Apartment; provide two, three-story apartment buildings containing 24 total dwelling units with associated site improvements	Exploratory Submittal	No
Woodland Industrial Park	Consolidate 2 existing parcels, create 6 new lots, and construct 382,500 SF warehouse buildings.	Exploratory Submittal	No
2787 Pulaski Highway	Combine parcels to construct 89,400 SF self-storage warehouse and associated improvements.	Exploratory Submittal	No
613 Pulaski Highway Convenience Store/Gas Station	Proposed Royal Farms gas station and convenience store.	Exploratory Submittal	No
Sunset Lake Properties, LLC	Combine tax parcel 11-014.00-048 and 11-014.00-083 into one lot, rezone from ST to I and construct two proposed warehouse buildings with associated improvements.	Exploratory Submittal	Yes
Heavens Gate Ministries	Two proposed 15,000 SF church buildings, a 5,000 SF daycare, four dwellings (569 SF each) and associated site improvements.	Exploratory Submittal	Yes
Country Creek Phase 3	Subdivide tax parcel and develop 28 single family detached units.	Exploratory Submittal	Yes

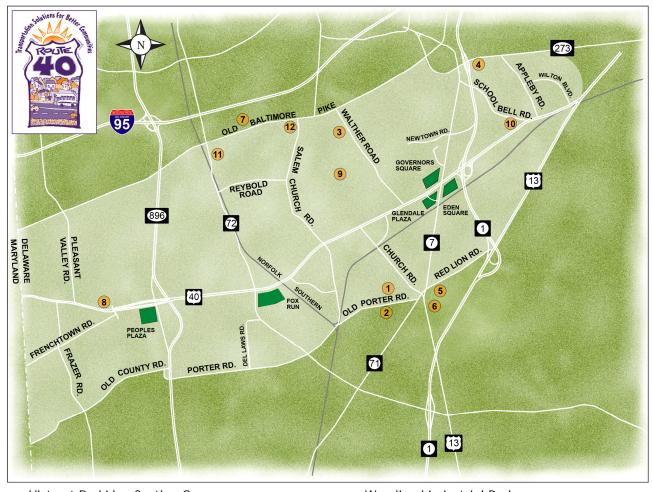


Figure 1. Active Major Development Plans/Rezonings

- 1. Vista at Red Lion Section One
- 2. Vista at Red Lion Section Two
- 3. Valley Stream Village Apartments
- 4. Garrett Woods
- 5. Linden Grove (fka Red Lion North)
- 6. Governor's Glen (fka Red Lion South)

- 7. Woodland Industrial Park
- 8. 2787 Pulaski Highway
- 9. Country Creek Phase 3
- 10. 613 Pulaski Highway
- 11. Sunset Lake Properties, LLC
- 12. Heavens Gate Ministries

Developer Agreements

Since 2000, there have been more than 570 applications submitted to New Castle County for developments in the Route 40 Corridor. In addition to those previously noted, many development projects in the 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 DelDOTsponsored roadway improvements. Developer contributions throughout the corridor are highlighted in Figure 2.

Any proposed development requiring a Level of Service (LOS) waiver from New Castle County must first have a Traffic Mitigation (TM) Agreement negotiated with DelDOT. TM Agreements were implemented to provide an alternative for developers to reduce trip generation and provide transportation demand management measures. Developers are required to present primary and contingent trip reduction measures that could include alternative work hours, preferential parking for carpools/vanpools, transit usage, bicycle storage, and parking management. There are four developments in the Route 40 Corridor that have TM Agreements with DelDOT: Lincoln Center, Springside Plaza, Astra Zeneca, and Gore.

