

US 322 TRAFFIC ANALYSIS STUDY I-95 TO US 1 Delaware County, Pennsylvania

Supplement No. 1



**Delaware Valley Regional Planning Commission
November 2000**

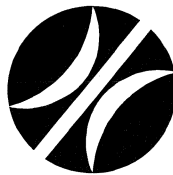
**US 322 TRAFFIC ANALYSIS STUDY
I-95 TO US 1
Delaware County, Pennsylvania
Supplement No. 1**



**Delaware Valley Regional Planning Commission
The Bourse Building
111 South Independence Mall East
Philadelphia, PA 19106-2582
November 2000**

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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty, and intercity agency which provides continuing, comprehensive, and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. DVRPC provides technical assistance and services, conducts high priority studies that respond to the request and demands of member state and local governments, fosters cooperation among various constituents to forge a consensus on diverse regional issues, determines and meets the needs of the private sector, and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the commission.



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. This report was primarily funded by the Pennsylvania Department of Transportation and the Federal Highway Administration (FHWA). The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.

On the cover: US 322 looking west from PA 261 (Foulk Road) overpass.

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EXECUTIVE SUMMARY

This report updates a previous effort that developed 2016 traffic forecasts for a No-Build and three build alternatives for US 322 between I-95 and US 1, commonly referred to as Conchester Road. Updates were necessary to reflect the current traffic volumes and socio-economic data that have changed since the previous report. In addition, the design year has been changed to 2026 to represent a 20-year horizon from the anticipated opening year (2006) and the alternatives under consideration have been modified from the previous study. This analysis was conducted at the request of the Pennsylvania Department of Transportation (PennDOT) and its consultants, who are engaged in preliminary designs for the reconstruction of this facility.

Together with the No-Widening alternative, three improvement alternatives were tested. The first of these includes widening US 322 to four lanes with a median barrier and incorporating left-turn pockets at selected intersections. The second includes a four-lane divided section with jughandles at selected intersections. The final improvement alternative involves a mixed cross-section incorporating four-lane divided sections with jughandles at selected intersections and a five-lane section with a two-way center left-turn lane.

In preparation for projecting future traffic volumes, the Delaware Valley Regional Planning Commission (DVRPC) collected traffic counts throughout the study area. Municipal and county planners were contacted to identify the significant proposed residential and commercial developments within the corridor. DVRPC's regional traffic simulation model was focused on the corridor and used to prepare 2006 and 2026 traffic volume estimates for study area roadways under each of the alternatives.

Under the No-Widening alternative, traffic growth in the study area is projected to be heavy. On US 322, traffic increases by 25 to 30 percent over current volumes by 2026. These traffic volumes will result in congestion and delay. Parallel facilities in the study area experience even greater percentages of traffic growth. Concord Road volumes increase by between 36 and 77 percent. Naamans Creek and Bethel roads will grow by 30 to 177 percent.

Each of the widening alternatives produces greater traffic volumes on US 322 compared to the No-Widening alternative (by between 16 and 42 percent), although traffic volumes per lane are considerably lower than the No-Widening alternative. In fact, 2026 traffic volumes per lane under the widening alternatives will be lower than current conditions. Each of the widening alternatives also reduces traffic flows on the parallel facilities, by between 2 and 22 percent compared to the No-Widening alternative.

Overall, there is very little difference in 2026 traffic volume forecasts among the three widening alternatives. The widening alternatives differ only in the treatment of left turns and only at a limited number of intersections. Along US 322, traffic varies by at most 900 vehicles per day, which represents about 2 percent of daily traffic.

Because the traffic volumes differences between alternatives are so small, the choice of a preferred alternative will likely be driven by other considerations than forecast traffic volumes, such as safety, intersection operations, available right-of-way, and local concerns.

I. INTRODUCTION

This report updates a previous effort that developed 2016 traffic forecasts for a No-Build and three build alternatives for US 322 between I-95 and US 1. Updates were necessary to reflect the current traffic volumes and socio-economic data that have changed since the previous analysis. In addition, the design year has been changed to 2026 to represent a 20-year horizon from the new anticipated opening year (2006) and the alternatives under consideration have been modified from the previous study. This analysis was conducted at the request of the Pennsylvania Department of Transportation (PennDOT) and its consultants, who are engaged in preliminary designs for the reconstruction of this facility.

US 322 is an older highway that runs between Atlantic City, New Jersey and Cleveland, Ohio. It enters Pennsylvania by crossing the Delaware River on the Commodore Barry Bridge from Gloucester County, passes through Delaware and Chester counties in the Pennsylvania portion of the Delaware Valley Region, and continues through Harrisburg and State College to exit the state near Meadville. For the most part, intercity travelers have switched routes for newer facilities, and the highway now carries mainly local and regional traffic.

This report focuses on the 6.1-mile section of US 322 in Delaware County from I-95 to US 1 known as Conchester Road. This roadway is primarily a two-lane arterial with a mix of at-grade and grade-separated intersections. In recent years, increasing traffic volumes and heavy turning movements on the existing, antiquated design have significantly increased both traffic delay and the accident rate. This highway is now in serious need of reconstruction to improve traffic safety and relieve congestion.

A focused travel simulation was conducted using DVRPC's regional travel forecasting models. The traffic zones in the study area were subdivided into smaller zones to better reflect the highway network and land use characteristics of the study area. The model's highway network within the study area was reviewed and modified as needed to reflect the detailed nature of the traffic improvements to be tested.

Chapter II of this report documents the existing physical characteristics of the US 322 corridor. Included are a brief description of existing land use and the physical characteristics of US 322 and the surrounding roadway network. Current traffic volumes on US 322 and other area roadways are also presented in this chapter.

The four improvement alternatives in this study are described in Chapter III. Chapter IV explains the travel forecasting methodology, with a brief discussion of the focused traffic simulation model used to develop the traffic projections. The regional demographic and employment forecasts and corridor specific future development proposals which form the basis for the forecast are also presented in the chapter.

The final chapter (V) presents an analysis of the travel forecasts for the US 322 corridor. These forecasts represent projected 2006 and 2026 daily traffic volumes for US 322 and the surrounding network under each of the improvement alternatives. Also included in an appendix are existing and projected AM and PM peak hour turning movements for selected intersections along this section of US 322.

II. DESCRIPTION OF THE US 322 CORRIDOR

The limits of the study run from I-95 in the east to the intersection of US 1 with US 202 in the west, although physical improvements will be limited to Conchester Road west of its intersection with PA 452 (Market Street) and east of the intersection with US 1. The study area consists of Upper Chichester, Bethel, and Concord townships, which are traversed by the highway, plus Aston, Chester, and Lower Chichester townships and the Borough of Chester Heights nearby (see Figure 1).

1. Existing Highway Facilities and Land Use

The highway corridor is described from east to west, with distances measured from I-95. Except for a slight bend near Chichester Avenue, US 322 is almost tangent. Generally, owners of abutting property have been granted direct highway access.

After crossing the Commodore Barry Bridge from New Jersey, US 322 proceeds south along I-95. The route then turns west (Mile 0) onto Conchester Road, which it follows for about 6.1 miles to the junction with US 1. From the I-95 ramps, Conchester Road has been widened to four lanes with a concrete barrier median to a point just west of PA 452. The remainder is two lanes, except for occasional turn lanes provided at some intersections. CSX's main rail line to Baltimore is crossed on an overpass at Mile 0.5. The grade-separated interchange with PA 452 (Market St.), which provides connections south to I-95 and north through Aston Township to US 1, is reached at Mile 0.9. Signals control the intersections with Cherry Tree Road (Mile 1.5) and Bethel Avenue/Chelsea Parkway (Mile 1.9). Chichester Avenue (Mile 2.0) is crossed on an overpass, with connections possible via Bethel Avenue. Further north, a signalized intersection provides access to the commercial sites served by Creek Parkway. A grade-separated interchange with PA 261, Foulk Road, is reached at Mile 3.3. To the south, Foulk Road leads to the rapidly growing northern suburbs of Wilmington in New Castle County. North of US 322, Foulk Road loses its PA route designation and leads to the borough of Chester Heights. US 322 uses overpasses to cross Smith Bridge Road (US 322 access via Station Road) at Mile 4.7 and the SEPTA Octoraro Branch rail right-of-way at Mile 5.3. In this area, Featherbed Lane/Mattson Road, Station Road South, and Spring Valley Road intersect at grade with stop-controlled approaches to US 322. Station Road North has recently been signalized. There is also a signalized intersection at Conchester Road (US 322) and US 1 (Baltimore Pike) at Mile 6.1. US 322 then turns south and runs concurrently with US 1 for one mile to Painters Crossroads, where it intersects with the Wilmington-West Chester Pike (US 202). At that point US 322 turns north and runs concurrently with US 202 as far as West Chester before diverging to continue west towards Harrisburg.

Generally a mix of residential and commercial land use is found along the corridor, with the density of development decreasing with distance from I-95. At the eastern end land use is industrial

with US 322 passing between a Sun Pipe Line terminal on the north side and a CSX Transportation auto terminal on the south. Major traffic generators include Stoney Pond Plaza (retail shops near PA 452), Sacred Heart Medical Center (off Cherry Tree Road), Naamans Creek Center (office park west of Chichester Avenue), and at the western end of the corridor, Concordville Plaza (shops and Concordville Hotel), and Concord Interplex (planned office park). Some open land (wooded and meadow) is found along the western portion of the corridor. Retail shopping centers and the regional office for State Farm Insurance are located along US 1 at Painters Crossroads.

It is necessary to include a network of roads surrounding US 322 to accurately assess the impact of the US 322 improvement alternatives on the corridor. In addition to US 322, the following roads have been included in the traffic simulation network:

Parallel/Non-Intersecting Roads

Concord Road
Bethel Road (portions)
PA 491 (Naamans Creek Road)
Meetinghouse Road
Chichester Avenue
Larkin Road
Garnet Mine Road
Smith Bridge Road

Intersecting Roads

Interstate 95
PA 452 (Market St.)
Cherry Tree Road
Bethel Road
PA 261 (Foult Road)
Featherbed Lane/Mattson Road
Station Road
Spring Valley Road
US 1 (Baltimore Pike)

The majority of these are two lane roads which function as minor arterials or collectors. In general, other than the interstate or state roads, these facilities are narrow roads which were originally intended to carry local trips through sparsely developed areas.

2. Existing Traffic Volumes

DVRPC staff collected existing traffic counts on US 322 and the surrounding highway network from 1997 to 1999. Locations were counted using pneumatic tube techniques during this effort and the resulting average daily volumes are displayed in Figure 2. The detailed traffic counts for all locations including both daily and hourly traffic volume tabulations can be found in Appendix A.

US 202 / US 322

US 1 / US 322

US 1

BALTIMORE PK

BRINTON

LAKE RD

39.6

41.8

32.7

3.4

24.1

0.4

6.3

CONCORD RD

STATION RD

0.4

0.5

24.4

CONCHESTER RD

1.8

8.3

SMITH BRIDGE RD

US 202

FEATHERBED LA

25.2

1.1

25.8

5.9

7.3

8.7

9.8

CONCORD RD

10.7

6.3

CHERRY TREE RD

PA 452

MARKET ST

24.1

BETHEL RD

2.1

US 322

31.7

26.6

28.8

28.8

OLIVER LA

11.5

CHICHESTER

5.1

6.2

LARKIN RD

8.6

MEETINGHOUSE

19.0

PA 281

FOULK RD

1.8

1.3

0.8

GARNET MINE RD

9.8

9.5

PA 491

NAAMANS CREEK

20.8

I-95

104.3

109.2

CURRENT AADT (000'S)

SCHEMATIC NOT TO SCALE

Delaware Valley Regional Planning Commission
September 2000

Study area current traffic volumes along the two lane portions of existing US 322 range from a low of 24,100 vehicles per day between Spring Valley Road and the intersection with US 1 to a high of 28,800 daily vehicles between Cherry Tree Road and Chichester Avenue. The heaviest traveled portion of Conchester Road in the study area is the four lane section just west of I-95, with approximately 33,500 vehicles a day using this roadway segment. A major highway crossing the corridor is PA 452 (Market Street). This facility carries traffic volumes of about 20,800 daily vehicles south of Conchester Road and about 24,100 daily vehicles north of the US 322 intersection. US 1, crossing US 322 at the western end of the study area, carries approximately 32,500 vehicles per day north of US 322 and approximately 41,800 daily vehicles south of its intersection with Conchester Road. Other major crossroads along the corridor are PA 261 (Foulk Road) with 7,000 to 7,300 vehicles per day, and Cherry Tree Road with a current traffic volume of 6,300 north of US 322. The portion of Cherry Tree Road south of US 322 carries a relatively small volume of 3,600 daily vehicles, partially as a result of the fact that it runs nearly parallel and adjacent to US 322. Spring Valley Road carries 1,800 vehicles per day south of Conchester Road and 400 daily vehicles to the north of this facility. In the vicinity of US 322, Station Road carries traffic volumes of 400 to 500 vehicles per day. Featherbed Lane functions as a local road, carrying 800 to 1,100 vehicles per day. Other crossroads which do not intersect US 322 at grade include Smith Bridge Road, carrying approximately 8,300 vehicles per day, and Chichester Road carrying 10,000 to 11,500 daily vehicles.

Those study area roads which run generally parallel to US 322 carry significantly lower amounts of traffic. Concord Road carries traffic volumes which range between 3,400 and 10,700 vehicles per day. Traffic volumes on Concord Road generally decrease as one proceeds westward from PA 452, where the largest traffic volumes occur. PA 491 (Naamans Creek Road) carries 8,600 to 9,800 vehicles per day. Bethel Road traffic is much more localized, with current counts of between 1,300 and 6,200 vehicles per day.

3. Current Turning Volumes

Manual turning movement counts were collected within the study corridor as a part of this effort at the following nine US 322 intersections:

- US 1 (Baltimore Pike)
- Spring Valley Road
- Station Road
- Featherbed Lane / Mattson Road
- PA 261 (Foulk Road)
- Chelsea Parkway/Bethel Avenue
- Cherry Tree Road
- PA 452 (Market Street)
- Bethel Road Ramps to and from US 322

These counts were conducted between 7:00 to 9:00 AM and 4:00 to 6:00 PM. Detailed hourly summaries over the entire counting period are contained in Appendix B.

III. IMPROVEMENT ALTERNATIVES

Four improvement alternatives were identified for US 322 -- a No-Widening alternative and three widening alternatives. The improvement alternatives under consideration are similar to those studied previously, though with some modifications. In general, there are less differences among the current, modified widening alternatives than the original widening alternatives. A more detailed description of the facility improvements contained in each alternative follows.

1. No-Widening Alternative

In this alternative, no improvements are made to US 322. The No-Widening alternative does, however, assume the implementation of various planned improvements to other regional facilities. Generally, the facility improvements included in the travel simulation model network are projects included in DVRPC's Long Range Transportation Plan. Of particular interest to this study are the US 202 Section 100 (Delaware State Line to Matlack Street) improvements and the construction of a new cross street (Korman Drive) opposite the Concordville Best Western Hotel in conjunction with the development of that site. This will provide an alternate connection through the site from US 322 to US 1. These improvements were also assumed to be opened to traffic in the widening alternatives.

2. Widening Alternatives

All widening alternatives include the addition of a second travel lane in each direction between PA 452 and US 1. They differ primarily in the treatment of left turns from US 322 at signalized intersections. Treatments include turn bays which allow traffic to turn left from US 322, but remove the left-turning vehicles from the through travel lanes; jughandles which re-direct left-turning traffic to the cross street from the right side of the highway; and a center left-turn lane that is shared by both northbound and southbound left-turning vehicles. Except for those locations where a center left-turn lane is provided, a median barrier is proposed to prohibit left turns to and from driveways and other minor intersections along the length of US 322. Existing grade-separated intersections will remain grade-separated, though some ramp reconstruction is proposed.

The proposed treatments at many of the US 322 intersections are same across all widening alternatives. Differences occur primarily at major signalized intersections where sufficient right-of-way is available to allow for construction of jughandles. Specific intersection proposals include:

US 1 (Baltimore Pike) - No changes to intersection configuration.

Korman Drive - This new intersection will be constructed with either jughandles or left-turn bays.

Spring Valley Road - Proposed median barrier will limit Spring Valley Road traffic to right-in/right-out only. All left turns will be accomplished using the new intersections at Station Road North or Korman Drive.

Station Road North/Fellowship Drive - This intersection will be configured with either jughandles or left-turn bays.

Station Road South - Limited to right-in/right-out due to proposed median barrier.

Smith Bridge Road - No direct connection existing or proposed.

Cambridge Lane - Proposed opening in median barrier will allow left turns onto Cambridge Lane, but left turns from Cambridge Lane will be prohibited.

Merion Drive - Limited to right-in/right-out due to proposed median barrier.

Featherbed Lane/Mattson Road - Jughandles are proposed to eliminate left turns from US 322.

Green Creek Lane - Limited to right-in/right-out due to proposed median barrier.

Garnet Mine Road - Existing connection to US 322 will be eliminated. All traffic will use PA 261 (Foulk Road) interchange.

PA 261 (Foulk Road) - Existing grade separation will be retained.

Colonial Drive - Limited to right-in/right-out due to proposed median barrier.

Creek Parkway - Existing signalized intersection with left-turn bays will be retained.

Sommers Lane - Limited to right-in/right-out due to proposed median barrier.

Chichester Avenue - Existing grade separation and connection to US 322 via Bethel Road and Chelsea Parkway will be retained.

Cherry Tree Road/Bethel Road - Proposed realignment of existing at-grade intersection will include either left-turn bays or jughandles.

PA 452 (Market Street) - The existing grade separation will be maintained with reconstructed ramps.

Differences among the three widening alternatives as well as a detailed description of each are provided in the following sections.

a. Alternative 1. Four Lane Divided with Selected Jughandles

This improvement alternative includes widening US 322 from PA 452 to US 1. It consists of two through lanes in each direction, separated by a median barrier. Median breaks would only be provided at signalized intersections. Intersections would be configured as listed above. The Korman Drive, Station Road North and Cherry Tree Road/Bethel Road intersections would be configured with jughandles. Left turns from US 322 would be redirected to the jughandles on the right side of the highway, which would deposit them on the cross street. The left turn would be completed by crossing US 322 as a thru movement on the cross street. Because no left-turn phase would be required in the signal timing plans, this alternative results in more capacity relative to Alternative 2, where left turns occur from turn bays on the US 322 mainline. More right-of-way would be required, however, to construct the jughandles.

b. Alternative 2. Four Lane Divided with Selected Left-Turn Bays

This improvement alternative is similar to Alternative 1, except that turn bays would be provided on US 322 at the Korman Drive, Station Road North, and Cherry Tree Road/Bethel Road intersections. Left turns would occur directly from US 322. These left turns would likely require a dedicated left-turn phase to be provided in the signal timing plans, thus reducing the greentime available to the thru movement, and the capacity of the mainline. This alternative would require the least amount of right-of-way to construct.

c. Alternative 3. Four Lane Divided with Selected Jughandles/Five Lane with Center Left-Turn Lane

This alternative is similar to Alternative 1, except that a five-lane section would be provided from Chichester Avenue to Cherry Tree Road with no median barrier. The center lane would accommodate both northbound and southbound lefts. Left turns to and from driveways and cross streets between Chichester Avenue and Cherry Tree Road would be permitted. These left-turns would, to some degree, interfere with the US 322 thru movements, resulting in a slight decrease in capacity relative to Alternative 1.

IV. TRAVEL FORECASTING PROCEDURES

The process used to generate 2006 and 2026 travel forecasts for the US 322 corridor improvement alternatives required an enhancement to DVRPC's focused travel simulation process. Highway traffic volumes were simulated by the standard sequence of trip generation, trip distribution, modal split/auto occupancy, and traffic assignment using the TRANPLAN travel forecasting software package. However, the standard highway assignment model is not able to differentiate between the differences in left-turn treatments in the proposed widening alternatives. Therefore the simulation of the US 322 alternatives utilized the Highway Capacity Manual software in the estimation of highway network capacities. These capacities were then incorporated in the TRANPLAN software. Using this technique, simulation runs were conducted for each of the three US 322 widening alternatives. A brief description of the DVRPC's focused simulation model and its inputs follows.

1. Socio-Economic Projections

Travel forecasting models require that estimates of demographic and employment data be made for small areas or zones. This requirement derives from the need to assign trip making associated with households and businesses to the streets and transit facilities serving them. DVRPC has prepared 2020 forecasts of the socio-demographic inputs to the travel simulation process for all traffic analysis zones in the nine-county region. These projections form the basis for the travel projections included in this report.

In these forecasts, study area population is expected to grow by about 15 percent between 1997 and 2020. This is nearly double the rate for the region as a whole, and a high rate for Delaware County, whose population growth is projected to be nearly flat. Table 1 shows the projected population growth for municipalities in the corridor. Growth rates vary widely in the study area, from -18.4 percent in Lower Chichester Township to 60.2 percent in Chester Heights Borough. Concord Township is projected to add the most new residents with 3,195, representing more than a third of the growth in the study area.

Employment growth in the study area is expected to increase at a slightly slower rate than population at about 13 percent. This growth rate is similar to the employment growth rates of both Delaware County and the Delaware Valley region. Table 2 provides the projected employment growth for study area municipalities. Municipal employment growth rates are not as varied as the population growth rates; they range from a low of 5.6 percent in Lower Chichester Township to a high of 24.1 percent in Concord Township. Together, Concord and Aston townships include over 70 percent of the job growth in the study area.