TIS Waivers / Fair Share Contributions

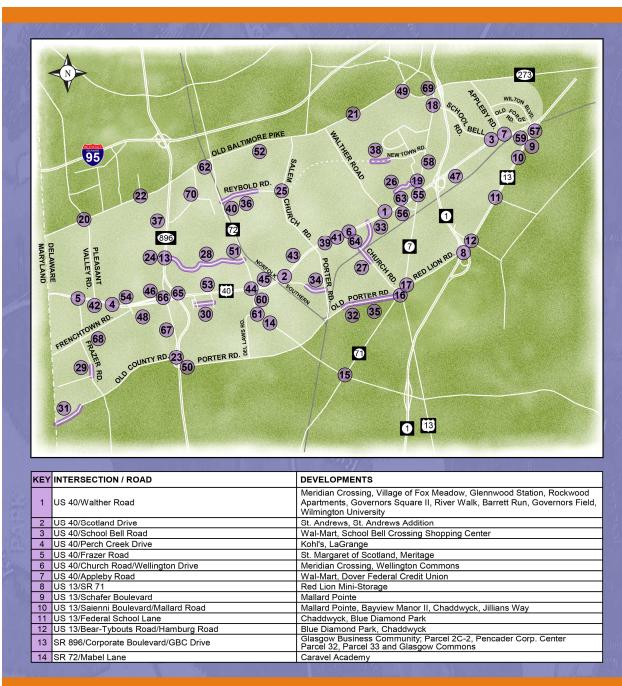
In 2004, New Castle County amended its Unified Development Code (UDC) to increase eligibility for Traffic Impact Study (TIS) Waivers. The UDC already enabled such waivers for developments where TISs had been done for changes in zoning. The modification allowed TIS Waivers for developments in Transportation Improvement Districts (TIDs) or similarly defined areas where sufficient prior traffic studies have been done.

In 2019, New Castle County amended the UDC by: including code language enabling County Council to establish Transportation Improvement Districts (TIDs) and Complete Community Enterprise Districts (CCEDs); establishing LOS Waiver standards based upon Job Creation, Public Purpose, and Significant Hardship; and providing improved coordination with DelDOT regulatory language. TIDs and CCEDs require an agreement between the County and DelDOT, with an adopted plan involving land use and transportation. A TIS Waiver for a development located within a TID or CCED is based on the transportation planning for the district, rather than a TIS, to determine what transportation improvements should be the developer's responsibility. As of 2022, no such TID or CCED has been created in the Route 40 area.

There are currently four operating TIDs in Delaware: Southern New Castle County, Westown in Middletown, Eastown in Middletown, and Henlopen. The State is also working with New Castle County on the development of the Newark TID and Churchmans Area TID; Kent County and local towns on the development of the Cheswold Area TID, Little Heaven TID, South Frederica TID, Magnolia TID; and with Sussex County and local towns on the development of the SE Milford TID and Milton TID.

There were no new applications or approvals for TIS Waivers in the Route 40 Corridor in 2022. To date, 27 development plans have requested TIS Waivers for locations in a TID. By the end of 2021, TIS Waivers had been approved for 22 of them. Two developments did not require a TIS: Reserve at Becks Pond involved workforce housing, which was exempt from County concurrency; and Lighthouse Baptist Church where the nearby intersection recently had been improved. DelDOT denied a TIS Waiver for Governors Square Commercial Center and required a TIS for Whitewood Village. Another development, Whittington Woods, completed a TIS instead of completing the waiver process.

Figure 2. Developer Contributions*



*Note: See legend continued on the following page.

Figure 2. Developer Contributions (cont.)