Table 1. US 322 Study Area Population

Municipality	Population		1997 to 2020 Growth	
	1997	2020	Absolute	Percent
Aston Township	16,580	17,899	1,319	8.0%
Bethel Township	4,710	5,760	1,050	22.3%
Chester Township	5,305	5,200	-105	-2.0%
Chester Heights Borough	2,559	4,100	1,541	60.2%
Concord Township	7,964	11,159	3,195	40.1%
Lower Chichester Township	3,582	2,923	-659	-18.4%
Upper Chichester Township	16,565	19,016	2,451	14.8%
Study Area Total	57,265	66,057	8,792	15.4%

Table 2. US 322 Study Area Employment

Municipality	Employment		1997 to 2020 Growth	
	1997	2020	Absolute	Percent
Aston Township	6,223	6,985	762	12.2%
Bethel Township	1,001	1,075	74	7.4%
Chester Township	1,904	2,023	119	6.3%
Chester Heights Borough	1,986	2,173	187	9.4%
Concord Township	4,656	5,779	1,123	24.1%
Lower Chichester Township	906	957	51	5.6%
Upper Chichester Township	3,031	3,318	287	9.5%
Study Area Total	19,707	22,310	2,603	13.2%

DVRPC staff gathered information on proposed land use developments in and around the US 322 study area. The proposed developments were assigned to the appropriate traffic zone and summarized in terms of square footage, residents, employment, and other parameters that affect trip generation. DVRPC staff then reviewed this list with respect to growth already included in the DVRPC Board adopted 2020 forecasts. Most of the proposed developments were already included in the DVRPC traffic zone level forecasts. However, some developments were not included in the DVRPC projections. The socio-economic data associated with these proposed developments were added as a surcharge to the DVRPC socio-economic forecasts. The DVRPC travel simulation models were used to convert the development surcharge to travel patterns.

The list of proposed study-area developments included in the surcharge can be found in Table 3. These proposals do not represent final approved plans. Market conditions, zoning changes, and redesign may have an effect on the ultimate type and magnitude of development; however, this list represents a realistic picture of potential future development activity at this point in time.

Table 3. US 322 Study Area Development Surcharge

Development	Location	Residential Units/Type	Commercial Sq. Ft./Type
<i>Aston Township</i>			
Bridgewater	South of Bridgewater Rd and Chester Creek	89/single family 109/townhomes	72,800/retail
Dutton Hill Shopping Center	South of Pennell Rd and Lamp Post Ln		
Spring Valley PRD	Crozerville Rd and Birney Hwy	12/single family 56/townhomes	
Dutton Hill Business Park	North of Pennell Rd and Dutton Mill Rd		115,000/office 115,000/warehouse
Tryens Development Corp.	Concord Rd and Tryens Rd		59,500/office 59,500/warehouse
Julian Tract PRD	Aston/Concord township line	75/single family 341 units	421,800 sq. ft.
TOTAL: Aston Township			
<i>Bethel Township</i>			
Maier Tract	South Garnet Mine Rd/ Upper Chichester Township line	26/single family 120/townhomes	
TOTAL: Bethel Township		146 units	0 sq. ft.
<i>Chester Township</i>			
Custom Compounding	I-95 Industrial Park on Concord Rd		54,000/warehouse
J-Mark Corporation	I-95 Industrial Park on Concord Rd		325,000/industrial
TOTAL: Chester Township		0 units	379,000 sq. ft.
<i>Chester Heights Borough</i>			
Wawa	South of Baltimore Pike		25,000/office
TOTAL: Chester Heights Borough		0 units	25,000 sq. ft.
<i>Concord Township</i>			

Table 3. US 322 Study Area Development Surcharge

Development	Location	Residential Units/Type	Commercial Sq. Ft./Type
Concord Mobile Home Park	North and south sides of Concord Rd east of Matson Rd	222/mobile homes	
Sweet Hollow	Northeast corner of Shavertown and Naamans Creek Rds	56/single family	64,900/warehouse
Plumbmaster	Southwest corner of Aldon and LaCrue Aves		117,000/mfg
Southco, Inc.	On North Briton Lake Rd		
Valley Brook	East of Valley Brook Rd on Concord/Bethel Township line	71/single family	
Spring Valley Business Park	Northwest corner of Conchester and Spring Valley Rds		
United Stor-All	South of Naamans Creek Rd east of US 202		50,000/office
Springfield Estates	North of Shavertown east of Naamans Creek Rd	51/single family	87,075/commercial
Cappelli Property	South of Baltimore Pike at Stoney Bank Rd	78/apartments	
Fox Valley Life Campus	South of Baltimore Pike west of Dougherty Blvd	180/apartments	52,563/commercial
Groundwater Technologies	East of US 202 north of Pyle Rd		161,234/office
Concord Crossing	East of US 202 north of Pyle Rd	240/single family	
Glen Eagle Square	East of US 202 at north end of divided highway		103,405//retail
Concord Interplex	South of Baltimore Pike west of Conchester Rd		1,200,000/office
State Farm expansion	Northeast corner of US 202 and US 1		220,000/office
Fox Hill Farm	North of Smith Bridge Rd east of Sunset View Dr	215/single family	
DeNenno/Lewis	South of Smith Bridge Rd at Kirk Rd	96/single family	
Gaster Tract	Concord and Foulk rds	70/single family	
Concord Pointe	On Smith Bridge Rd	65/townhomes	
Grist Mill Estates	Cheyney and Concord rds	94/single family	
Brandywine Suites	US 1 west of Stoney Bank Rd	108/apartments	
Former Westinghouse site	US 1 west of Brinton Lake Rd		550,000/office
TOTAL: Concord Township		1,771 units	2,786,177 sq. ft.
			180,000/retail
<i>Lower Chichester Township</i>			
Eschem Company	East of I-95 on Blue Ball Ave		60,912/warehouse
TOTAL: Lower Chichester Township		0 units	60,912 sq. ft.

Table 3. US 322 Study Area Development Surcharge

Development	Location	Residential Units/Type	Commercial Sq. Ft./Type
<i>Upper Chichester Township</i>			
Naamans Creek Center	North of US 322 east of Bethel Township line		770,000/office 770,000/warehouse
Hunters Woods	South of Bethel and Larkin rds	94/single family	
Cherry Tree Knoll	North of Cherry Tree Rd and US 322	17/single family 309/townhomes	
Chelsea Business Park	North of US 322 and Chichester Ave		241,500/commercial 241,500/industrial 167,000/commercial 65,500/office 65,500/warehouse
Chelsea Shopping Center Flynn Property	North of US 322 and Chichester Ave West of Market St south of railroad		
Yorktown	South of Naamans Creek and Larkin rds	14/single family 135/townhomes 50/twins	
TOTAL: Upper Chichester Township		619 units	2,321,000 sq. ft.
TOTAL STUDY AREA		2,877 units	5,993,889 sq. ft.

2. Regional Travel Simulation Models

Regional travel simulation models are used to forecast future travel patterns, as well as quantify the effects of various transportation projects and policies. They utilize a system of traffic zones that follow Census boundaries and rely on demographic and employment data, land use, and transportation network characteristics to simulate trip making patterns throughout the region.

Trip generation is the first step in the modeling process. Person, truck, and taxi trips are generated from traffic zone level forecasts of households and employment. This step of the process is carried out by the use of trip rates disaggregated by trip purpose (home based work, home based non-work, non-home based), auto ownership, and area type (CBD, fringe, urban, suburban, rural, and open rural). Estimates of external-local and through highway travel are developed from population and employment estimates in counties surrounding the Delaware Valley Region.

In the trip distribution step, travel from traffic zones within the region is allocated to destinations within the region with a gravity model. This model assumes that the propensity to travel to a zone of destination increases with the attractiveness of destination (as measured by employment) and decreases as the difficulty of traveling between zones increases. The travel effort (impedance) is measured by travel time and cost for both the highway and transit modes.

The modal split model divides the travel between traffic zones within the region into transit and highway components. Generally, the tendency to use public transit increases with the relative transit-to-highway service levels. These relative service levels are estimated through highway and transit out-of-vehicle time, highway operating costs and parking charges, and transit fares. In addition, auto ownership, transit submode, household income, trip purpose, and the consumer price index further define the trip-maker's choice between highway and transit.

The final step in the process is to assign the estimated highway vehicle trips to specific facilities. This is accomplished by determining the best route (or minimum time) through the highway network and allocating trips to roads and highways. Because congestion levels must be considered in determining the best route, a capacity restrained assignment, based on the "equilibrium" traffic assignment technique, is used for this purpose.

3. Focused Simulation Process

The regional assignments do not give the detailed forecasts of peak hour link volumes and turns required for corridor level design studies. In addition, local streets not included in the regional highway network are often of great interest to local planners and elected officials. In order to improve the forecasting levels provided and to accommodate these special needs, an enhanced assignment technique focused on a detailed study area is used to produce corridor level highway and transit forecasts. This focused simulation process allows the use of DVRPC regional simulation models and increases the accuracy and detail of the travel forecasts within the detailed study area.

At the same time, all existing and proposed highways throughout the region and their impact on both regional and interregional travel patterns become an integral part of the simulation process.

A focused approach was used to estimate traffic volumes based on the highway service levels provided by the US 322 alternatives. The focused simulation process involved adding missing local streets to the network. Simulation zones inside the study area were subdivided so that traffic from existing and proposed land use developments may be loaded directly onto the network.

4. Future Trip Table Preparation and Traffic Assignment

The final step in the preparation of the focused simulation process is the validation of the simulated highway assignment outputs using current traffic counts taken on roadways serving the study area. The focused simulation model was executed with inputs reflective of 1997 conditions and the results compared with recent traffic counts collected by DVRPC. Based on this analysis, the focused model produced reasonable daily traffic volumes.

To establish the current travel demand for the area under influence of the proposed roadway access improvements, DVRPC gathered information from a traffic counting effort conducted by field personnel. Automatic Traffic Recorder equipment was set at forty-three (43) locations for a minimum of forty-eight (48) continuous hours. These traffic counts were then tabulated on a peak period and daily basis and factored to represent annual average daily traffic (AADT). These daily traffic counts form the basis for the validation of the travel simulation model. In addition, the peak hour distributions of traffic at the count locations provide guidance for the estimation of AM and PM peak hour traffic forecasts under the No-Widening and improvement alternatives.

For this study, the focused 2020 trip table was prepared by disaggregating the socio-economic inputs to the DVRPC trip generation model and surcharging these data to reflect the additional industrial, commercial, and residential development in the corridor not included in the DVRPC Board adopted 2020 forecast. Following this, the DVRPC model from trip generation through traffic assignment was executed for each of the improvement alternatives. The resulting travel matrix includes all travel patterns throughout the Delaware Valley Region. Travel to and from all parts of Bucks, Chester, Delaware, and Montgomery counties, Philadelphia, and New Jersey via the Delaware River bridges is included as are trips to/from the remainder of Pennsylvania and the state of Delaware. Traffic volumes for 2006 were found by interpolating between existing and 2020 volumes; traffic volumes for 2026 were found by extrapolating from existing to 2020 values.

Initial estimates of future year intersection turning volumes were determined by scaling current year turning volumes according to growth factors on each intersection leg. These growth factors are the ratio of future year peak hour link volumes to current peak hour volumes. The future year peak hour link volumes for each leg of the intersection were determined by multiplying the forecasted AADT, an output of the DVRPC traffic assignment, by AM and PM “K” factors. Existing “K” factors were calculated from traffic counts as the ratio of the highest morning and evening hourly volumes to the total AADT. Future year “K” factors were based on the existing “K”

factors and the AADT growth on each intersection approach. The resulting forecasted turning volumes for the AM and PM peak hours were reviewed for reasonableness and adjusted as necessary to balance traffic flows between adjacent intersections.

The current AM and PM peak hour turning volumes for major intersections along US 322 are provided in Appendix B. Appendix B also contains forecasted peak hour intersection turning movements for these intersections for 2006 and 2026 for the No-Widening and the three widening alternatives.

V. PROJECTED TRAFFIC VOLUMES

Projected average daily traffic volumes for selected highway links within the corridor are presented and analyzed in this part of the report. Forecasts for two future years are presented: the anticipated opening year (2006) and the design year (2026) which is twenty years beyond the opening year.

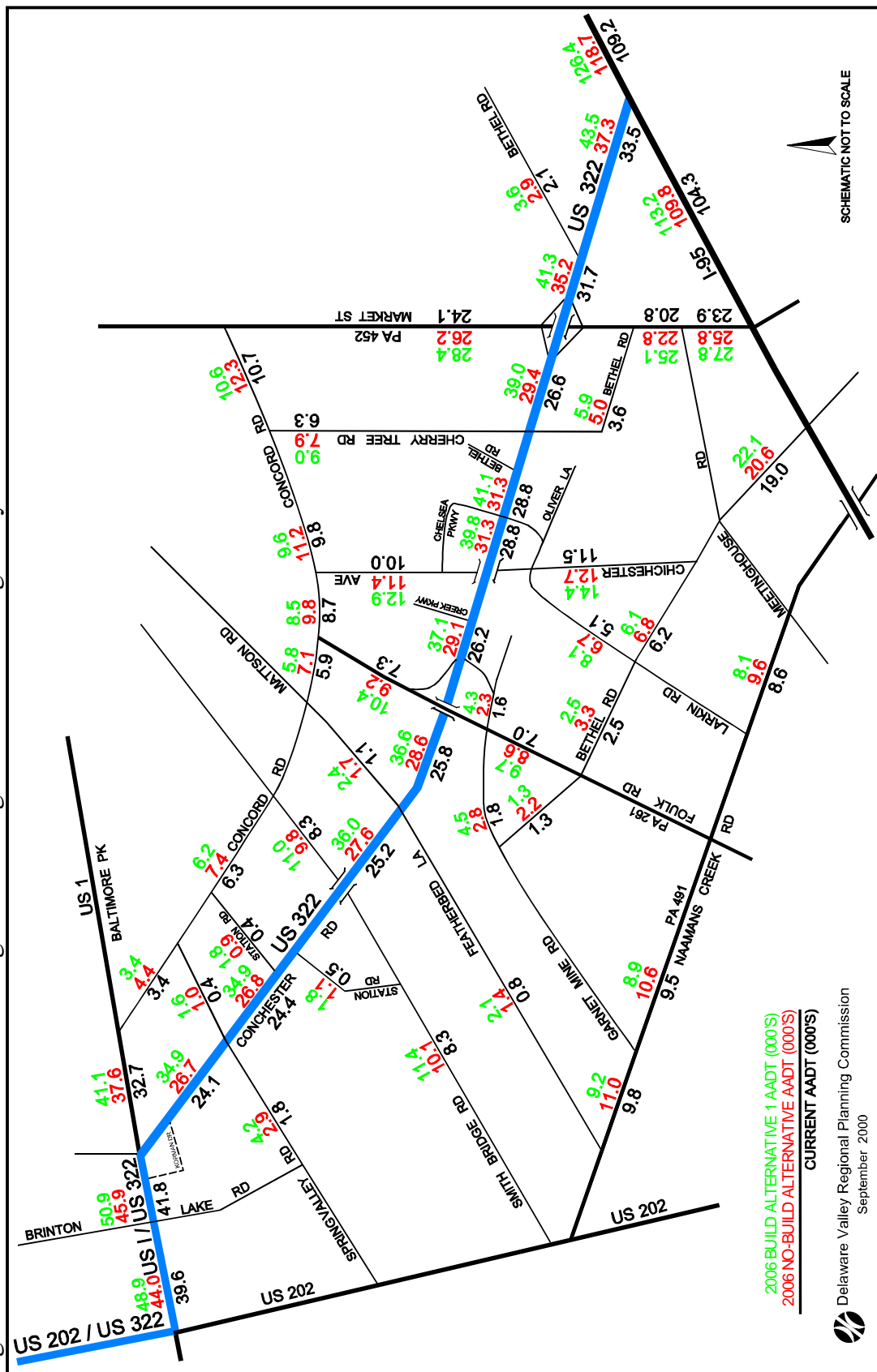
1. 2006 Traffic Analysis

Figure 3 compares the current, No-Widening, and widening Alternative 1 traffic volumes for 2006. In the figure, current average daily traffic volumes are shown in black, underneath the lines representing the highway links. No-Widening volumes are shown above the line in red, and Alternative 1 volumes are shown directly above the No-Widening volumes in green. Under current conditions, US 322 carries between 24,100 and 33,500 vehicles per day (vpd). Traffic volumes typically increase as one moves from east to west. Under the No-Widening scenario, these volumes will increase to between 26,700 and 37,300 vpd. These traffic volume increases average about ten percent. Other study area roadways will also experience increased traffic. This growth ranges from 600 vpd on Featherbed Lane and portions of Spring Valley, Station, and Bethel roads to 9,500 vpd on Interstate 95 north of its interchange with Conchester Road. This portion of I-95 also carries US 322 traffic between the Commodore Barry Bridge and Conchester Road. Generally, the higher volume roadways experience higher absolute growth while the lower volume roadways experience higher growth in percent terms.

Under widening Alternative 1, a four-lane divided section with jughandles at selected intersections, traffic volumes on US 322 increase by between 6,100 and 9,800 vpd over the No-Widening alternative traffic volumes, representing increases of between 16.6 and 32.7 percent. Traffic volumes per lane are significantly reduced, however, compared to both the No-Widening alternative and current conditions. Volumes per lane on the two-lane sections of US 322 average about 13,100 vpd; under the No-Widening alternative this average will increase to about 14,000 vpd. Under Alternative 1, volumes per lane are reduced to about 9,300 vpd.

Parallel roads in the study area also experience significant traffic relief under Alternative 1. Parallel road traffic is reduced relative to the No-Widening alternative by between 700 and 1,800 vpd. This is equivalent to reductions of between 10.3 and 40.9 percent of the parallel road traffic. This also translates to reductions of between 0 and 600 vpd (0 to 6.3 percent) relative to current traffic volumes. Compared to the No-Widening alternative, Naamans Creek Road experiences the greatest reductions in absolute terms, while Bethel Road receives the greatest relief on a percentage basis.

Figure 3 : Current and 2006 No-Widening and Widening Alternative 1 Average Daily Traffic Volumes



Traffic on intersecting roads in the study area tends to increase relative to the No-Widening alternative as these roadways are used to access a more attractive US 322. Excluding I-95 and US 1 which also carry US 322 traffic, these increases range from 600 vpd on Spring Valley Road to 2,300 vpd on portions of Market Street.

Figure 4 compares the 2006 traffic volumes for all three widening alternatives. In the figure, Alternative 1 volumes are shown below the line in green, Alternative 2 volumes are shown above the line in blue, and Alternative 3 volumes are shown directly above Alternative 2 volumes in brown. Overall, the differences in traffic volumes between the three widening alternatives are very small – 500 vpd or less along US 322. Parallel and intersecting roadways exhibit even less variation in traffic volumes, with many links showing no differences between the three alternatives. This is not unexpected, as there is very little difference among the three widening alternatives. They vary only in the treatment of left turns, and only at a limited number of intersections.

Alternative 1 volumes tend to be the highest. This alternative contains the highest number of jughandle intersections, which tend to increase capacity relative to left-turn bays. Jughandles do not require a dedicated left-turn phase and thus allow for more greentime to be assigned to the mainline thru traffic. Alternative 3 traffic is equal or very nearly equal to Alternative 1 traffic, as these two alternatives vary only by the presence of a two-way left-turn lane between Chichester Avenue and Cherry Tree Road in Alternative 3. Alternative 2, with the greatest number of intersections with left-turn bays, tends to exhibit the lowest traffic volumes. Table 4 summarizes the comparisons of average daily traffic for the no-widening and three widening alternatives for selected roadway links in the study area.

Figure 4 : 2006 Widening Alternatives 1, 2, and 3 Average Daily Traffic Volumes

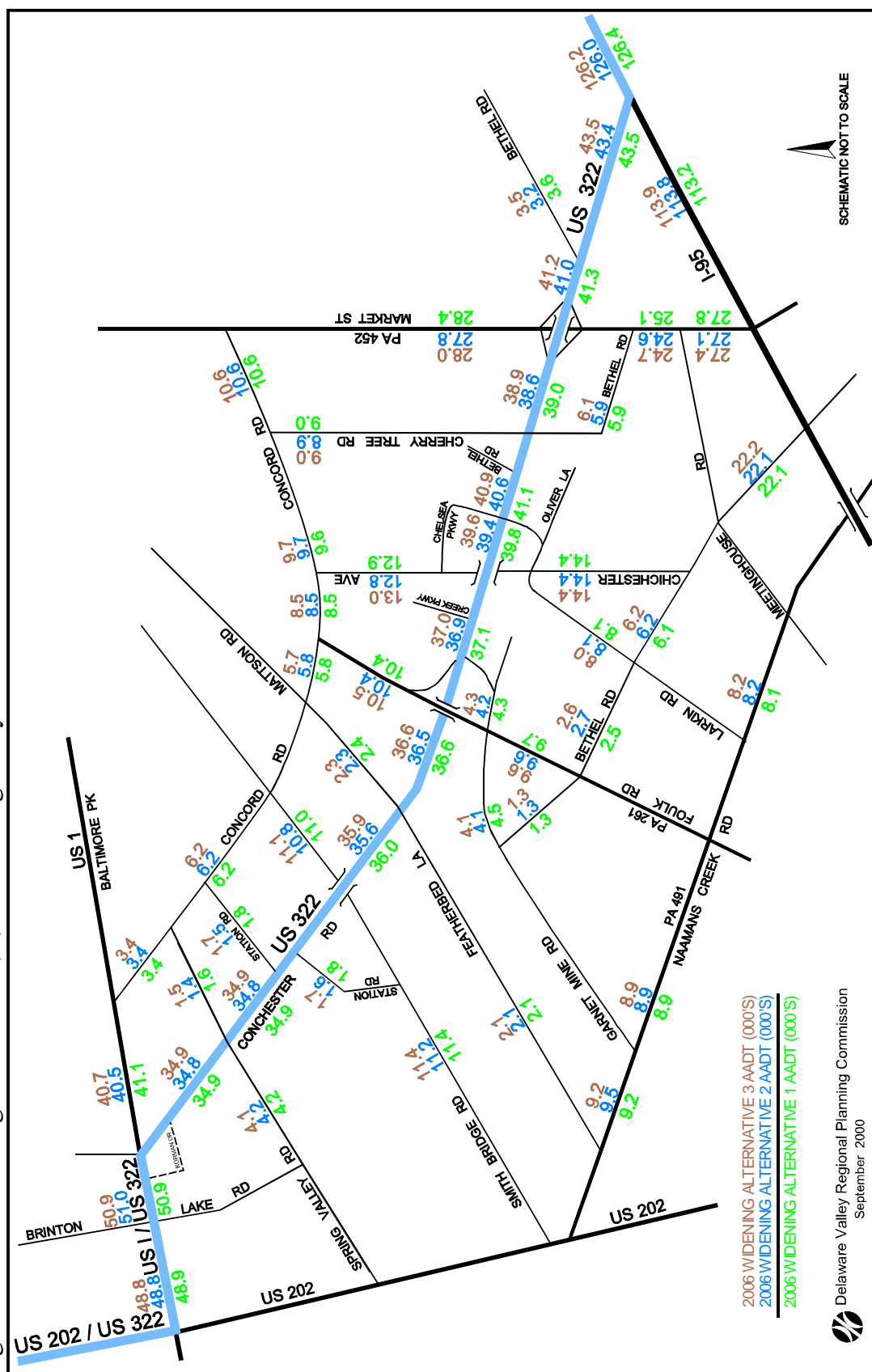


Table 4. Comparison of 2006 Average Daily Traffic Volumes (000s)

Selected Road Segments	Current ADT	No- Widening	Percent Growth	2006 ADT			Widening/No-Widening Difference		
				Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3
<u>US 322 Links</u>									
US 1 to Spring Valley Rd	24.1	26.7	10.8%	34.9	34.8	34.9	30.7%	30.3%	30.7%
Smith Bridge Rd to Featherbed La	25.2	27.6	9.5%	36.0	35.6	35.9	30.4%	29.0%	30.1%
Foulk Rd to Chichester Ave	26.2	29.1	11.1%	37.1	36.9	37.0	27.5%	26.8%	27.1%
Chelsea Pkwy to Cherry Tree Rd	28.8	31.3	8.7%	41.1	40.6	40.9	31.3%	29.7%	30.7%
Market St to Bethel Rd	31.7	35.2	11.0%	41.3	41.0	41.2	17.3%	16.5%	17.0%
<u>Crossing Roads</u>									
Spring Valley Rd south of US 322	1.8	2.9	61.1%	4.2	4.2	4.1	44.8%	44.8%	41.4%
Smith Bridge Rd north of US 322	8.3	9.8	18.1%	11.0	10.8	11.1	12.2%	10.2%	13.3%
Foulk Rd north of US 322	7.3	9.2	26.0%	10.4	10.4	10.5	13.0%	13.0%	14.1%
Cherry Tree Rd north of US 322	6.3	7.9	25.4%	9.0	8.9	9.0	13.9%	12.7%	13.9%
Market St north of US 322	24.1	26.2	8.7%	28.4	27.8	28.0	8.4%	6.1%	6.9%
<u>Parallel Roads</u>									
Naamans Creek Rd west of Foulk Rd	9.5	10.6	11.6%	8.9	8.9	8.9	-16.0%	-16.0%	-16.0%
Bethel Rd east of Foulk Rd	2.5	3.3	32.0%	2.5	2.7	2.6	-24.2%	-18.2%	-21.2%
Concord Rd west of Cherry Tree Rd	9.8	11.2	14.3%	9.6	9.7	9.7	-14.3%	-13.4%	-13.4%

2. 2026 Traffic Analysis

Figure 5 compares the current, No-Widening, and widening Alternative 1 traffic volumes for 2026. As in Figure 3, current traffic volumes are shown in black, underneath the lines representing the highway links; No-Widening volumes are shown above the line in red; and Alternative 1 volumes are shown directly above the No-Widening volumes in green. The 2026 No-Widening and widening Alternative 1 traffic volumes exhibit similar patterns to those of 2006. No-Widening volumes show significant growth over current volumes. Alternative 1 volumes are again considerably higher than the No-Widening volumes, although traffic volumes per lane are considerably less. Parallel roads experience traffic relief under the widening alternative, while cross streets show increased volumes as local traffic uses these links to access US 322.

Under the No-Widening alternative, traffic volumes on US 322 increase by between 6,400 and 10,300 vpd over current volumes, representing growth of between 23.3 percent and 30.7 percent. On the two-lane sections of US 322, traffic averages about 16,600 vpd per lane. Under Alternative 1, mainline traffic increases by an additional 7,200 to 14,900 vpd. This represents increases of between 16.4 and 42.0 percent over the No-Widening alternative and between 52.2 and 81.6 percent over current volumes. Under Alternative 1, average daily traffic per lane will average about 11,500 vehicles, considerably less than under the No-Widening alternative. In fact, traffic per lane will be lower than current conditions (about 13,100 vpd/lane).

Parallel roads in the study experience significant growth under the No-Widening scenario as traffic is shifted from the heavily congested US 322 to other facilities. Parallel road traffic will increase between 1,600 and 4,200 vpd, representing growth of between 25.8 and 176.9 percent over current volumes. Under Alternative 1, parallel road traffic will decrease relative to the No-Widening alternative by between 600 and 1,700 vpd, or between 7.7 and 22.2 percent. Unlike 2006, Alternative 1 parallel road traffic will not be lower than current conditions, due to increases in traffic brought on by increased development.

Traffic on cross streets in study area will increase under the No-Widening and widening alternatives. Excluding US 1 and I-95, cross street traffic will increase by 1,400 vpd on Station Road to 5,700 vpd on Market Street under the No-Widening alternative. In percent terms, cross street traffic increases by between 20.9 percent on Market Street between I-95 and Meetinghouse Road and 400 percent on Spring Valley Road between US 322 and Concord Road. Under Alternative 1, cross street traffic increases by an additional 400 vpd on portions of Bethel and Cherry Tree roads to 2,800 vpd on Garnet Mine Road between Foulk and Larkin roads.

APPENDIX A

MACHINE TRAFFIC COUNTS

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DVRPC Travel Monitoring

DATE: 8/9/99

ROAD: TR 322

FROM: BALTIMORE PIKE

TO: SPRING VALLEY RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0322/0010/2500 FC: 14

PROJECT: PAD99 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 13504

DVRPC FILE #: 7744

COUNTER: 9944

WEATHER: F

Hour Ending	Monday 08/09/99	Tuesday 08/10/99	Wednesday 08/11/99	Thursday 08/12/99	Friday 08/13/99
1 AM		357	404		
2 AM		170	202		
3 AM		146	132		
4 AM		164	180		
5 AM		308	329		
6 AM		782	806		
7 AM		1,751	1,685		
8 AM		2,010			
9 AM	1,768	1,723			
10 AM	1,418	1,501			
11 AM	1,310	1,316			
12 AM	1,248	1,328			
1 PM	1,324	1,363			
2 PM	1,279	1,330			
3 PM	1,404	1,400			
4 PM	1,740	1,714			
5 PM	1,868	1,956			
6 PM	1,994	2,148			
7 PM	1,664	1,768			
8 PM	1,138	1,176			
9 PM	906	872			
10 PM	802	856			
11 PM	822	796			
12 AM	617	699			
		27,634			

SEASONAL FACTOR:	.911	AADT: 24,117	AM PEAK %:	7.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	7.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/29/97

ROAD: TR 322

FROM: STATION RD S

TO: STATION RD N

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0322/0020/ FC: 14

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 13505

DVRPC FILE #: 1300

COUNTER: 9485

WEATHER: F

Hour Ending	Wednesday 10/29/97	Thursday 10/30/97	Friday 10/31/97	Saturday 11/01/97	Sunday 11/02/97
1 AM		317	307		
2 AM		189	200		
3 AM		172	197		
4 AM		156	190		
5 AM		308	320		
6 AM		828	793		
7 AM	1,852	1,913			
8 AM	2,123	2,143			
9 AM	1,801	1,856			
10 AM	1,382	1,425			
11 AM	1,218	1,276			
12 AM	1,292	1,289			
1 PM	1,316	1,342			
2 PM	1,281	1,435			
3 PM	1,529	1,473			
4 PM	1,804	1,894			
5 PM	2,002	2,053			
6 PM	1,969	1,981			
7 PM	1,682	1,576			
8 PM	1,095	1,017			
9 PM	817	839			
10 PM	808	784			
11 PM	794	694			
12 AM	542	<u>518</u>			
		27,478			

SEASONAL FACTOR:	.924	AADT: 24,399	AM PEAK %:	7.8	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	7.5	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 8/13/99

ROAD: TR 322

FROM: MERION DR

TO: MATTSON RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0322/0040/3000 FC: 14

PROJECT: PAD99 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 24609

DVRPC FILE #: 7745

COUNTER: 9485

WEATHER: F

Hour Ending	Friday 08/13/99	Saturday 08/14/99	Sunday 08/15/99	Monday 08/16/99	Tuesday 08/17/99
1 AM		470	457		
2 AM		244	211		
3 AM		223	190		
4 AM		189	184		
5 AM		315	305		
6 AM		851	836		
7 AM		1,694	1,651		
8 AM		2,033	1,998		
9 AM	1,774	1,791			
10 AM	1,484	1,496			
11 AM	1,394	1,442			
12 AM	1,344	1,406			
1 PM	1,367	1,397			
2 PM	1,364	1,331			
3 PM	1,505	1,537			
4 PM	1,732	1,760			
5 PM	2,036	2,039			
6 PM	2,172	2,131			
7 PM	1,785	1,737			
8 PM	1,238	1,236			
9 PM	964	943			
10 PM	911	920			
11 PM	854	881			
12 AM	797	<u>773</u>			
		28,839			

SEASONAL FACTOR:	.911	AADT: 25,169	AM PEAK %:	7.	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	7.4	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 12/7/98

ROAD: TR 322

FROM: BETHEL ROAD

TO: TR 322 RAMPS

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0322/0100/1500 FC: 14

PROJECT: PAD98 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 13506

DVRPC FILE #: 4211

COUNTER: 9785

WEATHER: F

Hour Ending	Monday 12/07/98	Tuesday 12/08/98	Wednesday 12/09/98	Thursday 12/10/98	Friday 12/11/98
1 AM		520	544		
2 AM		328	342		
3 AM		206	184		
4 AM		173	166		
5 AM		196	214		
6 AM		334	357		
7 AM		999	964		
8 AM		2,086	2,052		
9 AM		2,053	2,048		
10 AM		1,912	1,940		
11 AM		1,613	1,646		
12 AM		1,483			
1 PM		1,478			
2 PM		1,556			
3 PM	1,460	1,434			
4 PM	1,702	1,700			
5 PM	1,811	1,948			
6 PM	1,895	1,962			
7 PM	1,860	1,826			
8 PM	1,640	1,682			
9 PM	1,195	1,327			
10 PM	982	1,082			
11 PM	956	1,024			
12 AM	589	640			
		29,562			

SEASONAL FACTOR:	.937	AADT: 26,592	AM PEAK %:	7.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	6.6	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 6/16/99

ROAD: TR 322 EB FROM: TR 452 (MARKET ST OVERPASS) TO: CXS RAILROAD BRIDGE
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0322/0120/1000 FC: 14
 PROJECT: PAD99 COUNT DIR: EAST TRAFFIC DIR: BOTH SPEED LIMIT: 50 LOOP OR CLASS: Y
 STATION ID: 1771 DVRPC FILE #: 70 COUNTER: 9449 WEATHER: F

Hour Ending	Wednesday 06/16/99	Thursday 06/17/99	Friday 06/18/99	Saturday 06/19/99	Sunday 6/20/99	Monday 06/21/99	Tuesday 6/22/99
1 AM	182	195	164	281	210	115	170
2 AM	114	86	94	159	126	63	133
3 AM	124	97	109	116	90	66	109
4 AM	90	87	105	86	87	100	95
5 AM	204	218	210	161	99	244	252
6 AM	713	705	680	294	182	876	871
7 AM	1,385	1,348	1,318	460	290	1,349	1,367
8 AM	1,475	1,443	1,357	647	306	1,349	1,178
9 AM	1,246	1,237	1,197	790	441	1,121	727
10 AM	971	905	910	869	524	915	908
11 AM	863	826	937	931	716	829	783
12 AM	791	815	933	959	766	768	784
1 PM	791	839	925	904	852	823	756
2 PM	790	862	1,029	928	854	770	796
3 PM	886	986	1,086	945	789	900	959
4 PM	1,099	1,091	1,132	970	797	1,009	1,091
5 PM	1,225	1,198	1,295	962	800	1,160	1,244
6 PM	1,245	1,194	1,215	893	726	1,209	1,270
7 PM	1,049	1,073	1,064	842	781	887	1,032
8 PM	718	720	938	764	765	645	650
9 PM	614	597	773	675	629	455	601
10 PM	518	554	665	609	464	452	521
11 PM	426	402	576	641	315	309	401
12 AM	<u>272</u>	266	374	393	235	214	274
	17,791						

SEASONAL FACTOR: 0.914	AADT: 16,261	AM PEAK %: 8.3	HOUR ENDING:	8:00 AM
		PM PEAK %: 7.1	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 6/16/99

ROAD: TR 322 WB FROM: TR 452 (MARKET ST OVERPASS) TO: CXS RAILROAD BRIDGE
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0322/0121/1000 FC: 14
 PROJECT: PAD99 COUNT DIR: EAST TRAFFIC DIR: BOTH SPEED LIMIT: 50 LOOP OR CLASS: Y
 STATION ID: 1771 DVRPC FILE #: 79 COUNTER: 9451 WEATHER: F

Hour Ending	Wednesday 06/16/99	Thursday 06/17/99	Friday 06/18/99	Saturday 06/19/99	Sunday 6/20/99	Monday 06/21/99	Tuesday 6/22/99
1 AM	253	35	246	342	274	150	227
2 AM	158	26	118	255	192	104	98
3 AM	103	22	102	160	204	72	89
4 AM	98	13	87	12	106	83	105
5 AM	161	77	176	97	69	138	163
6 AM	365	383	373	190	115	404	459
7 AM	1,055	987	971	398	227	945	986
8 AM	1,139	1,046	1,084	497	275	1,135	955
9 AM	1,026	1,055	1,003	570	368	996	898
10 AM	786	811	839	709	502	837	801
11 AM	769	809	819	752	610	833	703
12 AM	802	783	847	938	729	871	564
1 PM	861	866	817	1,021	966	797	839
2 PM	855	869	960	1,044	1,106	825	816
3 PM	1,051	1,030	1,081	901	1,169	972	1,014
4 PM	1,263	1,199	1,149	833	1,170	1,081	1,204
5 PM	1,210	1,142	1,040	999	1,016	1,102	1,151
6 PM	1,391	1,173	1,146	894	1,018	1,176	1,314
7 PM	1,194	1,146	750	811	954	856	950
8 PM	732	1,052	784	709	904	763	768
9 PM	602	837	892	675	877	410	681
10 PM	548	985	614	633	753	326	520
11 PM	333	813	529	617	475	206	470
12 AM	<u>106</u>	554	478	494	295	200	424
16,861							

SEASONAL FACTOR: 0.914	AADT: 15,411	AM PEAK %: 6.8	HOUR ENDING:	8:00 AM
		PM PEAK %: 8.6	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/13/95

ROAD: TR 322 EB

FROM: TR 95

TO: TR 452

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0322/0120/ FC: 12

PROJECT: VMT-PA COUNT DIR: EAST TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 12864

COUNTER:

WEATHER: F

Hour Ending	Monday 11/13/95	Tuesday 11/14/95	Wednesday 11/15/95	Thursday 11/16/95	Friday 11/17/95
1 AM		192	185		
2 AM		129	111		
3 AM		113	135		
4 AM		95	112		
5 AM		246	230		
6 AM		363	610		
7 AM		1,427	1,384		
8 AM		1,563	1,546		
9 AM		1,279	1,255		
10 AM		972			
11 AM		853			
12 AM		928			
1 PM		888			
2 PM		926			
3 PM	1,038	1,046			
4 PM	1,126	1,153			
5 PM	1,288	1,305			
6 PM	1,215	1,237			
7 PM	889	962			
8 PM	663	712			
9 PM	572	556			
10 PM	512	522			
11 PM	422	414			
12 AM	297	<u>281</u>			
		18,162			

SEASONAL FACTOR:	.913	AADT: 16,582	AM PEAK %:	8.6	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	7.2	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 11/13/95

ROAD: TR 322 WB

FROM: TR 95

TO: TR 452

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0322/0121/ FC: 12

PROJECT: VMT-PA COUNT DIR: WEST TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 12865

COUNTER:

WEATHER: F

Hour Ending	Monday 11/13/95	Tuesday 11/14/95	Wednesday 11/15/95	Thursday 11/16/95	Friday 11/17/95
1 AM		284	267		
2 AM		157	143		
3 AM		126	140		
4 AM		152	135		
5 AM		187	172		
6 AM		357	349		
7 AM		874	851		
8 AM		1,158	1,134		
9 AM		1,054			
10 AM		948			
11 AM		937			
12 AM		949			
1 PM		957			
2 PM		1,038			
3 PM		1,126			
4 PM	1,317	1,354			
5 PM	1,286	1,303			
6 PM	1,326	1,295			
7 PM	1,130	1,152			
8 PM	875	858			
9 PM	713	692			
10 PM	683	662			
11 PM	548	525			
12 AM	412	430			
		18,575			

SEASONAL FACTOR:	.913	AADT: 16,959	AM PEAK %:	6.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	7.3	HOUR ENDING:	4:00 PM

DVRPC Travel Monitoring

DATE: 11/9/98

ROAD: TR 1 NB

FROM: TR 202 / TR 322

TO: BRINTON LAKE RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0060/1500 FC: 14

PROJECT: PAD98 COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 11171

DVRPC FILE #: 4122

COUNTER: 9772

WEATHER: F

Hour Ending	Monday 11/09/98	Tuesday 11/10/98	Wednesday 11/11/98	Thursday 11/12/98	Friday 11/13/98
1 AM		171	171		
2 AM		90	82		
3 AM		91	86		
4 AM		146	124		
5 AM		258	210		
6 AM		620	608		
7 AM		1,398	1,306		
8 AM		1,589	1,568		
9 AM		1,619	1,496		
10 AM		1,204	1,252		
11 AM		1,018	1,084		
12 AM		1,072			
1 PM	1,230	1,193			
2 PM	1,188	1,232			
3 PM	1,274	1,289			
4 PM	1,414	1,474			
5 PM	1,545	1,596			
6 PM	1,677	1,648			
7 PM	1,101	1,138			
8 PM	753	804			
9 PM	656	599			
10 PM	514	644			
11 PM	389	466			
12 AM	208	<u>258</u>			
		21,617			

SEASONAL FACTOR:	.925	AADT: 19,196	AM PEAK %:	7.5	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.6	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/9/98

ROAD: TR 1 SB

FROM: TR 202 / TR 322

TO: BRINTON LAKE RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0061/1500 FC: 14

PROJECT: PAD98 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 11171

DVRPC FILE #: 4123

COUNTER: 9836

WEATHER: F

Hour Ending	Monday 11/09/98	Tuesday 11/10/98	Wednesday 11/11/98	Thursday 11/12/98	Friday 11/13/98
1 AM		224	224		
2 AM		133	155		
3 AM		100	129		
4 AM		102	100		
5 AM		166	151		
6 AM		352	331		
7 AM		932	900		
8 AM		1,652	1,552		
9 AM		1,486	1,399		
10 AM		1,294	1,312		
11 AM		1,288	1,251		
12 AM	1,218	1,252			
1 PM	1,301	1,394			
2 PM	1,270	1,342			
3 PM	1,310	1,256			
4 PM	1,387	1,480			
5 PM	1,652	1,698			
6 PM	1,568	1,734			
7 PM	1,290	1,491			
8 PM	1,056	1,174			
9 PM	704	819			
10 PM	582	690			
11 PM	442	477			
12 AM	326	<u>400</u>			
		22,936			

SEASONAL FACTOR:	.925	AADT: 20,367	AM PEAK %:	7.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.6	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 8/17/99

ROAD: TR 1/ TR 322 NB FROM: BRINTON LAKE RD TO: TR 322, CONCHESTER RD
COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0070/1000 FC: 14
PROJECT: 943320 COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:
STATION ID: 13n DVRPC FILE #: 9286 COUNTER: 9773 WEATHER: F