KEY	INTERSECTION / ROAD	DEVELOPMENTS
15	SR 71/SR 72	Willow Oak Farms, Red Lion Chase, Sunset Meadows, Red Lion Christian Academy, Sunset Run, Village of Red Lion Creek, Estates of Red Lion, Jester Crossing, Peoples Industrial Park, WAWA
16	SR 71/Church Road	Meridian Crossing, Rockwood Apartments
17	SR 7/SR 71	Love of Christ Church, Corbitt Estates, Estates of Red Lion, Peoples Industrial Park
18	SR 7/School Bell Road	School Bell Apartments
19	Songsmith Drive/Governors Square access	Calvarese Farms, Governors Square Commercial
20	Old Baltimore Pike/Otts Chapel Road/Pleasant Valley Road	Deerborne Woods, Lighthouse Baptist Church
21	Old Baltimore Pike/Martha Washington Boulevard/Norwegian Woods Drive	Norwegian Woods, Hershberger Apartments
	Old Baltimore Pike/Iron Hill Road	Preserve at Lafayette Hill
	Glasgow Avenue/Old County Road	Meritage
	Corporate Boulevard/Executive Drive	Pencader Corporate Center; Parcel 30A
	Salem Church Road/Reybold Road	AstraZeneca, Whitewood Village
	Carvel Drive traffic calming	Calvarese Farms
	Church Road	Rockwood Apartments, Meridian Crossing
	GBC Drive (Dusk Run Road), SR 896 to SR 72	Glasgow Commons
	Frazer Road	Meritage (frontage shoulder)
	George Williams Way	YMCA, Delaware State Police, Bristol Place
	Old County Road	Estates at Long Branch (frontage, extending west to Maryland border)
	Old Porter Road curve realignment	Meridian Crossing
	Rockwood Drive	Rockwood Apartments St. Andrews Addition
	Scotland Drive extension, St. Andrews Road to Porter Road Old Porter Road	Vista at Red Lion
	Reybold Road	Whitewood Village
	Route 896/Old Coochs Bridge Road/Four Seasons Parkway	Thirteen Stars Housing and Glasgow Commons
	Newtown Trail	Whittington Woods
	US 40/Glasgow Drive	Salem Center
	SR 72/Reybold Road	Whitewood Village
	US 40/Brookmont Drive	Wellington Commons
	US 40/Pleasant Valley Road	Pleasant Valley Crossing, Royal Farms
	US 40/Becks Woods Drive	Becks Woods Plaza, St. Andrews Addition
	US 40/SR 72	Fox Run Shopping Center, Belltown Business Center
45	US 40/PGA Blvd	Belltown Business Center
	US 40/Peoples Plaza	LaGrange
	US 40/Buckley Blvd	Americinn, Goodyear, Gordon Furniture
	US 40/Biddle Avenue	Springside Plaza, LaGrange
	Old Baltimore Pike/SR 273	Comfort Suites, Promenade at Christiana
	SR 896/Porter Road SR 72/GBC Drive	Glasgow Commons, Colony at Summit Bridge Glasgow Commons
	Old Baltimore Pike/Hanna Drive	Astra Zeneca
	US 40/LaGrange Avenue/Glasgow Park	YMCA, Delaware State Police, New Castle County
	US 40/N392A	Deer Park Plaza
	US 40/SR 7	Governors Square Commercial, Newtown Square
	SR 7/Glendale Connector/Old Hamburg Road	Governors Square Commercial
	US 13/Langollen Blvd	Old State Road Hotel, Old State Road Self Storage
	SR 7/Songsmith Drive South	Governors Square Commercial, Lincoln Center
	Old State Road	Old State Road Hotel, Old State Road Self Storage
	SR 72/Rue Madora SR 72/Del Laws Road	Fox Run Business Center
	SR 72/Old Baltimore Pike	Fox Run Business Center Royal Farms
63	US 40 Widening	Governors Square II, Wilmington University, Rockwood Apartments, Lidl
	Church Road/Rockwood Road	Steeple Glen, Rockwood Apartments
65	US 40/SR 896	Glasgow Commons West
66	US 40/Glasgow Avenue	Glasgow Commons West
	Glasgow Avenue/Peoples Plaza	Glasgow Commons West
	Frazer Road/Frenchtown Road	Village at Pine View
69	SR 7 / SR 273	Garrett Woods
70	Old Coochs Bridge Road	Glasgow Commons

Traffic

To monitor traffic growth, 24-hour traffic counts were conducted on five segments of Route 40 using automatic tube counters for one week. 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 based on counts conducted primarily in 1998 and 1999, as well as counts conducted for Corridor Monitoring and Triggering Reports during 2000 through 2022. As summarized in Table 2, the Average daily traffic (ADT) volumes along Route 40 remained steady in 2022 with all intersections experiencing slight growth compared to 2021.

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 significantly less than what was originally anticipated (See Figure 3). The volumes at these five locations are summarized in Table 2. All five locations experienced less traffic than predicted, ranging from 26.9 to 41.9 percent below the original 2020 projections. As a result, the general growth trend through 2022 is about 0.3 percent annually.

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 weekday peak hours at 11 signalized intersections along US 40 in October 2022.

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 DelDOT.

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 DelDOT. The results of the level of service (LOS) analysis are summarized in Table 3. As indicated, five intersections had minor degradation in levels of service from 2021, eight experienced slight improvement, and one experienced significant improvement.