Hour Ending	Tuesday 08/17/99	Wednesday 08/18/99	Thursday 08/19/99	Friday 08/20/99	Saturday 08/21/99
1 AM		254	261		
2 AM		145	151		
3 AM		103	142		
4 AM		134	140		
5 AM		232	256		
6 AM		704	656		
7 AM		1,422	1,372		
8 AM		1,720	1,740		
9 AM		1,588	1,586		
10 AM		1,362	1,305		
11 AM		1,230	1,191		
12 AM	1,226	1,244			
1 PM	1,362	1,243			
2 PM	1,306	1,281			
3 PM	1,406	1,432			
4 PM	1,656	1,720			
5 PM	1,802	1,850			
6 PM	1,628	1,650			
7 PM	1,322	1,304			
8 PM	908	940			
9 PM	830	826			
10 PM	800	778			
11 PM	542	498			
12 AM	364	<u>358</u>			
		24,018			

SEASONAL FACTOR:	.911	AADT: 20,961	AM PEAK %:	7.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	7.7	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 8/17/99

ROAD: TR 1/ TR 322 SB FROM: BRINTON LAKE RD TO: TR 322, CONCHESTER RD
COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0071/1000 FC: 14
PROJECT: 943320 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:
STATION ID: 13s DVRPC FILE #: 9287 COUNTER: 9773 WEATHER: F

Hour Ending	Tuesday 08/17/99	Wednesday 08/18/99	Thursday 08/19/99	Friday 08/20/99	Saturday 08/21/99
1 AM		263	217		
2 AM		184	150		
3 AM		115	118		
4 AM		130	120		
5 AM		181	182		
6 AM		401	441		
7 AM		1,076	1,055		
8 AM		1,698	1,732		
9 AM		1,647	1,677		
10 AM		1,369	1,434		
11 AM		1,190	1,382		
12 AM	1,340	1,350			
1 PM	1,418	1,422			
2 PM	1,304	1,290			
3 PM	1,365	1,308			
4 PM	1,493	1,504			
5 PM	1,692	1,595			
6 PM	1,770	1,770			
7 PM	1,568	1,508			
8 PM	1,180	1,208			
9 PM	850	936			
10 PM	779	804			
11 PM	532	531			
12 AM	360	<u>388</u>			
		23,868			

SEASONAL FACTOR:	.911	AADT: 20,831	AM PEAK %:	7.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	7.4	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 12/7/98

ROAD: BALTIMORE PK NB

FROM: TR 322 CONCHESTER RD

TO: CONCORD RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0080/1500 FC: 14

PROJECT: 6-0 70 COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 5214

COUNTER: 9838

WEATHER: F

Hour Ending	Monday 12/07/98	Tuesday 12/08/98	Wednesday 12/09/98	Thursday 12/10/98	Friday 12/11/98
1 AM		88	82		
2 AM		44	46		
3 AM		28	36		
4 AM		30	32		
5 AM		66	62		
6 AM		186	198		
7 AM		702	686		
8 AM		1,303	1,280		
9 AM		1,236	1,258		
10 AM		1,100	1,181		
11 AM		1,071	1,084		
12 AM		1,168	1,156		
1 PM		1,154	1,216		
2 PM	725	1,138			
3 PM	1,142	1,156			
4 PM	1,201	1,274			
5 PM	1,356	1,300			
6 PM	1,277	1,259			
7 PM	908	965			
8 PM	718	723			
9 PM	590	620			
10 PM	456	477			
11 PM	301	306			
12 AM	234	<u>214</u>			
		17,608			

SEASONAL FACTOR:	.937	AADT: 15,839	AM PEAK %:	7.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.4	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 12/7/98

ROAD: BALTIMORE PK SB

FROM: THORNTON RD

TO: CONCORD RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 0001/0081/1500 FC: 14

PROJECT: 6-0 70 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 5215

COUNTER: 9837

WEATHER: F

Hour Ending	Monday 12/07/98	Tuesday 12/08/98	Wednesday 12/09/98	Thursday 12/10/98	Friday 12/11/98
1 AM		82	100		
2 AM		63	80		
3 AM		32	44		
4 AM		40	56		
5 AM		50	70		
6 AM		178	216		
7 AM		613	654		
8 AM		1,206	1,353		
9 AM		1,141	1,261		
10 AM		1,079	1,222		
11 AM		1,096	1,029		
12 AM		1,297	1,264		
1 PM		1,345			
2 PM	1,236	1,185			
3 PM	1,166	1,142			
4 PM	1,250	1,220			
5 PM	1,510	1,518			
6 PM	1,702	1,574			
7 PM	1,283	1,202			
8 PM	778	866			
9 PM	635	654			
10 PM	495	485			
11 PM	379	368			
12 AM	238	285			
		18,721			

SEASONAL FACTOR:	.937	AADT: 16,840	AM PEAK %:	6.9	HOUR ENDING:	12:00 PM
AXLE CORR. FACTOR:	.96		PM PEAK %:	8.4	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: SPRING VALLEY RD

FROM: BRINTON LAKE RD

TO: TR 322

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: LOC FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: DVRPC FILE #: 9317 COUNTER: 9869 WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		8	10		
2 AM		6	9		
3 AM		4	4		
4 AM		-	3		
5 AM		4	4		
6 AM		19	17		
7 AM		96	89		
8 AM		238	207		
9 AM		234	210		
10 AM	84	94	109		
11 AM	48	77			
12 AM	56	72			
1 PM	72	77			
2 PM	70	92			
3 PM	79	85			
4 PM	98	130			
5 PM	134	136			
6 PM	188	208			
7 PM	121	127			
8 PM	64	82			
9 PM	70	48			
10 PM	34	50			
11 PM	34	22			
12 AM	31	20			
		1,929			

SEASONAL FACTOR:	.933	AADT: 1,787	AM PEAK %:	12.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	10.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: SPRING VALLEY RD

FROM: TR 322

TO: CONCORD RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: LOC FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9318

COUNTER: 9769

WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		3	4		
2 AM		2	3		
3 AM		-	-		
4 AM		-	1		
5 AM		3	4		
6 AM		6	3		
7 AM		16	12		
8 AM		42	25		
9 AM		40	33		
10 AM		22	22		
11 AM	20	26			
12 AM	22	19			
1 PM	24	33			
2 PM	24	28			
3 PM	22	26			
4 PM	36	37			
5 PM	40	34			
6 PM	36	45			
7 PM	32	20			
8 PM	23	22			
9 PM	19	22			
10 PM	12	18			
11 PM	12	10			
12 AM	4	<u>20</u>			
		476			

SEASONAL FACTOR:	.933	AADT: 441	AM PEAK %:	8.8	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	9.5	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: STATION RD FROM: SMITH BRIDGE RD TO: TR 322

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 3025/0030/1000 FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 40 LOOP OR CLASS:

STATION ID: DVRPC FILE #: 9319 COUNTER: 9839 WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		1	1		
2 AM		-	-		
3 AM		1	-		
4 AM		1	2		
5 AM		-	4		
6 AM		7	4		
7 AM		18	10		
8 AM		36	49		
9 AM		28	31		
10 AM		30	15		
11 AM	28	26	17		
12 AM	27	32			
1 PM	29	28			
2 PM	26	27			
3 PM	38	42			
4 PM	50	54			
5 PM	46	42			
6 PM	32	56			
7 PM	18	48			
8 PM	26	32			
9 PM	22	23			
10 PM	10	15			
11 PM	5	7			
12 AM	3	6			
		560			

SEASONAL FACTOR:	.933	AADT: 519	AM PEAK %:	6.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	10.	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/9/99

ROAD: SMITHBRIDGE RD

FROM: STATION RD

TO: ALLEN MEET LANE

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3046/0100/0250 FC: 16

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 15164

COUNTER: 9838

WEATHER: F

Hour Ending	Tuesday 11/09/99	Wednesday 11/10/99	Thursday 11/11/99	Friday 11/12/99	Saturday 11/13/99
1 AM		21	32		
2 AM		17	16		
3 AM		7	12		
4 AM		3	1		
5 AM		9	12		
6 AM		38	47		
7 AM		319	321		
8 AM		852	827		
9 AM		768			
10 AM		420			
11 AM	375	344			
12 AM	470	456			
1 PM	499	470			
2 PM	460	417			
3 PM	598	596			
4 PM	804	770			
5 PM	796	762			
6 PM	856	860			
7 PM	640	638			
8 PM	446	490			
9 PM	349	316			
10 PM	286	348			
11 PM	99	96			
12 AM	57	66			
		9,083			

SEASONAL FACTOR:	.951	AADT: 8,327	AM PEAK %:	9.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.5	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: FEATHERBED LA

FROM: KIRK RD

TO: TR 322

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: LOC FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: DVRPC FILE #: 9322 COUNTER: 9841 WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		8	3		
2 AM		1	-		
3 AM		1	-		
4 AM		3	1		
5 AM		3	6		
6 AM		9	7		
7 AM		44	28		
8 AM		81	88		
9 AM		68	92		
10 AM		47	30		
11 AM		42	27		
12 AM	54	50	50		
1 PM	54	45			
2 PM	39	36			
3 PM	64	58			
4 PM	60	70			
5 PM	46	45			
6 PM	72	68			
7 PM	51	58			
8 PM	70	54			
9 PM	38	35			
10 PM	27	32			
11 PM	9	18			
12 AM	7	7			
		883			

SEASONAL FACTOR:	.933	AADT: 818	AM PEAK %:	9.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	7.9	HOUR ENDING:	4:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: FEATHERBED LA

FROM: TR 322

TO: CONCORD RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: LOC FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9323

COUNTER: 9873

WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		3	2		
2 AM		4	6		
3 AM		10	4		
4 AM		8	6		
5 AM		23	27		
6 AM		34	22		
7 AM		92	83		
8 AM		86	72		
9 AM		58	58		
10 AM		49	42		
11 AM		44	32		
12 AM	60	60			
1 PM	55	53			
2 PM	70	66			
3 PM	88	76			
4 PM	83	84			
5 PM	96	106			
6 PM	83	96			
7 PM	56	62			
8 PM	46	46			
9 PM	42	39			
10 PM	21	24			
11 PM	10	6			
12 AM	4	14			
		1,143			

SEASONAL FACTOR:	.933	AADT: 1,059	AM PEAK %:	8.	HOUR ENDING:	7:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	9.3	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 10/20/97

ROAD: GARNET MINE RD

FROM: BETHEL RD

TO: TR 322 RAMPS

COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 3038/0060/0500 FC: 17

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 21314

DVRPC FILE #: 1445 COUNTER: 9153

WEATHER: F

Hour Ending	Monday 10/20/97	Tuesday 10/21/97	Wednesday 10/22/97	Thursday 10/23/97	Friday 10/24/97
1 AM		12	11		
2 AM		7	5		
3 AM		5	5		
4 AM		1	1		
5 AM		9	7		
6 AM		29	31		
7 AM		82	79		
8 AM		160	175		
9 AM		120	116		
10 AM		91	94		
11 AM		86	83		
12 AM	95	115	68		
1 PM	91	102			
2 PM	92	95			
3 PM	144	119			
4 PM	124	138			
5 PM	154	162			
6 PM	169	175			
7 PM	124	128			
8 PM	89	95			
9 PM	67	64			
10 PM	46	58			
11 PM	31	50			
12 AM	18	<u>26</u>			
		1,929			

SEASONAL FACTOR:	.935	AADT: 1,778	AM PEAK %:	8.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	9.1	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/19/99

ROAD: GARNET MINE RD

FROM: TR 261

TO: LARKIN RD

COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 3038/0080/1000 FC: 19

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 30 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9326

COUNTER: 9955

WEATHER: F

Hour Ending	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99	Saturday 10/23/99
1 AM		17	8		
2 AM		11	7		
3 AM		3	4		
4 AM		7	8		
5 AM		4	5		
6 AM		30	28		
7 AM		78	82		
8 AM		177	178		
9 AM		124	129		
10 AM		75	80		
11 AM		83	78		
12 AM		69	94		
1 PM		91	120		
2 PM		68			
3 PM	110	99			
4 PM	144	118			
5 PM	191	160			
6 PM	211	177			
7 PM	135	110			
8 PM	100	85			
9 PM	69	62			
10 PM	45	58			
11 PM	37	33			
12 AM	19	<u>24</u>			
		1,763			

SEASONAL FACTOR:	.933	AADT: 1,633	AM PEAK %:	10.	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.993		PM PEAK %:	10.	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: TR 261 FROM: BETHEL RD TO: TR 322
 COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 0261/0050/1000 FC: 16
 PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 40 LOOP OR CLASS:
 STATION ID: DVRPC FILE #: 9324 COUNTER: 9767 WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		31	23		
2 AM		16	20		
3 AM		11	8		
4 AM		10	2		
5 AM		14	12		
6 AM		58	66		
7 AM		327	322		
8 AM		626	634		
9 AM		562	546		
10 AM		428	418		
11 AM		341	334		
12 AM		387	360		
1 PM		450			
2 PM	384	404			
3 PM	424	425			
4 PM	544	581			
5 PM	601	640			
6 PM	732	764			
7 PM	581	590			
8 PM	358	379			
9 PM	274	290			
10 PM	200	214			
11 PM	128	116			
12 AM	62	79			
		7,743			

SEASONAL FACTOR:	.934	AADT: 6,972	AM PEAK %:	8.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: TR 261

FROM: TR 322

TO: CONCORD RD

COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 0261/0050/1000 FC: 16

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 40 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9325

COUNTER: 9763

WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		31	27		
2 AM		16	19		
3 AM		12	10		
4 AM		12	5		
5 AM		18	16		
6 AM		68	68		
7 AM		300	290		
8 AM		726	585		
9 AM		692	583		
10 AM		446	374		
11 AM		342	340		
12 AM		422	401		
1 PM	402	392			
2 PM	387	396			
3 PM	458	450			
4 PM	592	636			
5 PM	617	682			
6 PM	742	768			
7 PM	592	584			
8 PM	353	402			
9 PM	263	310			
10 PM	216	230			
11 PM	140	119			
12 AM	60	64			
		8,118			

SEASONAL FACTOR:	.934	AADT: 7,309	AM PEAK %:	8.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.5	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/19/99

ROAD: LARKIN RD

FROM: BETHEL RD

TO: CHICHESTER AVE

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3016/0030/1000 FC: 17

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9327

COUNTER: 9764

WEATHER: F

Hour Ending	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99	Saturday 10/23/99
1 AM		37	37		
2 AM		25	16		
3 AM		14	28		
4 AM		9	11		
5 AM		24	24		
6 AM		76	82		
7 AM		188	173		
8 AM		400	404		
9 AM		373	367		
10 AM		234	240		
11 AM		195	234		
12 AM		250	330		
1 PM		287	331		
2 PM	302	262			
3 PM	301	298			
4 PM	418	395			
5 PM	469	438			
6 PM	614	533			
7 PM	451	436			
8 PM	326	354			
9 PM	252	256			
10 PM	230	216			
11 PM	130	120			
12 AM	74	80			
		5,500			

SEASONAL FACTOR:	.935	AADT: 5,081	AM PEAK %:	7.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.988		PM PEAK %:	9.7	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/4/98

ROAD: CHICHESTER AVE

FROM: BEESON AVE

TO: BLUE BALL AVE

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3009/0040/0500 FC: 16

PROJECT: PAD98 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 20129

DVRPC FILE #: 4298

COUNTER: 9831

WEATHER: F

Hour Ending	Wednesday 11/04/98	Thursday 11/05/98	Friday 11/06/98	Saturday 11/07/98	Sunday 11/08/98
1 AM		141	194		
2 AM		119	138		
3 AM		69	72		
4 AM		62	67		
5 AM		86	90		
6 AM		356	374		
7 AM		1,150	1,096		
8 AM		1,700	1,635		
9 AM		1,413			
10 AM		949			
11 AM	930	966			
12 AM	962	1,054			
1 PM	1,038	1,084			
2 PM	1,138	1,058			
3 PM	1,247	1,169			
4 PM	1,439	1,462			
5 PM	1,600	1,576			
6 PM	1,668	1,610			
7 PM	1,331	1,358			
8 PM	1,018	1,014			
9 PM	760	800			
10 PM	656	670			
11 PM	424	436			
12 AM	350	<u>308</u>			
		20,610			

SEASONAL FACTOR:	.946	AADT: 18,990	AM PEAK %:	8.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.974		PM PEAK %:	7.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/19/99

ROAD: BETHEL RD

FROM: CHERRY TREE RD

TO: TR 452

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3016/0060/1000 FC: 17

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 30 LOOP OR CLASS:

STATION ID: DVRPC FILE #: 9330 COUNTER: 9956 WEATHER: F

Hour Ending	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99	Saturday 10/23/99
1 AM		26	21		
2 AM		12	13		
3 AM		10	8		
4 AM		6	6		
5 AM		13	7		
6 AM		53	30		
7 AM		173	162		
8 AM		320	373		
9 AM		324	306		
10 AM		231	170		
11 AM		128	108		
12 AM		154	160		
1 PM	193	172	187		
2 PM	176	154			
3 PM	227	167			
4 PM	383	379			
5 PM	396	374			
6 PM	384	382			
7 PM	397	302			
8 PM	206	170			
9 PM	110	118			
10 PM	95	106			
11 PM	65	49			
12 AM	38	47			
		3,870			

SEASONAL FACTOR:	.935	AADT: 3,575	AM PEAK %:	8.4	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.988		PM PEAK %:	9.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/3/98

ROAD: TR 452 MARKET ST FROM: TR 95 RAMPS TO: MEETINGHOUSE RD
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0452/0040/1000 FC: 14
 PROJECT: PAD98 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:
 STATION ID: 24625 DVRPC FILE #: 4224 COUNTER: 9485 WEATHER: F

Hour Ending	Tuesday 11/03/98	Wednesday 11/04/98	Thursday 11/05/98	Friday 11/06/98	Saturday 11/07/98
1 AM		265	262		
2 AM		107	115		
3 AM		98	83		
4 AM		86	108		
5 AM		190	174		
6 AM		476	392		
7 AM		1,344			
8 AM		2,083			
9 AM		1,796			
10 AM		1,385			
11 AM		1,246			
12 AM	1,469	1,454			
1 PM	1,722	1,603			
2 PM	1,791	1,627			
3 PM	1,700	1,693			
4 PM	2,004	1,827			
5 PM	2,121	1,927			
6 PM	1,954	2,101			
7 PM	1,574	1,672			
8 PM	1,089	1,166			
9 PM	712	919			
10 PM	703	788			
11 PM	542	646			
12 AM	376	<u>447</u>			
		26,946			

SEASONAL FACTOR:	.925	AADT: 23,928	AM PEAK %:	7.7	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/29/97

ROAD: TR 452

FROM: MEETINGHOUSE RD

TO: TR 322 RAMPS

COUNTY: PHILADELPHIA MCD: 239 - PHILADELPHIA SR/SEG/OFF: 0452/0050/1000 FC: 14

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 24626

DVRPC FILE #: 597

COUNTER: 15800

WEATHER: F

Hour Ending	Wednesday 10/29/97	Thursday 10/30/97	Friday 10/31/97	Saturday 11/01/97	Sunday 11/02/97
1 AM		164	167		
2 AM		97	110		
3 AM		83	89		
4 AM		64	87		
5 AM		97	124		
6 AM		335	366		
7 AM		1,004	938		
8 AM		1,667	1,639		
9 AM		1,429	1,401		
10 AM	1,251	1,258			
11 AM	1,134	1,200			
12 AM	1,309	1,444			
1 PM	1,402	1,447			
2 PM	1,277	1,397			
3 PM	1,397	1,481			
4 PM	1,599	1,643			
5 PM	1,666	1,747			
6 PM	1,796	1,839			
7 PM	1,520	1,484			
8 PM	1,064	1,074			
9 PM	824	859			
10 PM	690	726			
11 PM	470	475			
12 AM	335	<u>393</u>			
		23,407			

SEASONAL FACTOR:	.924	AADT: 20,785	AM PEAK %:	7.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	7.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 2/24/97

ROAD: BETHEL ST FROM: EXCELSIOR DR TO: KEYSTONE RD
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3010/0010/1000 FC: 19
 PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:
 STATION ID: 20228 DVRPC FILE #: 1768 COUNTER: 9768 WEATHER: F

Hour Ending	Monday 02/24/97	Tuesday 02/25/97	Wednesday 02/26/97	Thursday 02/27/97	Friday 02/28/97
1 AM		11	12		
2 AM		10	19		
3 AM		5	4		
4 AM		8	6		
5 AM		18	20		
6 AM		36	27		
7 AM		122	151		
8 AM		148	141		
9 AM		132	128		
10 AM		119	89		
11 AM		108	98		
12 AM		144	143		
1 PM		152	134		
2 PM		131			
3 PM		137			
4 PM	154	149			
5 PM	180	186			
6 PM	122	127			
7 PM	66	89			
8 PM	38	66			
9 PM	56	47			
10 PM	38	32			
11 PM	26	30			
12 AM	22	33			
		2,040			

SEASONAL FACTOR:	1.042	AADT: 2,113	AM PEAK %:	7.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.994		PM PEAK %:	9.1	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 11/6/95

ROAD: TR 95 NB

FROM: TR 452

TO: TR 322

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0095/0020/ FC: 11

PROJECT: VMT-IU COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 12918

COUNTER:

WEATHER: F

Hour Ending	Monday 11/06/95	Tuesday 11/07/95	Wednesday 11/08/95	Thursday 11/09/95	Friday 11/10/95
1 AM		569	623		
2 AM		412	463		
3 AM		332	399		
4 AM		357	406		
5 AM		595	594		
6 AM		1,372	1,430		
7 AM		3,484	3,579		
8 AM		4,912	4,672		
9 AM		3,986	3,708		
10 AM		2,920			
11 AM		2,619			
12 AM	2,724	2,685			
1 PM	2,835	2,764			
2 PM	2,805	2,893			
3 PM	2,981	3,017			
4 PM	3,421	3,544			
5 PM	3,801	4,055			
6 PM	4,324	4,368			
7 PM	3,161	3,342			
8 PM	2,033	2,321			
9 PM	1,601	1,648			
10 PM	1,512	1,599			
11 PM	1,179	1,337			
12 AM	831	<u>922</u>			
		56,053			

SEASONAL FACTOR:	.94	AADT: 52,690	AM PEAK %:	8.8	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	7.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 11/6/95

ROAD: TR 95 SB

FROM: TR 452

TO: TR 322

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0095/0021/ FC: 11

PROJECT: VMT-IU COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 12919

COUNTER:

WEATHER: F

Hour Ending	Monday 11/06/95	Tuesday 11/07/95	Wednesday 11/08/95	Thursday 11/09/95	Friday 11/10/95
1 AM		630	663		
2 AM		492	531		
3 AM		389	440		
4 AM		472	565		
5 AM		637	588		
6 AM		1,045	1,052		
7 AM		2,715	2,745		
8 AM		4,348	4,176		
9 AM		3,591			
10 AM	2,621	2,724			
11 AM	2,651	2,493			
12 AM	2,730	2,779			
1 PM	2,763	2,620			
2 PM	2,769	2,662			
3 PM	2,876	3,096			
4 PM	3,735	3,895			
5 PM	3,988	4,109			
6 PM	4,259	4,377			
7 PM	3,134	3,305			
8 PM	2,301	2,313			
9 PM	1,679	1,811			
10 PM	1,669	1,830			
11 PM	1,323	1,449			
12 AM	1,173	<u>1,143</u>			
		54,925			

SEASONAL FACTOR:	.94	AADT: 51,630	AM PEAK %:	7.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	8.	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: TR 491

FROM: FEATHERBED LA

TO: GARNET MINE RD

COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 0491/0110/1000 FC: 16

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9315

COUNTER: 9870

WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		66	53		
2 AM		23	25		
3 AM		26	24		
4 AM		23	24		
5 AM		42	32		
6 AM		130	124		
7 AM		537	488		
8 AM		1,014			
9 AM		912			
10 AM		494			
11 AM		433			
12 AM	488	522			
1 PM	532	534			
2 PM	539	518			
3 PM	555	570			
4 PM	716	722			
5 PM	946	978			
6 PM	1,032	1,075			
7 PM	812	792			
8 PM	496	512			
9 PM	346	385			
10 PM	297	326			
11 PM	168	166			
12 AM	81	87			
		10,887			

SEASONAL FACTOR:	.934	AADT: 9,802	AM PEAK %:	9.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/20/97

ROAD: TR 491 FROM: MEETINGHOUSE RD TO: ROCKHURST AVE
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 0491/0020/1000 FC: 17
 PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:
 STATION ID: 13960 DVRPC FILE #: 1314 COUNTER: 9624 WEATHER: F

Hour Ending	Monday 10/20/97	Tuesday 10/21/97	Wednesday 10/22/97	Thursday 10/23/97	Friday 10/24/97
1 AM		41	51		
2 AM		36	26		
3 AM		16	14		
4 AM		15	10		
5 AM		37	32		
6 AM		130	140		
7 AM		481	456		
8 AM		890	836		
9 AM		600	590		
10 AM		390	424		
11 AM		421	395		
12 AM		433	426		
1 PM		498			
2 PM		418			
3 PM	296	530			
4 PM	663	632			
5 PM	826	826			
6 PM	964	918			
7 PM	718	714			
8 PM	469	436			
9 PM	299	344			
10 PM	254	258			
11 PM	156	187			
12 AM	96	<u>112</u>			
		9,363			

SEASONAL FACTOR:	.935	AADT: 8,632	AM PEAK %:	9.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	9.8	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 8/7/95

ROAD: BETHEL RD FROM: TR 261 TO: GARNET MINE RD
 COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 3017/0050/ FC: 16
 PROJECT: VMT-CU COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:
 STATION ID: DVRPC FILE #: 12526 COUNTER: WEATHER: F

Hour Ending	Monday 08/07/95	Tuesday 08/08/95	Wednesday 08/09/95	Thursday 08/10/95	Friday 08/11/95
1 AM		10	11		
2 AM		4	5		
3 AM		1	3		
4 AM		1	3		
5 AM		5	6		
6 AM		7	6		
7 AM		42			
8 AM		75			
9 AM	52	68			
10 AM	84	95			
11 AM	49	51			
12 AM	61	71			
1 PM	77	85			
2 PM	51	65			
3 PM	55	64			
4 PM	63	64			
5 PM	108	117			
6 PM	96	89			
7 PM	81	83			
8 PM	80	71			
9 PM	55	46			
10 PM	45	49			
11 PM	33	42			
12 AM	20	25			
		1,230			

SEASONAL FACTOR:	.952	AADT: 1,171	AM PEAK %:	7.7	HOUR ENDING:	10:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	9.5	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 5/19/99

ROAD: BETHEL RD FROM: LARKIN RD TO: COLONIAL RD
 COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3017/0024/1000 FC: 17
 PROJECT: 60-138 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:
 STATION ID: DVRPC FILE #: 7521 COUNTER: 9836 WEATHER: F

Hour Ending	Wednesday 05/19/99	Thursday 05/20/99	Friday 05/21/99	Saturday 05/22/99	Sunday 05/23/99
1 AM		30	37		
2 AM		21	26		
3 AM		10	18		
4 AM		12	12		
5 AM		15	20		
6 AM		48	52		
7 AM		145	164		
8 AM		247			
9 AM		191			
10 AM		132			
11 AM		125			
12 AM		127			
1 PM		140			
2 PM	149	137			
3 PM	163	147			
4 PM	147	161			
5 PM	250	259			
6 PM	180	176			
7 PM	171	153			
8 PM	136	129			
9 PM	95	108			
10 PM	62	71			
11 PM	51	62			
12 AM	29	40			
		2,686			

SEASONAL FACTOR:	.924	AADT: 2,452	AM PEAK %:	9.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.988		PM PEAK %:	9.6	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 10/15/97

ROAD: BETHEL RD FROM: CHICHESTER AVE TO: MILL RD

COUNTY: DELAWARE MCD: 173 - UPPER CHICHESTER TOWNSHIP SR/SEG/OFF: 3017/0010/0500 FC: 17

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:

STATION ID: 20641

DVRPC FILE #: 1434

COUNTER: 9171

WEATHER: F

Hour Ending	Wednesday 10/15/97	Thursday 10/16/97	Friday 10/17/97	Saturday 10/18/97	Sunday 10/19/97
1 AM		47	59		
2 AM		25	38		
3 AM		19	22		
4 AM		10	14		
5 AM		13	12		
6 AM		79	72		
7 AM		295	255		
8 AM		468			
9 AM		370			
10 AM		299			
11 AM		258			
12 AM	323	338			
1 PM	338	358			
2 PM	315	304			
3 PM	398	386			
4 PM	431	462			
5 PM	491	597			
6 PM	554	643			
7 PM	475	583			
8 PM	327	425			
9 PM	251	319			
10 PM	213	237			
11 PM	117	138			
12 AM	68	86			
		6,759			

SEASONAL FACTOR:	.935	AADT: 6,231	AM PEAK %:	6.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	9.5	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/15/97

ROAD: CONCORD RD FROM: SMITH BRIDGE RD TO: IVY MILLS RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 3607/0110/1000 FC: 16

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 25805 DVRPC FILE #: 1619 COUNTER: 9168 WEATHER: F

Hour Ending	Wednesday 10/15/97	Thursday 10/16/97	Friday 10/17/97	Saturday 10/18/97	Sunday 10/19/97
1 AM		46	42		
2 AM		14	17		
3 AM		11	9		
4 AM		5	9		
5 AM		24	17		
6 AM		51	64		
7 AM		329	295		
8 AM		656			
9 AM		511			
10 AM		306			
11 AM		269			
12 AM	261	316			
1 PM	279	319			
2 PM	278	327			
3 PM	328	402			
4 PM	503	553			
5 PM	609	648			
6 PM	614	678			
7 PM	420	489			
8 PM	250	299			
9 PM	188	209			
10 PM	184	227			
11 PM	100	115			
12 AM	78	72			
		6,876			

SEASONAL FACTOR:	.934	AADT: 6,249	AM PEAK %:	9.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	9.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/15/97

ROAD: CONCORD RD

FROM: IVY MILLS RD

TO: CHEYNEY RD

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 3007/0120/1000 FC: 16

PROJECT: PASD97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 40 LOOP OR CLASS:

STATION ID: 19977

DVRPC FILE #: 1421

COUNTER: 9766

WEATHER: F

Hour Ending	Wednesday 10/15/97	Thursday 10/16/97	Friday 10/17/97	Saturday 10/18/97	Sunday 10/19/97
1 AM		42	49		
2 AM		14	16		
3 AM		12	10		
4 AM		7	11		
5 AM		19	18		
6 AM		49	54		
7 AM		321	292		
8 AM		658			
9 AM		510			
10 AM		306			
11 AM		237			
12 AM	326	352			
1 PM	363	350			
2 PM	278	346			
3 PM	351	412			
4 PM	550	587			
5 PM	644	657			
6 PM	656	730			
7 PM	450	495			
8 PM	308	346			
9 PM	191	192			
10 PM	221	233			
11 PM	100	96			
12 AM	55	62			
		7,033			

SEASONAL FACTOR:	.934	AADT: 6,391	AM PEAK %:	9.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	10.4	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/18/99

ROAD: CONCORD RD

FROM: MATTSON RD

TO: TR 261

COUNTY: DELAWARE MCD: 139 - CONCORD TOWNSHIP SR/SEG/OFF: 3007/0100/1000 FC: 16

PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 9312

COUNTER: 9770

WEATHER: F

Hour Ending	Monday 10/18/99	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99
1 AM		30	38		
2 AM		18	12		
3 AM		10	15		
4 AM		8	5		
5 AM		18	15		
6 AM		64	60		
7 AM		372	317		
8 AM		670	634		
9 AM		568	544		
10 AM		345	332		
11 AM		251	236		
12 AM		298	269		
1 PM	310	276			
2 PM	268	283			
3 PM	306	352			
4 PM	534	509			
5 PM	582	576			
6 PM	618	606			
7 PM	450	486			
8 PM	280	280			
9 PM	179	196			
10 PM	160	162			
11 PM	99	98			
12 AM	49	34			
		6,510			

SEASONAL FACTOR:	.934	AADT: 5,861	AM PEAK %:	10.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.3	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 5/31/95

ROAD: CONCORD RD EB

FROM: DAVIDS DR

TO: CHELSEA AVE

COUNTY: DELAWARE MCD: 130 - BETHEL TOWNSHIP SR/SEG/OFF: 3007/0080/ FC: 16

PROJECT: 6-0-14 COUNT DIR: EAST TRAFFIC DIR: BOTH SPEED LIMIT: LOOP OR CLASS:

STATION ID: DVRPC FILE #: 11868 COUNTER: WEATHER: F

Hour Ending	Wednesday 05/31/95	Thursday 06/01/95	Friday 06/02/95	Saturday 06/03/95	Sunday 06/04/95
1 AM		28	31		
2 AM		12	12		
3 AM		4	8		
4 AM		7	9		
5 AM		13	5		
6 AM		45	29		
7 AM		199	201		
8 AM		402			
9 AM		330			
10 AM		188			
11 AM		233			
12 AM	229	239			
1 PM	254	257			
2 PM	221	232			
3 PM	235	259			
4 PM	363	355			
5 PM	545	493			
6 PM	465	458			
7 PM	313	324			
8 PM	268	256			
9 PM	214	224			
10 PM	144	150			
11 PM	99	102			
12 AM	45	42			
		4,852			

SEASONAL FACTOR:	.894	AADT: 4,338	AM PEAK %:	8.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1		PM PEAK %:	10.2	HOUR ENDING:	5:00 PM

DVRPC Travel Monitoring

DATE: 10/19/99

ROAD: CONCORD RD FROM: CHICHESTER AVENUE TO: CHERRY TREE RD
 COUNTY: DELAWARE MCD: 129 - ASTON TOWNSHIP SR/SEG/OFF: 3007/0080/1000 FC: 16
 PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:
 STATION ID: DVRPC FILE #: 9313 COUNTER: 9768 WEATHER: F

Hour Ending	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99	Saturday 10/23/99
1 AM		56	60		
2 AM		20	24		
3 AM		26	18		
4 AM		14	12		
5 AM		39	20		
6 AM		114	100		
7 AM		433	448		
8 AM		908	956		
9 AM		894	956		
10 AM		558	584		
11 AM		466	482		
12 AM	560	574	564		
1 PM	622	601			
2 PM	550	484			
3 PM	630	567			
4 PM	910	825			
5 PM	1,010	1,005			
6 PM	1,136	1,079			
7 PM	764	748			
8 PM	482	472			
9 PM	385	328			
10 PM	305	332			
11 PM	174	208			
12 AM	80	<u>112</u>			
		10,863			

SEASONAL FACTOR:	.934	AADT: 9,781	AM PEAK %:	8.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.9	HOUR ENDING:	6:00 PM

DVRPC Travel Monitoring

DATE: 10/19/99

ROAD: CONCORD RD FROM: CHERRY TREE RD TO: TR 452
 COUNTY: DELAWARE MCD: 129 - ASTON TOWNSHIP SR/SEG/OFF: 3007/0060/0500 FC: 16
 PROJECT: TR-322 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:
 STATION ID: DVRPC FILE #: 9314 COUNTER: 9957 WEATHER: F

Hour Ending	Tuesday 10/19/99	Wednesday 10/20/99	Thursday 10/21/99	Friday 10/22/99	Saturday 10/23/99
1 AM		66	74		
2 AM		28	26		
3 AM		34	21		
4 AM		14	14		
5 AM		36	46		
6 AM		136	112		
7 AM		464	480		
8 AM		830	900		
9 AM		880	889		
10 AM		671	676		
11 AM		543	556		
12 AM		612	590		
1 PM	684	697			
2 PM	638	592			
3 PM	686	686			
4 PM	930	855			
5 PM	986	988			
6 PM	1,138	1,058			
7 PM	908	866			
8 PM	662	542			
9 PM	494	444			
10 PM	407	416			
11 PM	201	262			
12 AM	106	138			

11,858

SEASONAL FACTOR:	.934	AADT: 10,677	AM PEAK %:	7.4	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	8.9	HOUR ENDING:	6:00 PM

APPENDIX B
INTERSECTION TURNING MOVEMENTS

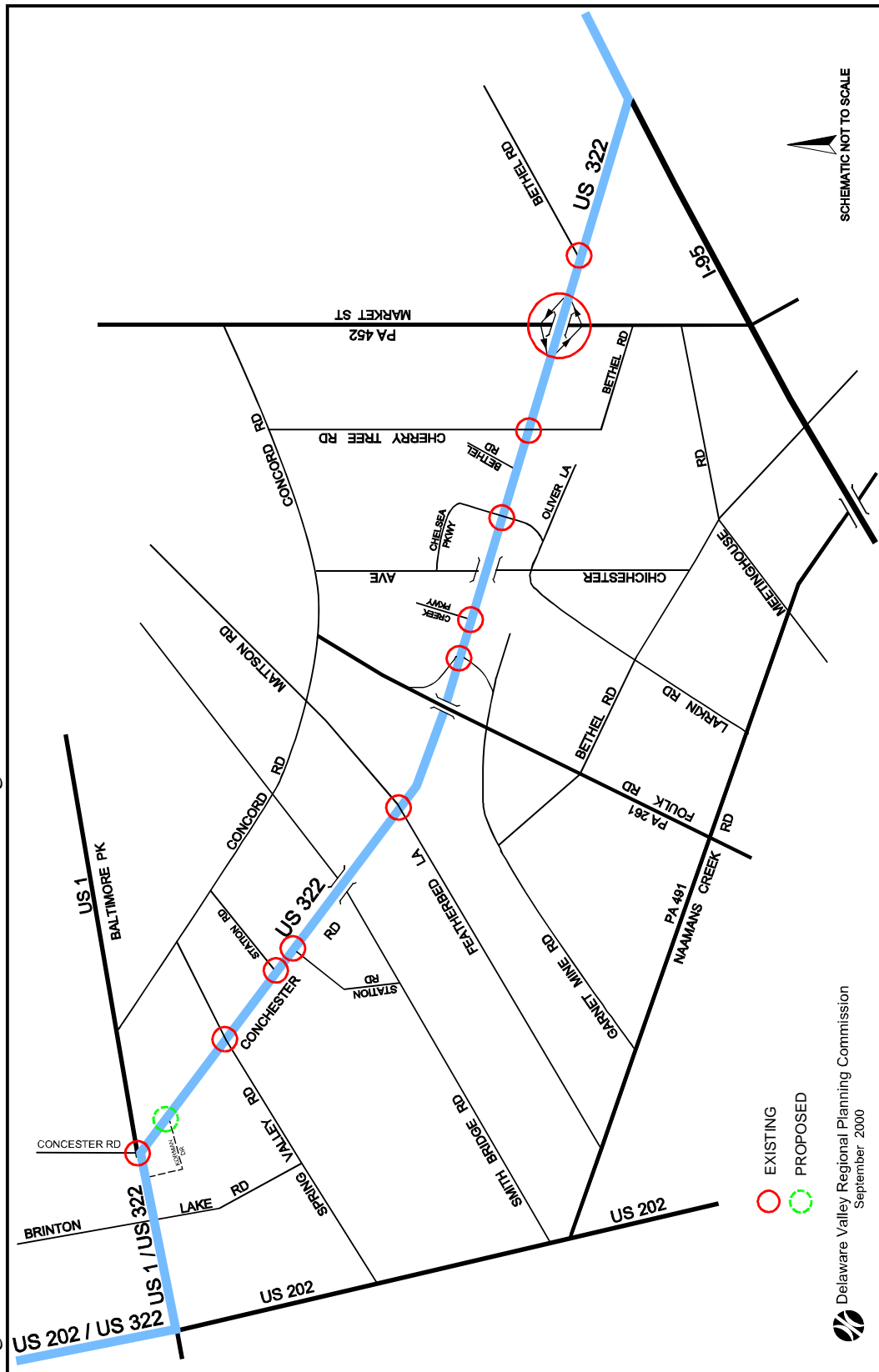
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Figure B-1 : Location of Selected Intersection Turning Movements



**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: CONCORD TWP
INTERSECTION: North-South Street -East-West Street
STREETS: US 1- BALTIMORE PIKE & US 322

DATE: 10/07/99
DAY: THURSDAY
WEATHER: FAIR
FILE NUMBER: A - AM

**AM INTERVAL
COUNTS**

STARTING TIME	US 1 - BALTIMORE PIKE								US 322									
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL
7:00 7:15	15	254	193	462	8	133	2	143	6	17	21	44	136	13	2	151	605	195
7:15 7:30	20	288	162	470	25	223	12	260	9	7	11	27	254	39	9	302	730	1059
7:30 7:45	29	244	179	452	23	295	21	339	4	6	14	24	279	22	15	316	791	1131
7:45 8:00	35	215	177	427	27	407	31	465	4	7	13	24	206	72	12	290	892	1206
8:00 8:15	31	294	162	487	14	231	6	251	6	7	22	35	146	16	4	166	738	939
8:15 8:30	38	246	193	477	24	262	8	294	5	5	14	24	172	7	6	185	771	980
8:30 8:45	29	199	174	402	14	182	13	209	6	1	7	14	235	12	17	264	611	889
8:45 9:00	29	197	159	385	10	199	13	222	5	3	8	16	181	7	14	202	607	825
9:00 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	226	1937	1399	3562	145	1932	106	2183	45	53	110	208	1609	188	79	1876	5745	7829
P.H. am																		
P.H. pm																		

HOURLY VOLUMES STARTING TIME	US 1 - BALTIMORE PIKE								US 322									
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL
7:00 8:00	99	1001	711	1811	83	1058	66	1207	23	37	59	119	875	146	38	1059	3018	4196
8:00 9:00	127	936	688	1751	62	874	40	976	22	16	51	89	734	42	41	817	2727	3633
9:00 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	226	1937	1399	3562	145	1932	106	2183	45	53	110	208	1609	188	79	1876	5745	7829

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: CONCORD TWP

INTERSECTION: North-South Street-East-West Street
STREETS: US 1- BALTIMORE PIKE & US 322

DATE: 10/07/99
DAY: THURSDAY
WEATHER: FAIR
FILE NUMBER: A - PM

**PM INTERVAL
COUNTS**

STARTING TIME	US 1 - BALTIMORE PIKE												US 322							
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W		
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL	
12:00 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 4:15	16	204	178	398	29	239	3	271	29	25	45	99	240	15	5	260	669	359	1028	
4:15 4:30	14	231	195	440	39	265	5	309	33	29	41	103	200	14	15	229	749	332	1081	
4:30 4:45	18	240	219	477	33	355	7	395	41	40	50	131	226	10	13	249	872	380	1252	
4:45 5:00	21	257	237	515	26	273	4	303	44	47	55	146	268	11	21	300	818	446	1264	
5:00 5:15	25	273	250	548	24	298	7	329	49	53	62	164	173	15	15	203	877	367	1244	
5:15 5:30	28	294	274	596	28	266	6	300	57	62	69	188	256	11	25	292	896	480	1376	
5:30 5:45	26	307	279	612	8	174	3	185	53	55	60	168	129	0	11	140	797	308	1105	
5:45 6:00	25	312	288	625	27	261	4	292	48	51	53	152	146	9	22	177	917	329	1246	
TOTALS	173	2118	1920	4211	214	2131	39	2384	354	362	435	1151	1638	85	127	1850	6595	3001	9596	
P.H. am																				
P.H. pm																				

HOURLY VOLUMES		US 1 - BALTIMORE PIKE												US 322									
STARTING		1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND								4-WESTBOUND				N-S	E-W
TIME		L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL			
12:00 1:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1:00 2:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2:00 3:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3:00 4:00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:00 5:00		69	932	829	1830	127	1132	19	1278	147	141	191	479	934	50	54	1038	3108	1517	4625			
5:00 6:00		104	1186	1091	2381	87	999	20	1106	207	221	244	672	704	35	73	812	3487	1484	4971			
TOTALS		173	2118	1920	4211	214	2131	39	2384	354	362	435	1151	1638	85	127	1850	6595	3001	9596			

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: CONCORD TWP

INTERSECTION: North-South Street-East-West Street
STREETS: MATTSON RD / FEATHERBEAD LANE & US 322

DATE: 10/29/99
DAY: FRIDAY
WEATHER: FAIR
FILE NUMBER: B - AM

**AM INTERVAL
COUNTS**

STARTING TIME	MATTSON RD / FEATHERBEAD LANE										US 322									
	1-NORTHBOUND				2-SOUTHBOU				3-EASTBOUND				4-WESTBOUND N-S				E-W			
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
7:00 7:15	0	3	14	17	2	1	0	3	2	197	5	204	11	175	6	192	20	396	416	
7:15 7:30	1	3	8	12	2	5	5	12	5	201	12	218	12	221	5	238	24	456	480	
7:30 7:45	0	2	10	12	0	4	0	4	4	213	13	230	7	224	4	235	16	465	481	
7:45 8:00	1	1	9	11	1	4	4	9	2	226	9	237	9	237	2	248	20	485	505	
8:00 8:15	0	1	7	8	0	4	4	8	1	231	7	239	11	244	6	261	16	500	516	
8:15 8:30	0	0	6	6	1	2	1	4	4	241	8	253	9	238	7	254	10	507	517	
8:30 8:45	0	2	4	6	0	4	3	7	3	237	8	248	8	242	4	254	13	502	515	
8:45 9:00	2	1	4	7	1	3	2	6	4	231	5	240	0	0	0	0	13	240	253	
9:00 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	4	13	62	79	7	27	19	53	25	1777	67	1869	67	1581	34	1682	132	3551	3683	

P.H. am
P.H. pm

HOURLY VOLUMES STARTING TIME	MATTSON RD / FEATHERBEAD LANE										US 322									
	1-NORTHBOUND				2-SOUTHBOU				3-EASTBOUND				4-WESTBOUND N-S				E-W			
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
7:00 8:00	2	9	41	52	5	14	9	28	13	837	39	889	39	857	17	913	80	1802	1882	
8:00 9:00	2	4	21	27	2	13	10	25	12	940	28	980	28	724	17	769	52	1749	1801	
9:00 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	4	13	62	79	7	27	19	53	25	1777	67	1869	67	1581	34	1682	132	3551	3683	

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: CONCORD TWP

INTERSECTION: North-South Street-East-West Street
STREETS: MATTSON RD / FEATHERBEAD LANE & US 322

DATE: 10/25/99
DAY: MONDAY
WEATHER: FAIR
FILE NUMBER: B - PM

**PM INTERVAL
COUNTS**

STARTING TIME	MATTSON RD / FEATHERBEAD LANE								US 322										
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
12:00 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 4:15	0	0	5	5	2	0	6	8	2	211	1	214	4	194	9	207	13	421	434
4:15 4:30	1	1	3	5	3	1	7	11	3	240	3	246	7	216	10	233	16	479	495
4:30 4:45	0	0	12	12	2	2	5	9	3	308	1	312	10	200	8	218	21	530	551
4:45 5:00	0	0	5	5	3	2	4	9	1	208	2	211	9	198	5	212	14	423	437
5:00 5:15	1	0	7	8	4	1	4	9	4	245	2	251	10	212	4	226	17	477	494
5:15 5:30	1	0	8	9	5	2	5	12	5	252	1	258	9	216	5	230	21	488	509
5:30 5:45	2	0	4	6	4	4	4	12	1	248	2	251	10	214	7	231	18	482	500
5:45 6:00	1	0	9	10	3	2	4	9	3	237	3	243	12	221	4	237	19	480	499
TOTALS	6	1	53	60	26	14	39	79	22	1949	15	1986	71	1671	52	1794	139	3780	3919
P.H. am																			
P.H. pm																			

STARTING TIME	MATTSON RD / FEATHERBEAD LANE								US 322										
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
12:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 5:00	1	1	25	27	10	5	22	37	9	967	7	983	30	808	32	870	64	1853	1917
5:00 6:00	5	0	28	33	16	9	17	42	13	982	8	1003	41	863	20	924	75	1927	2002
TOTALS	6	1	53	60	26	14	39	79	22	1949	15	1986	71	1671	52	1794	139	3780	3919

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: BETHEL TWP

INTERSECTION: North-South Street-East-West Street
STREETS: PA 261-FOULK RD & US 322

DATE: 10/26/99
DAY: THUESDAY
WEATHER: FAIR
FILE NUMBER: C - AM

**AM INTERVAL
COUNTS**

PA 261-FOULK RD					US 322									
STARTING	1-NORTHBOUND			2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
TIME	R	TOTAL		R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	TOTAL
7:00 7:15	4	4		2	2	209	1	210	188	12	200	6	410	416
7:15 7:30	3	3		6	6	238	3	241	201	11	212	9	453	462
7:30 7:45	7	7		4	4	251	4	255	246	17	263	11	518	529
7:45 8:00	12	12		5	5	277	3	280	261	27	288	17	568	585
8:00 8:15	9	9		7	7	268	5	273	233	28	261	16	534	550
8:15 8:30	8	8		5	5	273	2	275	243	16	259	13	534	547
8:30 8:45	2	2		6	6	255	1	256	238	12	250	8	506	514
8:45 9:00	6	6		2	2	242	0	242	229	19	248	8	490	498
9:00 9:30	0	0		0	0	0	0	0	0	0	0	0	0	0
9:30 10:00	0	0		0	0	0	0	0	0	0	0	0	0	0
10:00 10:30	0	0		0	0	0	0	0	0	0	0	0	0	0
10:30 11:00	0	0		0	0	0	0	0	0	0	0	0	0	0
11:00 11:30	0	0		0	0	0	0	0	0	0	0	0	0	0
11:30 12:00	0	0		0	0	0	0	0	0	0	0	0	0	0
TOTALS	51	51		37	37	2013	19	2032	1839	142	1981	88	4013	4101
P.H. am														
P.H. pm														

HOURLY VOLUMES STARTING TIME		PA 261-FOULK RD						US 322						
		1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
		R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	TOTAL
7:00 8:00	26	26	17	17	975	11	986	896	67	963	43	1949	1992	
8:00 9:00	25	25	20	20	1038	8	1046	943	75	1018	45	2064	2109	
9:00 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	51	51	37	37	2013	19	2032	1839	142	1981	88	4013	4101	

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: BETHEL TWP

INTERSECTION: North-South Street-East-West Street
STREETS: PA 261-FOULK RD & US 322

DATE: 10/07/99
DAY: THUESDAY
WEATHER: FAIR
FILE NUMBER: C -PM

**PM INTERVAL
COUNTS**

STARTING TIME	PA 261-FOULK RD						US 322						TOTAL
	1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
	R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	
12:00 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 4:15	6	6	12	12	200	5	205	189	15	204	18	409	427
4:15 4:30	2	2	16	16	236	4	240	204	19	223	18	463	481
4:30 4:45	9	9	20	20	223	5	228	210	21	231	29	459	488
4:45 5:00	9	9	19	19	246	6	252	215	19	234	28	486	514
5:00 5:15	11	11	15	15	244	8	252	206	28	234	26	486	512
5:15 5:30	10	10	13	13	251	7	258	208	20	228	23	486	509
5:30 5:45	4	4	13	13	237	12	249	199	18	217	17	466	483
5:45 6:00	6	6	11	11	234	10	244	220	12	232	17	476	493
TOTALS	57	57	119	119	1871	57	1928	1651	152	1803	176	3731	3907
P.H. am													
P.H. pm													

HOURLY VOLUMES

STARTING TIME	PA 261-FOULK RD						US 322						TOTAL
	1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
	R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	
12:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 5:00	26	26	67	67	905	20	925	818	74	892	93	1817	1910
5:00 6:00	31	31	52	52	966	37	1003	833	78	911	83	1914	1997
TOTALS	57	57	119	119	1871	57	1928	1651	152	1803	176	3731	3907

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: UPPER CHICHESTER TWP
INTERSECTION: North-South Street -East-West Street
STREETS: CHERRY TREE RD & US 322

DATE: 10/05/99
DAY: TUESDAY
WEATHER: FAIR
FILE NUMBER: D - AM

**AM INTERVAL
COUNTS**

STARTING TIME	CHERRY TREE RD								US 322								N-S		E-W	
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND							
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
7:00 7:15	57	8	0	65	94	11	10	115	2	199	2	203	0	150	4	154	180	357	537	
7:15 7:30	65	7	0	72	114	11	12	137	2	218	0	220	0	176	6	182	209	402	611	
7:30 7:45	67	9	0	76	124	20	10	154	0	195	1	196	0	169	1	170	230	366	596	
7:45 8:00	62	13	0	75	90	11	10	111	6	201	1	208	0	159	5	164	186	372	558	
8:00 8:15	53	17	0	70	107	7	6	120	4	203	1	208	0	156	4	160	190	368	558	
8:15 8:30	45	17	0	62	92	17	15	124	3	205	2	210	0	131	2	133	186	343	529	
8:30 8:45	32	9	0	41	73	5	8	86	1	213	3	217	0	165	10	175	127	392	519	
8:45 9:00	14	23	0	37	85	14	15	114	2	160	2	164	0	138	7	145	151	309	460	
9:00 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	395	103	0	498	779	96	86	961	20	1594	12	1626	0	1244	39	1283	1459	2909	4368	
P.H. am																				
P.H. pm																				

STARTING TIME	CHERRY TREE RD								US 322								N-S		E-W	
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND							
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
7:00 8:00	251	37	0	288	422	53	42	517	10	813	4	827	0	654	16	670	805	1497	2302	
8:00 9:00	144	66	0	210	357	43	44	444	10	781	8	799	0	590	23	613	654	1412	2066	
9:00 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	395	103	0	498	779	96	86	961	20	1594	12	1626	0	1244	39	1283	1459	2909	4368	

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: UPPER CHICHESTER TWP
INTERSECTION: North-South Street -East-West Street
STREETS: CHERRY TREE RD & US 322

DATE: 10/06/99
DAY: WEDNESDAY
WEATHER: FAIR
FILE NUMBER: D - PM

**PM INTERVAL
COUNTS**

STARTING TIME	CHERRY TREE RD								US 322								N-S		E-W	
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				TOTAL	TOTAL	TOTAL	TOTAL
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL				
12:00 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 4:15	54	17	1	72	70	17	18	105	7	211	4	222	0	176	10	186	177	408	585	
4:15 4:30	40	15	1	56	57	11	14	82	4	203	5	212	0	185	9	194	138	406	544	
4:30 4:45	59	26	3	88	56	11	6	73	3	221	13	237	0	196	8	204	161	441	602	
4:45 5:00	60	22	2	84	51	5	6	62	1	211	12	224	0	216	10	226	146	450	596	
5:00 5:15	43	23	0	66	64	16	4	84	0	217	9	226	0	210	10	220	150	446	596	
5:15 5:30	51	21	1	73	64	13	14	91	4	196	6	206	0	212	9	221	164	427	591	
5:30 5:45	67	27	1	95	49	10	13	72	6	203	9	218	0	217	9	226	167	444	611	
5:45 6:00	60	25	2	87	63	20	20	103	6	185	10	201	0	208	10	218	190	419	609	
TOTALS	434	176	11	621	474	103	95	672	31	1647	68	1746	0	1620	75	1695	1293	3441	4734	
P.H. am																				
P.H. pm																				

STARTING TIME	CHERRY TREE RD								US 322								N-S		E-W	
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				TOTAL	TOTAL	TOTAL	TOTAL
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL				
12:00 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 5:00	213	80	7	300	234	44	44	322	15	846	34	895	0	773	37	810	622	1705	2327	
5:00 6:00	221	96	4	321	240	59	51	350	16	801	34	851	0	847	38	885	671	1736	2407	
TOTALS	434	176	11	621	474	103	95	672	31	1647	68	1746	0	1620	75	1695	1293	3441	4734	

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: UPPER CHICHESTER TWP
INTERSECTION: North-South Street -East-West Street
STREETS: PA 452-MARKET ST & US 322

DATE: 10/28/99
DAY: THURSDAY
WEATHER: FAIR
FILE NUMBER: E - AM

**AM INTERVAL
COUNTS**

STARTING TIME	OFF RAMPS				ON RAMPS				US 322		
	US 322 EB TO		US 322 WB TO		US 322 EB FROM		US 322 WB FROM				
	452 NB	452 SB	452 N	452 S	452 NB	452 SB	452 N	452 S	EB	WB	TOTAL
7:00 7:15	4	4	85	29	22	21	1	0	241	274	515
7:15 7:30	3	3	87	34	29	26	6	1	291	325	616
7:30 7:45	3	1	98	37	34	39	3	4	287	416	703
7:45 8:00	5	5	96	32	33	54	5	2	398	433	831
8:00 8:15	5	9	91	49	31	49	2	5	401	312	713
8:15 8:30	5	2	89	38	28	32	3	5	394	301	695
8:30 8:45	1	7	84	32	30	24	2	3	236	289	525
8:45 9:00	2	5	85	39	27	15	3	5	231	182	413
9:00 9:30	0	0	0	0	0	0	0	0	0	0	0
9:30 10:00	0	0	0	0	0	0	0	0	0	0	0
10:00 10:30	0	0	0	0	0	0	0	0	0	0	0
10:30 11:00	0	0	0	0	0	0	0	0	0	0	0
11:00 11:30	0	0	0	0	0	0	0	0	0	0	0
11:30 12:00	0	0	0	0	0	0	0	0	0	0	0
TOTALS	28	36	715	290	234	260	25	25	2479	2532	5011

P.H. am

P.H. pm

HOURLY VOLUMES STARTING TIME	OFF RAMPS				ON RAMPS				US 322		
	US 322 EB TO		US 322 WB TO		US 322 EB FROM		US 322 WB FROM				
	452 N	452 S	452 N	452 S	452 N	452 S	452 N	452 S	EB	WB	TOTAL
7:00 8:00	15	13	366	132	118	140	15	7	1217	1448	2665
8:00 9:00	13	23	349	158	116	120	10	18	1262	1084	2346
9:00 10:00	0	0	0	0	0	0	0	0	0	0	0
10:00 11:00	0	0	0	0	0	0	0	0	0	0	0
11:00 12:00	0	0	0	0	0	0	0	0	0	0	0
TOTALS	28	36	715	290	234	260	25	25	2479	2532	5011

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: UPPER CHICHESTER TWP
INTERSECTION: North-South Street -East-West Street
STREETS: PA 452-MARKET ST & US 322

DATE: 10/28/99
DAY: THURSDAY
WEATHER: FAIR
FILE NUMBER: E - PM

AM INTERVAL

COUNTS

AM INTERVAL COUNTS

STARTING TIME	OFF RAMPS				ON RAMPS				US 322		
	US 322 EB TO		US 322 WB TO		US 322 EB FROM		US 322 WB FROM		EB	WB	TOTAL
	452 N	452 S	452 N	452 S	452 N	452 S	452 N	452 S			
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0
4:00 4:15	4	5	94	75	21	54	7	4	224	241	465
4:15 4:30	7	14	107	96	24	68	12	9	246	295	541
4:30 4:45	6	5	127	82	32	62	16	10	285	318	603
4:45 5:00	4	2	134	93	38	71	12	11	297	337	634
5:00 5:15	8	8	141	89	20	66	14	1	289	332	621
5:15 5:30	7	5	130	72	25	54	11	8	261	357	618
5:30 5:45	4	6	94	75	16	47	9	4	224	314	538
5:45 6:00	1	2	107	96	12	45	10	9	218	261	479
TOTALS	41	47	934	678	188	467	91	56	2044	2455	4499

P.H. am

P.H. pm

HOURLY VOLUMES

STARTING TIME	OFF RAMPS				ON RAMPS				US 322		
	US 322 EB TO		US 322 WB TO		US 322 EB FROM		US 322 WB FROM		EB	WB	TOTAL
	452 N	452 S	452 N	452 S	452 N	452 S	452 N	452 S			
1:00 2:00	0	0	0	0	0	0	0	0	0	0	0
2:00 3:00	0	0	0	0	0	0	0	0	0	0	0
3:00 4:00	0	0	0	0	0	0	0	0	0	0	0
4:00 5:00	21	26	462	346	115	255	47	34	1052	1191	2243
5:00 6:00	20	21	472	332	73	212	44	22	992	1264	2256
TOTALS	41	47	934	678	188	467	91	56	2044	2455	4499

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: BETHEL TWP

INTERSECTION: North-South Street-East-West Street
STREETS: BETHEL RD & US 322

DATE: 10/27/99
DAY: WEDNESDAY
WEATHER: FAIR
FILE NUMBER: F - AM

**AM INTERVAL
COUNTS**

STARTING TIME		BETHEL RD				US 322								N-S TOTAL		E-W TOTAL	
		1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND								
		R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL						
7:00	7:15	7	7	5	5	286	10	296	245	9	254	12	550	562			
7:15	7:30	12	12	2	2	328	14	342	297	1	298	14	640	654			
7:30	7:45	14	14	8	8	390	15	405	335	0	335	22	740	762			
7:45	8:00	13	13	5	5	320	11	331	306	4	310	18	641	659			
8:00	8:15	11	11	7	7	278	17	295	304	6	310	18	605	623			
8:15	8:30	10	10	6	6	321	16	337	319	7	326	16	663	679			
8:30	8:45	8	8	4	4	319	12	331	285	4	289	12	620	632			
8:45	9:00	10	10	5	5	274	12	286	286	9	295	15	581	596			
9:00	9:30	0	0	0	0	0	0	0	0	0	0	0	0	0			
9:30	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0			
10:00	10:30	0	0	0	0	0	0	0	0	0	0	0	0	0			
10:30	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0			
11:00	11:30	0	0	0	0	0	0	0	0	0	0	0	0	0			
11:30	12:00	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTALS		85	85	42	42	2516	107	2623	2377	40	2417	127	5040	5167			
P.H. am																	
P.H. pm																	

HOURLY VOLUMES		BETHEL RD				US 322								
		1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
		R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	TOTAL
7:00 8:00		46	46	20	20	1324	50	1374	1183	14	1197	66	2571	2637
8:00 9:00		39	39	22	22	1192	57	1249	1194	26	1220	61	2469	2530
9:00 10:00		0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 11:00		0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 12:00		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS		85	85	42	42	2516	107	2623	2377	40	2417	127	5040	5167

**DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING**

COUNTY: DELAWARE
MUNICIPALITY: BETHEL TWP

INTERSECTION: North-South Street-East-West Street
STREETS: BETHEL RD & US 322

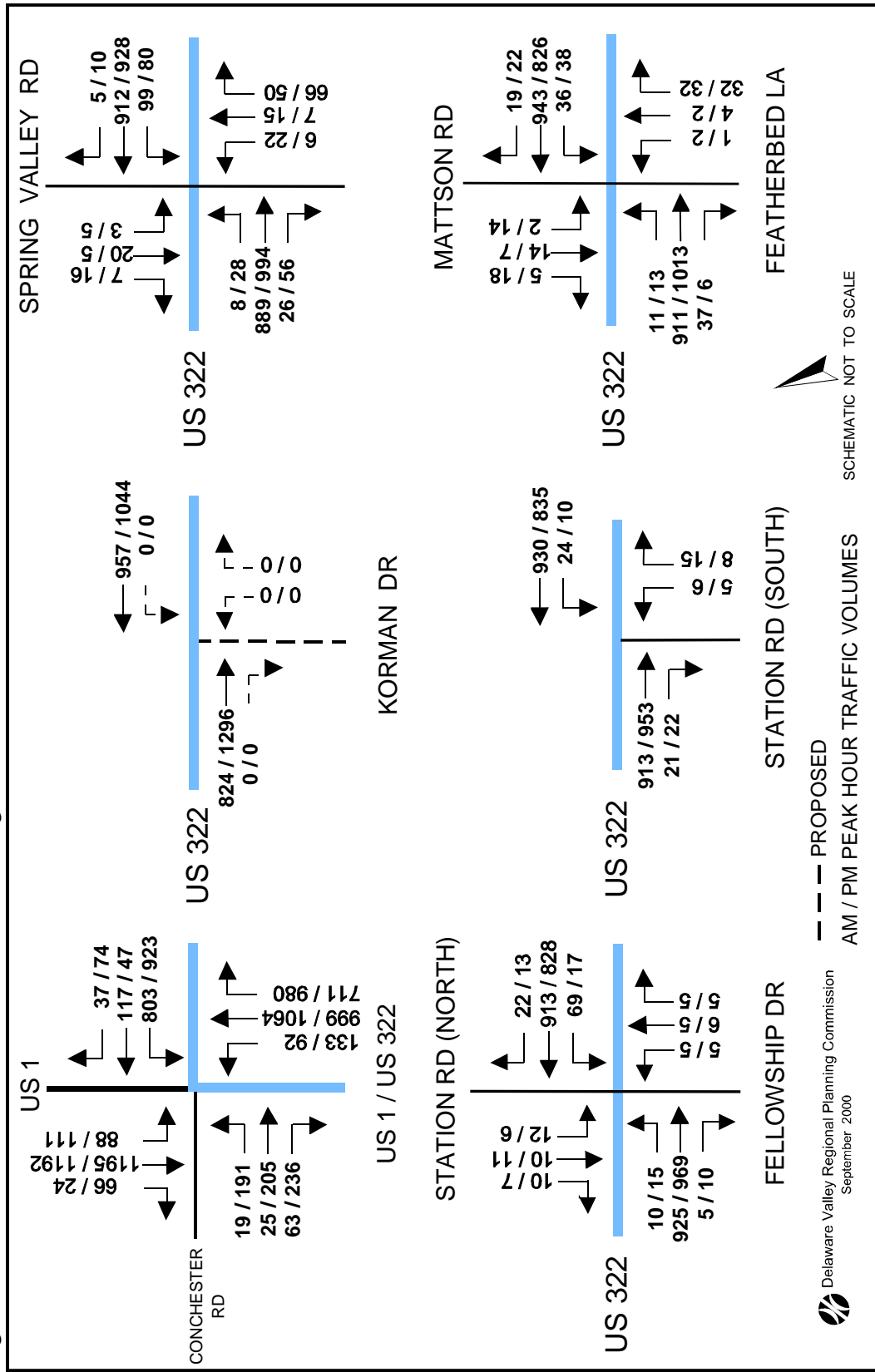
DATE: 10/27/99
DAY: WEDNESDAY
WEATHER: FAIR
FILE NUMBER: F - PM

**AM INTERVAL
COUNTS**

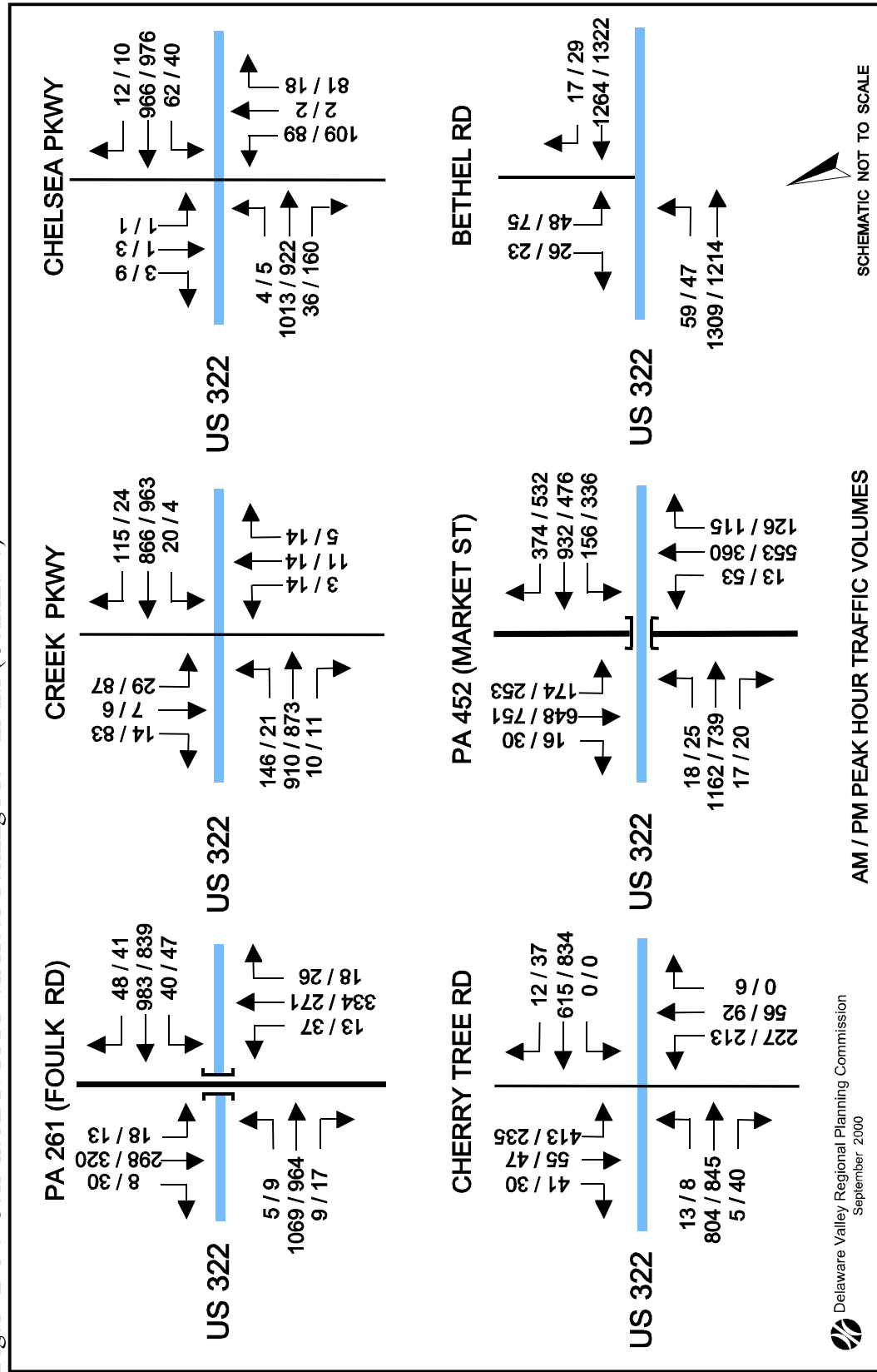
		BETHEL RD				US 322							
STARTING TIME	1-NORTHBOUND		2-SOUTHBOU		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
	R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	TOTAL
12:00 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 1:00	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 1:30	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 2:00	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 2:30	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 3:00	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 3:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 4:00	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 4:15	12	12	6	6	288	6	294	318	8	326	18	620	638
4:15 4:30	16	16	3	3	271	7	278	289	14	303	19	581	600
4:30 4:45	14	14	6	6	286	14	300	325	4	329	20	629	649
4:45 5:00	23	23	4	4	304	11	315	321	7	328	27	643	670
5:00 5:15	17	17	5	5	305	13	318	342	8	350	22	668	690
5:15 5:30	21	21	8	8	319	9	328	334	10	344	29	672	701
5:30 5:45	19	19	6	6	318	8	326	310	7	317	25	643	668
5:45 6:00	9	9	2	2	292	12	304	299	6	305	11	609	620
TOTALS	131	131	40	40	2383	80	2463	2538	64	2602	171	5065	5236
P.H. am													
P.H. pm													

HOURLY VOLUMES		BETHEL RD				US 322								
STARTING		1-NORTHBOUND		2-SOUTHBOUND		3-EASTBOUND			4-WESTBOUND			N-S	E-W	
TIME		R	TOTAL	R	TOTAL	S	R	TOTAL	S	R	TOTAL	TOTAL	TOTAL	TOTAL
12:00 1:00		0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 2:00		0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 3:00		0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 4:00		0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 5:00		65	65	19	19	1149	38	1187	1253	33	1286	84	2473	2557
5:00 6:00		66	66	21	21	1234	42	1276	1285	31	1316	87	2592	2679
TOTALS		131	131	40	40	2383	80	2463	2538	64	2602	171	5065	5236

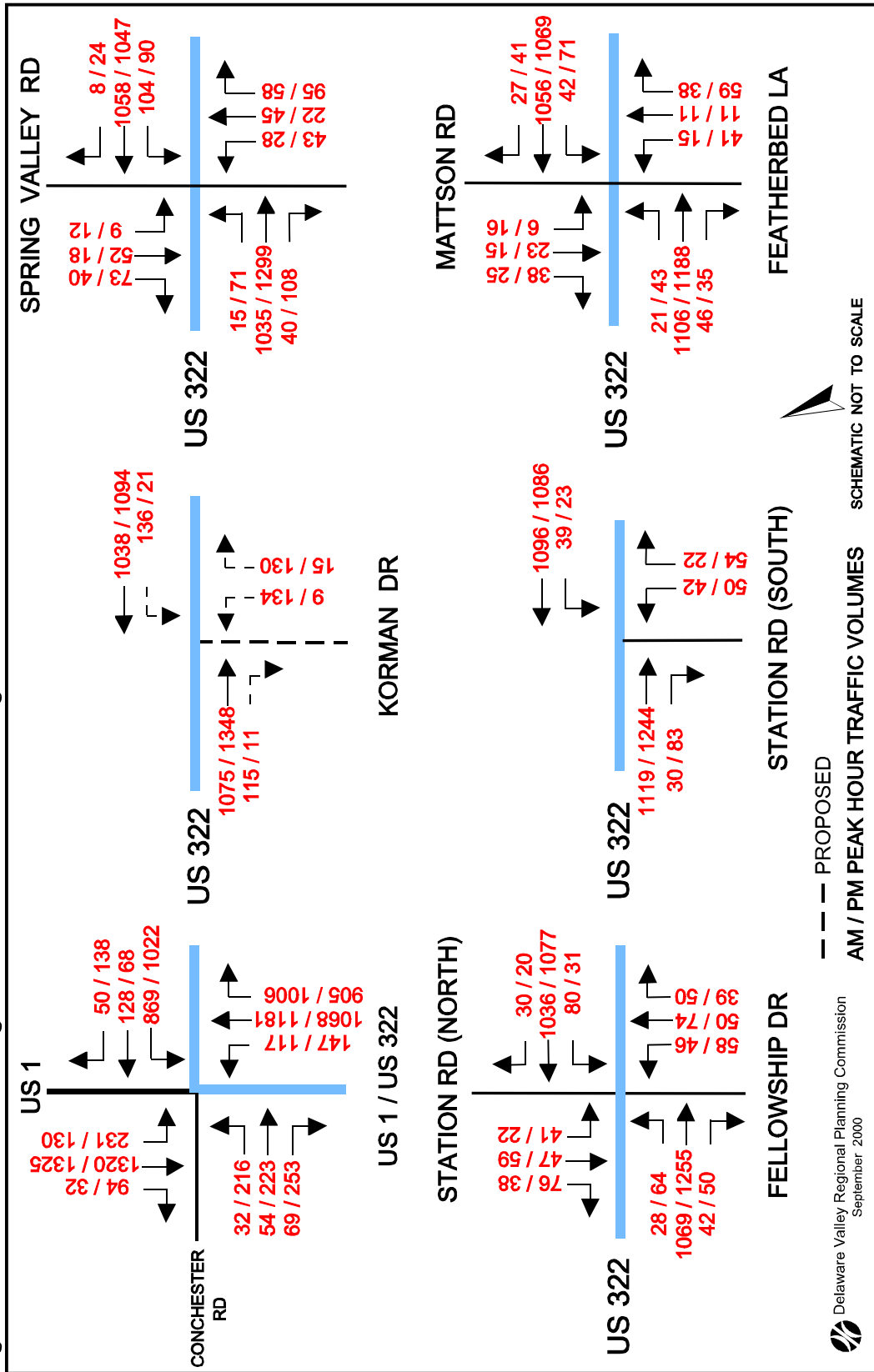
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-2 : Current AM / PM Peak Hour Turning Movements



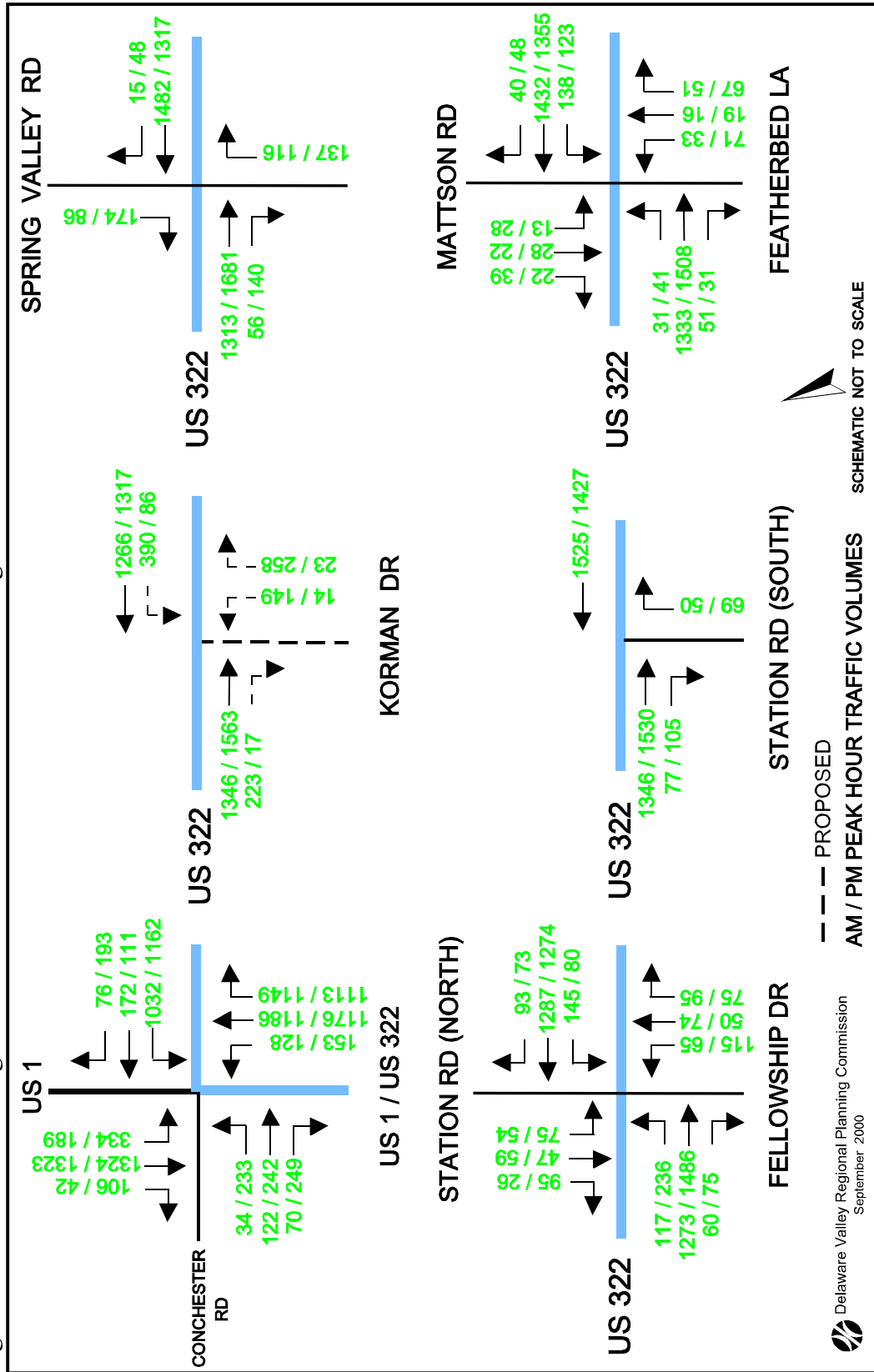
PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-3 : Current AM / PM Peak Hour Turning Movements (Continued)



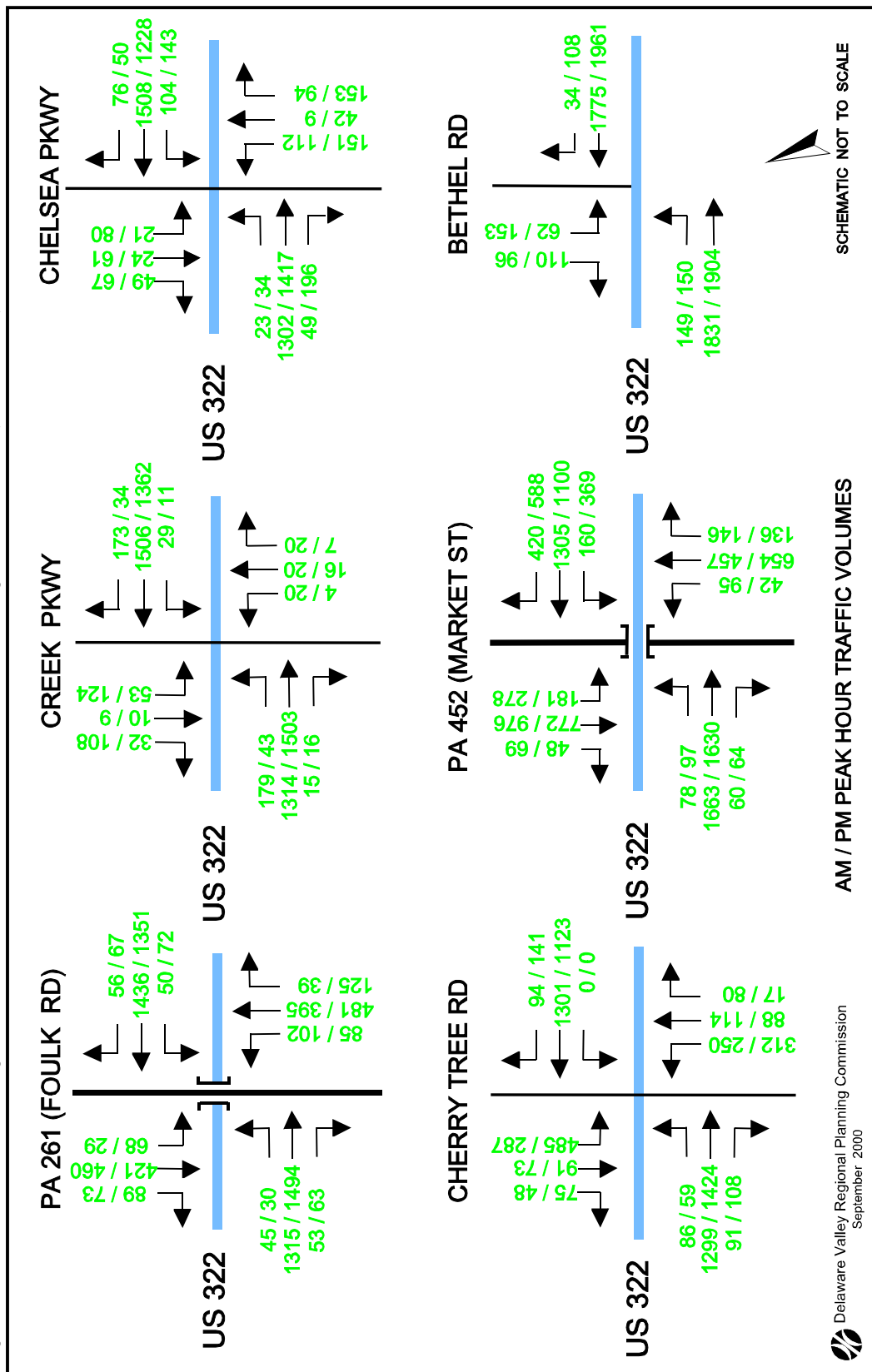
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-4 : 2006 No Widening AM / PM Peak Hour Turning Movements



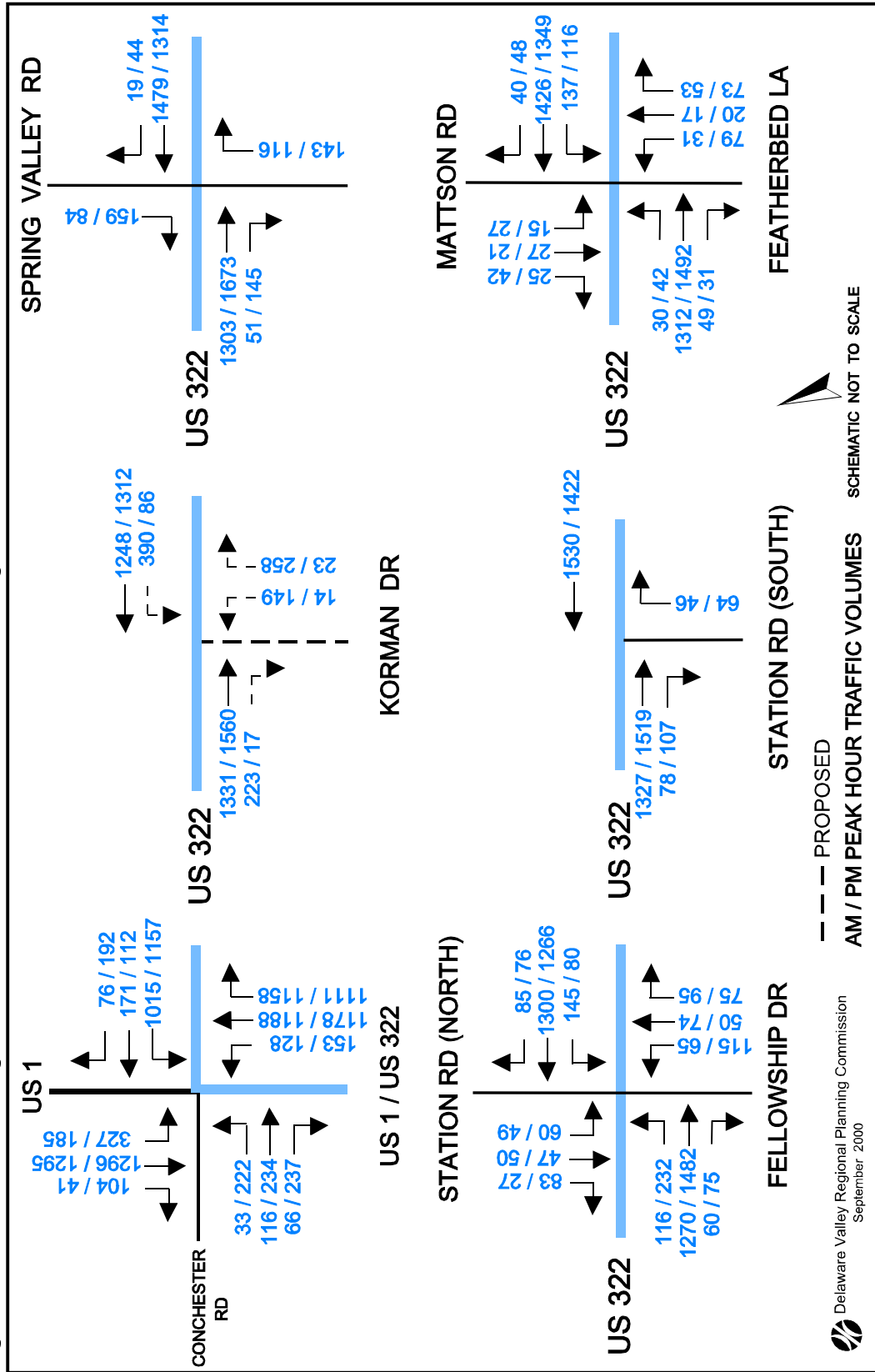
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-6 : 2006 Widening Alterenative 1 AM / PM Peak Hour Turning Movements