- The intersection of US 40 at SR 7/Governor's Square improved from LOS E (56.5 sec) in 2020 to a LOS C (32.6 sec) in 2022 during the PM peak hour.
- The intersection of US 40 at Glasgow Drive degraded from LOS A (9.4 sec) in 2021 to LOS B (11.8 sec) in 2022 during the AM peak hour. The PM peak remained at LOS B, with the delay remaining at 12.3 sec in 2021 and 2022.
- The intersection of US 40 at SR 896 remained at LOS D in the AM and PM peak. The AM peak experienced a slight decrease in delay, from 40.4 sec in 2021 to 38.2 sec in 2022, while the PM peak also experienced a more significant decrease in delay, from 43.3 sec in 2021 to 35.2 sec in 2022.

Table 2. Average Daily Traffic

Location	Plan volumes (1998/1999)	2000	2020	2021	Projected 2022 volumes*	2022 counts	% below original 2020 forecast	2020 forecast
East of Perch Creek Drive	34,000	29,000	33,527	33,431	33,565	33,643	-29.9%	48,000
West of SR 72	29,000	27,000	27,731	28,574	28,688	29,030	-41.9%	50,000
West of Salem Church Road	32,000	34,000	32,500	31,578	31,704	32,179	-38.1%	52,000
West of Walther Road	41,000	43,000	41,690	41,536	41,702	43,520	-30.0%	58,000
West of Wilton Boulevard	27,000	27,000	23,477	23,867	23,962	24,110	-26.9%	33,000

^{*}Based on 2021 0.4% annual growth rate

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

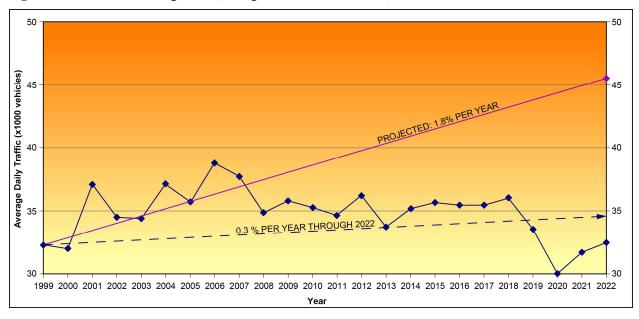


Table 3. Signalized Intersection Level of Service Summary

-	PEAK HOUR LEVEL OF SERVICE									
INTERSECTION	Base (1998/1999)		2000		2021		2022		2020 without additional Plan improvements	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Frazer Road	-	-	-	-	С	С	С	С	F	С
Pleasant Valley Road ²	С	С	С	С	С	С	С	С	Е	F
Perch Creek Drive	-	-	В	Α	В	В	В	В	С	С
Biddle Avenue north	-	-	-	-	Α	Α	Α	Α	-	-
Biddle Avenue south	-	-	-	-	В	В	В	В	-	-
Peoples Plaza north	В	С	Α	В	Α	Α	Α	Α	Α	Α
Peoples Plaza south	В	В	В	С	Α	В	Α	В	С	D
Glasgow Avenue north ²	С	С	С	С	D	D	C	D	С	Е
Glasgow Avenue south ²	С	D	В	С	D	D	C	C	D	D
SR 896 ²	D	D	D	Е	D	D	D	D	F	F
LaGrange Avenue	-	-	-	-	В	С	В	С	В	С
SR 72 ²	D	D	Е	Е	С	D	С	<u>C</u>	Е	Е
Scotland Drive	С	В	В	В	С	С	С	С	С	С
Becks Woods Drive	-	-	-	-	В	В	В	В	-	-
Salem Church/Porter Rd ²	С	С	D	D	С	Е	D	D	D	F
Glasgow Drive	-	-	-	-	Α	В	B	В	-	-
Brookmont Drive	В	В	В	В	Α	В	B	В	В	В
Church Road	D	С	D	С	С	С	С	С	С	С
Walther Road ²	С	D	D	D	С	С	С	С	С	С
Governor's Square ²	В	С	С	С	С	Е	С	<u>C</u>	С	D
SR 7 ^{1,2}	Е	D	Е	D	С	D	D	<u>C</u>	D	Е
Eden Square ^{1,2}	-	-	-	-	Α	Α	Α	Α	-	-
SR 1 SB Ramps	А	Α	А	Α	В	Α	В	А	В	С
SR 1 NB Ramps	В	В	В	Α	Α	В	B	В	Е	С
Buckley Boulevard	-	-	В	В	В	С	В	С	В	С
School Bell Road ²	В	В	С	Α	В	Α	В	Α	А	Α
Wilton Boulevard	В	В	С	С	В	В	В	В	В	С
US 13 ²	D	В	С	В	С	D	B	C	F	F

Note: Red denotes a worse level of service than 2020; green denotes improvement in level of service over 2020.

¹ Signal timing changes across the corridor were implemented in 2020; part of these changes included separating the SR 7 and Eden Square signals

² Peak hour counts were conducted at these intersections in fall 2022

Highway Safety

Each year, the project team coordinates with DelDOT Traffic Safety to request the annual crash report summary for the Route 40 corridor. In addition, to reviewing the annual summary, the project team coordinates with DelDOT's statewide Highway Safety Improvement Program (HSIP) to identify any locations that are currently under study. DelDOT's statewide HSIP includes several categories of transportation safety throughout the state. One of those categories is the Hazard Elimination Program (HEP), which involves reviewing statewide crash rates and selecting approximately 15 sites for study. The 2022 HEP list did not include any sites in the Route 40 Corridor.

The goal of this report with respect to safety is to identify intersections where reported crash totals from the annual summary increased significantly (>50%) compared to the previous five-year average, identify the possible reasons for those increases, and consider those sites for detailed study and improvement recommendations.

Table 4 shows the number of reported crashes annually at selected intersections from 2017-2022. The 2022 crash totals were compared to the previous five-year average to determine if there was an increase of greater than 50 percent. It is important to note that these totals are approximated based on raw crash data summaries and not the actual reports. The number of crashes is determined based on the DelDOT mile posts at a particular intersection along US 40 and includes all crashes listed within 0.10 miles of the intersection. These numbers may vary upon review of the detailed crash reports.

Of the 21 intersections evaluated, the number of crashes decreased for 12 intersections, and two intersections had no change in the number of crashes in 2022 compared to the previous five-year average. There were a total of six fatalities reported during 2022. Five involved vehicle occupants and one involved a pedestrian.

Upon reviewing the crash reports, there was one intersection where the 2022 reported crash total was more than 50 percent higher than the previous five-year average: Glasgow Avenue (+55%). The crash reports indicate that there were 45 reported crashes at this intersection in 2022 compared to the average of 29 reported crashes from 2017 to 2021. Of the 45 crashes in 2022:

- 16 (35%) were angle crashes.
- 17 (38%) were rear end crashes.

- 12 (27%) involved personal injury.
- 12 (27%) were associated with commercial accesses adjacent to the intersection.
- Four were related to the Service Road located between 2423 Pulaski Highway (N/F Wendy's) and 2409 Pulaski Highway (N/F Arby's).
- Three were located within private commercial parking lots adjacent to the intersection.
- One involved a bicyclist.

Since 19 of the 45 reported crashes occurred at locations unrelated to the intersection, no further study is recommended.

Pedestrian and Bicycle Safety

During 2022 in the Route 40 corridor, there were a total of eleven reported crashes involving pedestrians or bicyclists; five involved pedestrians and six involved bicyclists. Three of the ten reported crashes resulted in property damage only, seven resulted in personal injuries and one pedestrian fatality.

Of the eleven reported crashes:

- Four occurred within a shoulder or turn lane.
- Three occurred within a marked crosswalk.
- One occurred in a travel lane.
- One occurred during a mid-block crossing.
- One was identified as using sidewalk.
- One occurred on a side street of US 40.

The pedestrian fatality occurred on December 25, 2022 in the westbound lanes near Becks Woods Drive at 9:33 PM. The pedestrian was struck while walking eastbound in the westbound left through travel lane.

Route 40 Pedestrian Study

In 2017, DelDOT initiated a pedestrian safety study along Route 40 between SR 72 and Buckley Boulevard. In addition to reviewing detailed crash reports, field observations and pedestrian counts were conducted at several intersections along this 4.3-mile segment in spring 2017. The final study was submitted in April 2019 and included a three-page matrix of short-term, mid-term, and long-term recommendations.

Some of the recommendations are being actively implemented which include the installation of lighting, a median barrier along US 40 to deter midblock crossings and promote crossings at signalize intersections and upgrading the Ricky Blvd

intersection to provide a signalized pedestrian crossing.

Electronic Red Light Safety Program

The Delaware Electronic Red Light Safety Program (ERLSP) began operations on February 1, 2004 at the intersection of Route 13 and Webbs Lane in Dover. The program now includes 46 intersections statewide. Among those intersections there are six located along US 40 as noted below.

- US 40 at SR 896
- US 40 at SR 72 (NB)
- US 40 at Scotland Drive
- US 40 at Glasgow Drive
- US 40 at Governors Square
- US 40 at Eden Square

DelDOT completed the selection process for the cameras installer. The three sites listed below will be included in the next contract, which should be installed by the end of 2023.

- US 40 at Pleasant Valley Road (EB/WB)
- US 40 at Brookmont Drive (EB/WB)

• US 40 at SR 72 (EB/WB/SB)

Each location is identified based on an extensive selection process that includes reviewing crash data, field observations, signal timing review, data collection, and site evaluation. The program also completes an annual report that provides statistics about reported crashes, violations, and program revenue and expenses.

DelDOT is currently evaluating four additional locations for enforcement along US 40 at Perch Creek Drive, Glasgow Avenue, SR 1 SB ramps, and Buckley Boulevard.

More details about the history of the program and updates on the progress can be reviewed on the project website at:

https://www.deldot.gov/Programs/red_light/index.sh tml

 Table 4. Intersection Crash Data Summary

INTERCECTION								
INTERSECTION	2017	2018	2019	2020	2021	5-year average	2022	
Frazer Road	8	6	14	3	9	8	12	
Pleasant Valley Road	27	27	19	14	18	21	11	
Perch Creek Drive	16	15	13	13	7	13	8	
Peoples Plaza	9	6	6	11	10	8	5	
Glasgow Avenue	30	32	27	21	36	29	45	
SR 896	31	56	42	43	29	40	34	
LaGrange Avenue	13	12	9	11	12	11	6	
SR 72	26	36	24	30	23	28	26	
Scotland Drive	20	21	15	19	23	20	19	
Becks Woods Drive	6	11	8	9	8	8	11	
Salem Church/Porter Road	33	51	38	23	31	35	40	
Glasgow Drive	8	15	17	13	21	15	20	
Brookmont Drive	19	23	19	12	15	18	16	
Church Road	26	35	29	29	26	29	28	
Walther Road	17	21	13	8	10	14	11	
SR 7	47	45	52	55	57	51	46	
SR 1 SB	11	17	16	17	19	16	14	
SR 1 NB	10	9	9	4	9	8	11	
Buckley Boulevard	8	10	9	9	8	9	9	
School Bell Road	5	9	4	4	9	6	6	
Wilton Boulevard	17	14	13	9	11	13	19	

Transit Service

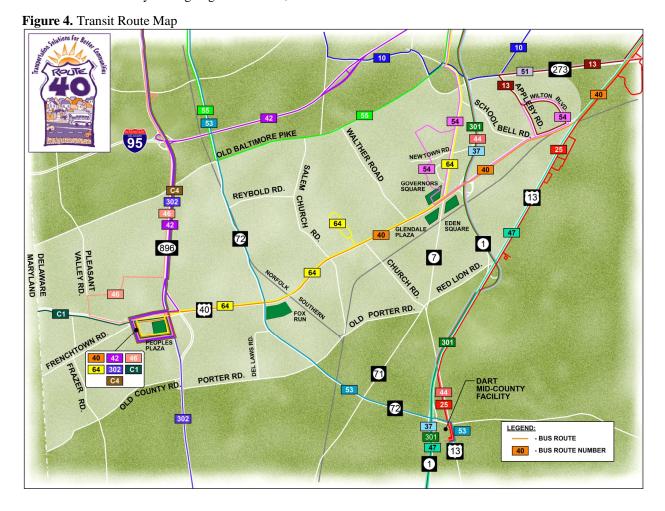
Comparing transit ridership numbers in 2022 with those from 2021, ridership in the US 40 corridor increased significantly. This was to be expected when considering the impact of the COVID pandemic.

When comparing total ridership for the bus routes in the Route 40 Corridor, there was a 79% increase in ridership between 2021 and 2022. The most significant increases occurred along bus route 40 (46%), 42 (32%), and 53 (109%). The smallest change in ridership was along bus route 54, which had an annual growth of 4%. With the 2021 services changes to route 64, there was an increase of 247% during January 2022 and 17% for the 2022 calendar year. Statewide ridership increased at total of 16% during 2022. The largest increase in statewide ridership occurred between June and November when the average monthly increase from 2021 to 2022 was 26%.

Service changes implemented in 2022 focused on eliminating low ridership trips along routes 54, 55, and 64. DART is currently undergoing a statewide, 14-

month evaluation called, "DART Reimagined." Additional service changes proposed for 2023 include:

- Route 42: Select trips will not travel into I-95 service plaza due to low ridership; an early morning weekday trip was discontinued; late night trips were added; limited Saturday and Sunday service was added, but would not serve the 896 PNR on these days
- Route 46: Route extended to the Odessa park & ride via SR 896 and SR 299; taking over portions of route 43, 63, and 302; end Saturday service at People's Plaza; increase to weekday trips
- Route 53: Number of trips reduced by half
- Route 54: 10:00 PM trip from Fairplay Station discontinued
- Route 55: 6:20 AM Saturday trip from Christiana Mall discontinued
- Route 64: Weekday service frequencies changed to 60 minutes, which reduced total trips by 10
- Route 302: Revised to operate between north Middletown park & ride and Dover



Project Status

During 2022, there were two active projects in the corridor that were part of the original Plan: US 40 widening from Salem Church Road/Porter Road to Walther Road, and the US 40/SR 896 intersection improvements. Figure 5 shows the status of Plan projects in the corridor as of the end of 2022. Detailed descriptions of all active projects are provided below.

US 40 Widening, Salem Church Road/Porter Road to Walther Road

The US 40 widening from Salem Church Road/Porter Road to Walther Road began concept design in 2016. In 2018, the developer for Rockwood completed widening to add a through lane along eastbound Route 40 from Rockwood Road to Glendale Boulevard.

Final design for the remaining segment west of Rockwood Road began in 2018. A virtual public workshop was conducted in May 2020 and a follow-up workshop was conducted with the Raven Glen Community in September 2020. The environmental documents have been approved and right-of-way acquisition is underway. Advance utility relocations are scheduled to being in fall 2023 and roadway construction is anticipated to begin in early 2025.

US 40 at SR 896 Intersection

Project development to address safety and congestion issues began in 2016. The project team developed concept alternatives, three of which were retained for further analysis and were presented at a public workshop held on May 1, 2018. A preferred alternative was selected in 2018. Preliminary design began in early 2019 and semi-final plans were completed in late 2020. Final design continues and a public workshop is planned for 2023. Final design will be complete in 2024 with construction anticipated to begin in 2026.

US 40 at SR 7 Intersection

The Department selected a design team to proceed with concept and final design for a proposed grade separated intersection at US 40 and SR 7 to address safety and traffic congestion. Concept design and environmental documents are scheduled to begin in FY 2023. Final design funding is scheduled through 2025 with R/W funding beginning in 2026. The construction funding and schedule has not been established.

Glasgow Avenue Main Street Study

The Glasgow Avenue Main Street Study was completed in 2017. The study was undertaken to develop a vision plan that will guide future transportation and land use along Glasgow Avenue in an effort to become a functional "Main Street" for the surrounding community.

The study provided several recommendations related to character districts, proposed gateway treatments, complete streets, and development. The study is now in the implementation phase when DelDOT, WILMAPCO, and New Castle County will use the design guidelines provided in the study to achieve the Main Street vision. Project design began in 2022 and the next public workshop is planned to be held in 2023. Construction funding is currently programmed for FY 2026. However, this project will begin construction following the US 40 at SR 896 Intersection project.

A copy of the study is posted on the WILMAPCO website at:

www.wilmapco.org/Glasgow/GlasgowAveMainStree tStudy.pdf

Other Projects in the Corridor

US 13 Paving and Pedestrian Improvements, Llangollen Blvd to Bacon/Boulden Blvd

This project includes pavement resurfacing, 2.8 miles of new sidewalk, corridor lighting improvements and new traffic signal with a signalized pedestrian crossing at Quigley Boulevard. The project has been split into multiple phases in order to expedite the implementation of the improvements. Pedestrian facilities between Boulden Blvd and Rogers Rd were completed in early 2021. The US 13 lighting project between Llangollen Blvd and I-495 was completed mostly in 2021, with some additional lighting from Delmarva Power in summer 2022. The US 13 median treatment is expected to start construction in early 2023. The US 13 paving and pedestrian project between Llangollen Blvd and Bacon/Boulden Blvd is expected to start construction in 2024.

Other Projects in the Region

As noted in previous Corridor Monitoring and Triggering Reports, future regional projects may have

an impact on the Route 40 corridor. The status of these projects is summarized below.

SR 1 widening, Road A to US 13/Tybouts Corner

Planning has begun for widening (from four to six lanes) and pavement reconstruction along this segment of SR 1. The project will be split into two contracts, one from Road A to Route 40 and a second from Route 40 to US 13/Tybouts Corner. The first contract will also include improvements to the SR 1 at SR 273 interchange. A virtual public workshop was conducted on October 27, 2021 to present the recommended preferred alternative. The updated NEPA document was available for public review in 2022. Construction funding is programmed for FY 2029.

A public workshop was conducted in July 2022 for the SR 1 at Tybouts Corner improvements.

SR 72, McCoy Road to SR 71

This project proposes to widen SR 72 from two to four lanes between McCoy Road and SR 71. Multimodal improvements, including shoulders to accommodate bicycles and new sidewalks are also planned. Utility relocation and drainage construction began in spring 2019 and was substantially completed in November 2021. Construction for the roadway contract began in the summer of 2022 and is expected to be completed by summer 2024.

I-95 at SR 896 Interchange

Design began in 2018. The project was advertised in November 2020 using alternative contract Construction Manager/General Contractor (CM/GC) delivery; however, DelDOT has decided to proceed with a design-bid-build approach. A virtual public workshop was held on February 16, 2021. Design and advanced clearing work have been completed. Advanced utility work is currently ongoing. Construction is scheduled to begin in May 2023 and will be complete in fall 2025.

Figure 5. Project Status



33. US 40 / SR 72 Intersection Improvements41. Glasgow Avenue Main Street Study

TRIGGERING

Assessment of Monitored Conditions

Traffic congestion did not change substantially in 2022. Levels of service were acceptable for all intersections that were counted in 2022. Traffic volumes continue to increase slightly from the effects of the pandemic, but traffic data confirms that overall growth rates are still significantly lower than originally anticipated by the Plan.

During 2022, there were 21 new development plans submitted to New Castle County for review in the Route 40 corridor. Review of 9 major developments proposed before 2022 continued this year. Among those plans, two were recorded in 2022.

There were no sites within the Route 40 Corridor included on the 2022 HEP list. No intersections experienced a significant increase in reported crashes. During 2022, there were a total of ten reported crashes involving pedestrians or bicyclists; four involved pedestrians and six involved bicyclists. Three of the ten reported crashes resulted in property damage only, seven resulted in personal injuries. There were no pedestrian/bicyclist fatalities reported in 2022.

There was a 79% increase in ridership in the Route 40 Corridor between 2021 and 2022. The most significant increases occurred along bus route 40 (46%), 42 (32%), and 53 (109%).

Recommendations

General

Continue to 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 major land developments to ensure the compatibility of developer-sponsored improvements with the Plan.

Corridor preservation

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

Highway safety

Continue to follow pedestrian safety improvement implemented as part of the Route 40 Ped Safety Study.

Continue to review annual crash reports to identify crash patterns or changes in the corridor.

Transit

Identify existing bus stops where improvements are needed – damaged shelters, need for lighting, access, and sidewalk reconstruction.

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

Continue to identify opportunities for developerfunded transit improvements such as bus service expansion, bus stop improvements, transit-oriented development, and innovative trail projects throughout the Route 40 Corridor.

Planning, design, and construction

Continue final design for the US 40 widening between Salem Church Road/Porter Road and Walther Road

Continue final design for the US 40 / SR 896 Grade Separated Intersection

Begin concept and final design for the US $40 / SR\ 7$ Grade Separated Intersection

Evaluate need and program funding for the Eden Square Connector.

PUBLIC INVOLVEMENT

Activities During 2022

The CMC met once, in May 2022. The project website is updated annually to provide the latest information on implementation of the Plan. The site contains information from newsletters, updates on project planning, design, and construction, and a schedule of public meetings and workshops. The site can be accessed from the DelDOT Web site at:

https://deldot.gov/projects/

Search: US 40

Activities Planned For 2023

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 will continue the following communications initiatives for 2023:

Website - The Route 40 corridor project website will continue to be maintained and updated on a regular basis.

2022 Corridor Monitoring and Triggering Report

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