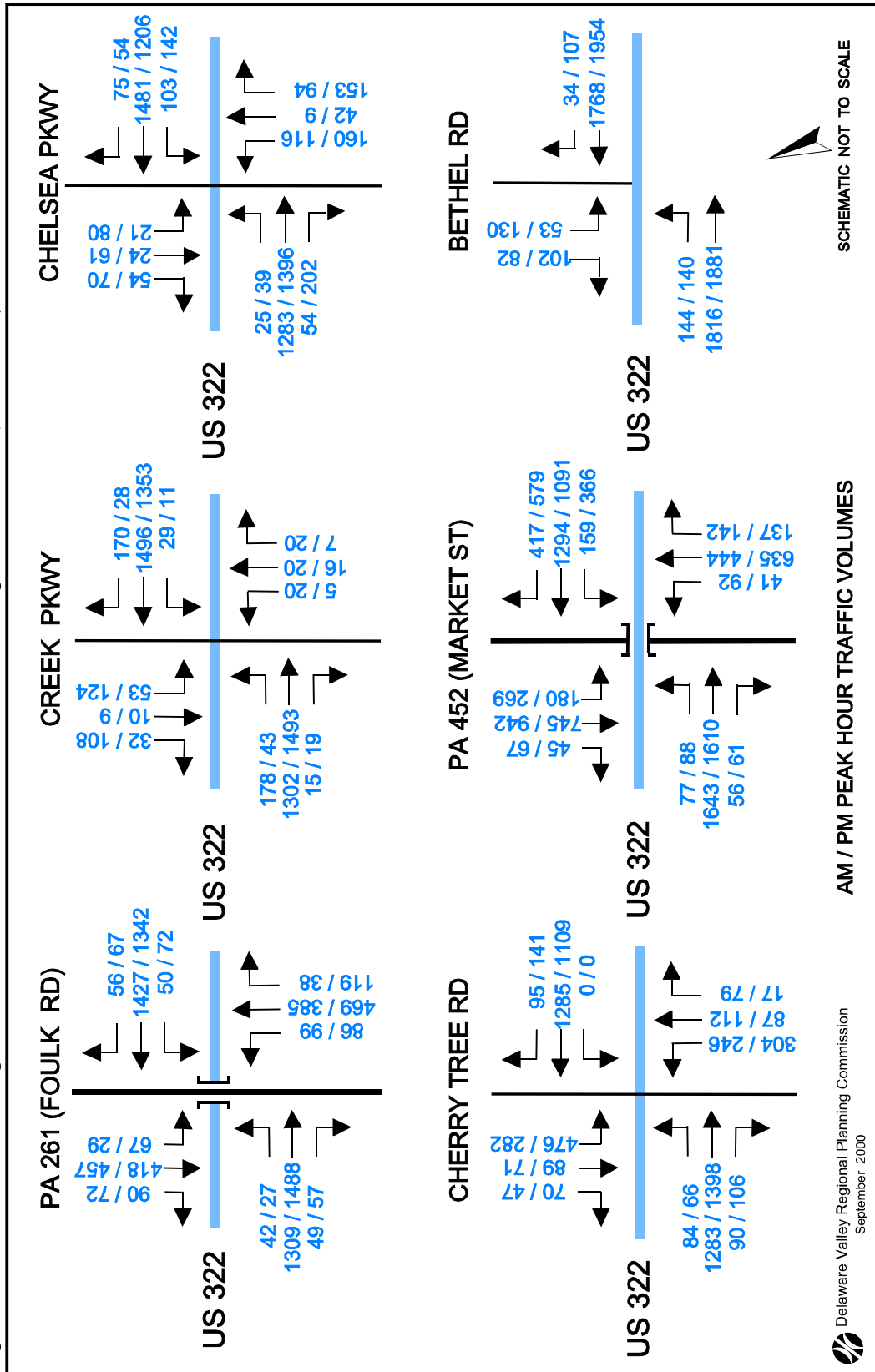
PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-7 : 2006 Widening Alternative 1 AM / PM Peak Hour Turning Movements (Continued)



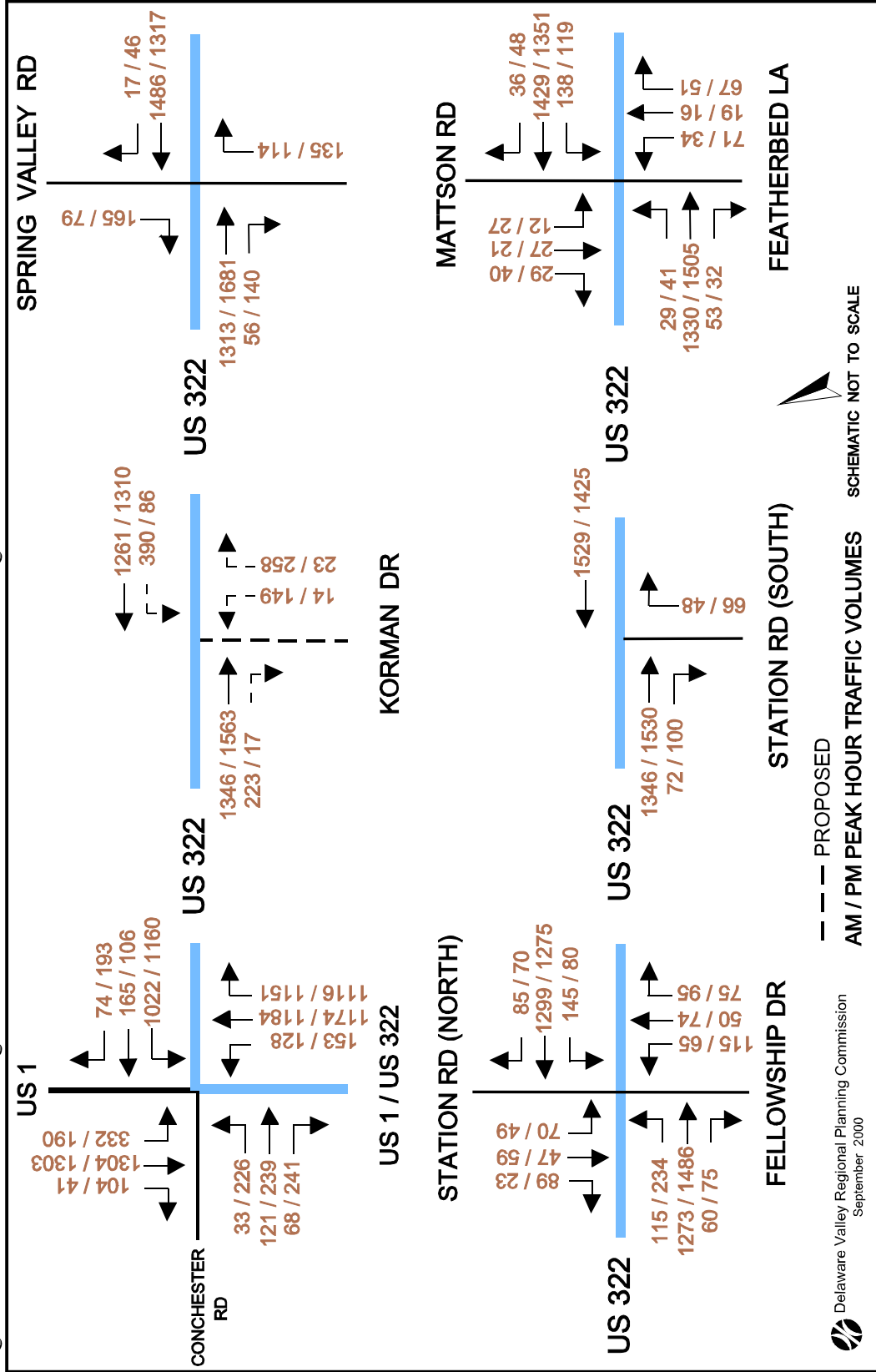
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-8 : 2006 Widening Alternative 2 AM / PM Peak Hour Turning Movements



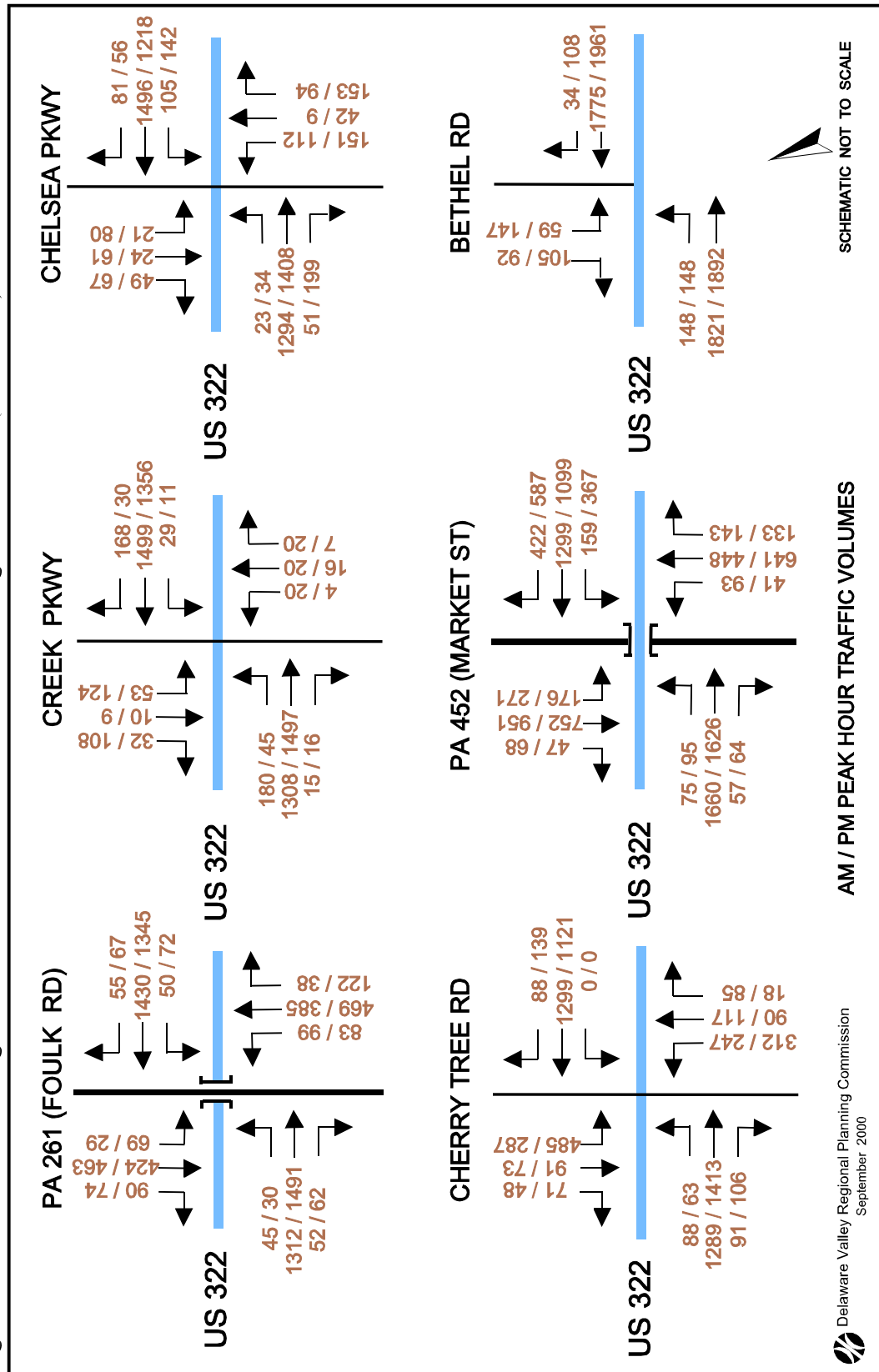
PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-9 : 2006 Widening Alternative 2 AM / PM Peak Hour Turning Movements (Continued)



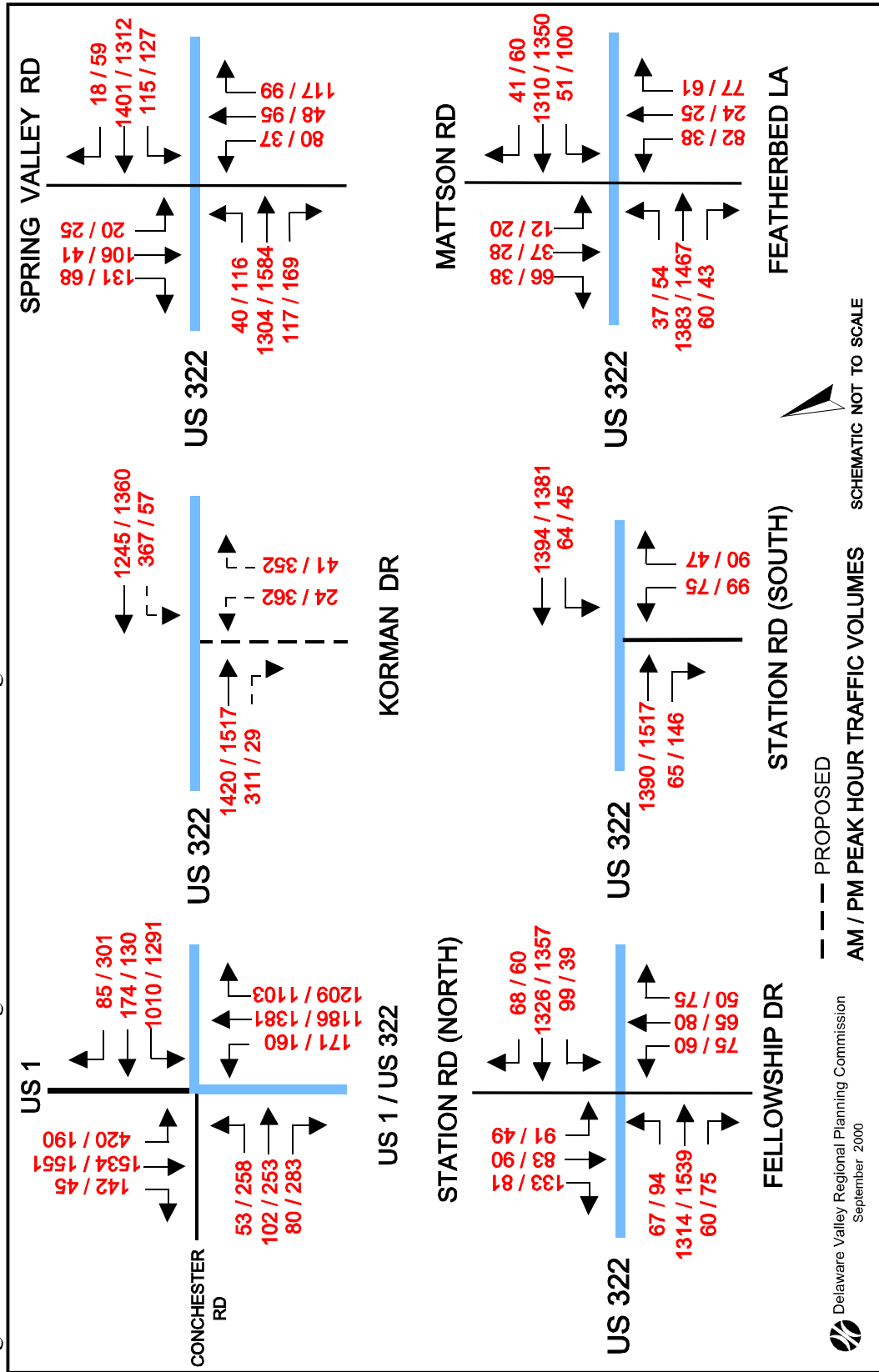
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-10 : 2006 Widening Alternative 3 AM / PM Peak Hour Turning Movements



PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-11 : 2006 Widening Alternative 3 AM / PM Peak Hour Turning Movements (Continued)

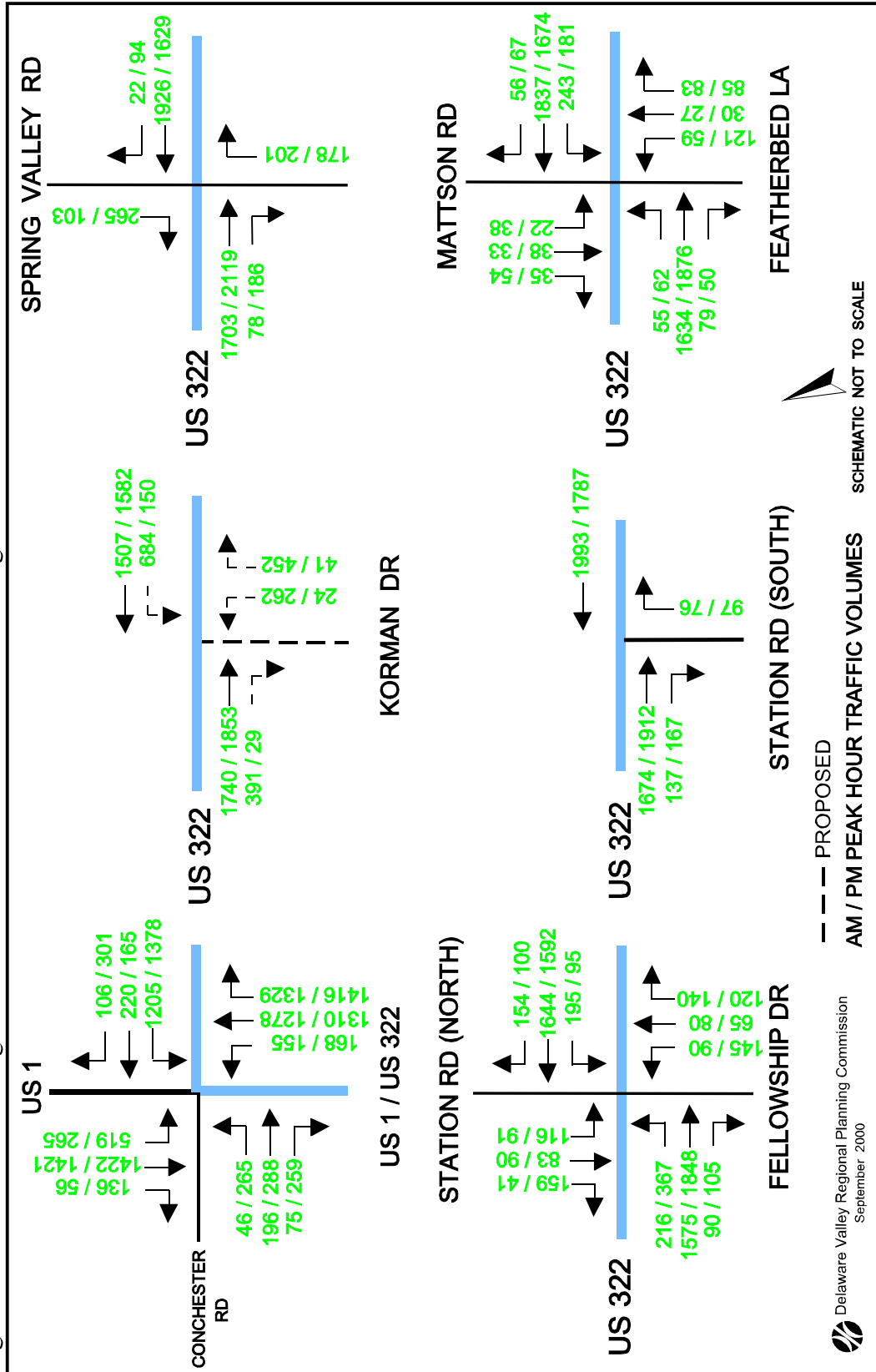


US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-12 : 2026 No Widening AM / PM Peak Hour Turning Movements

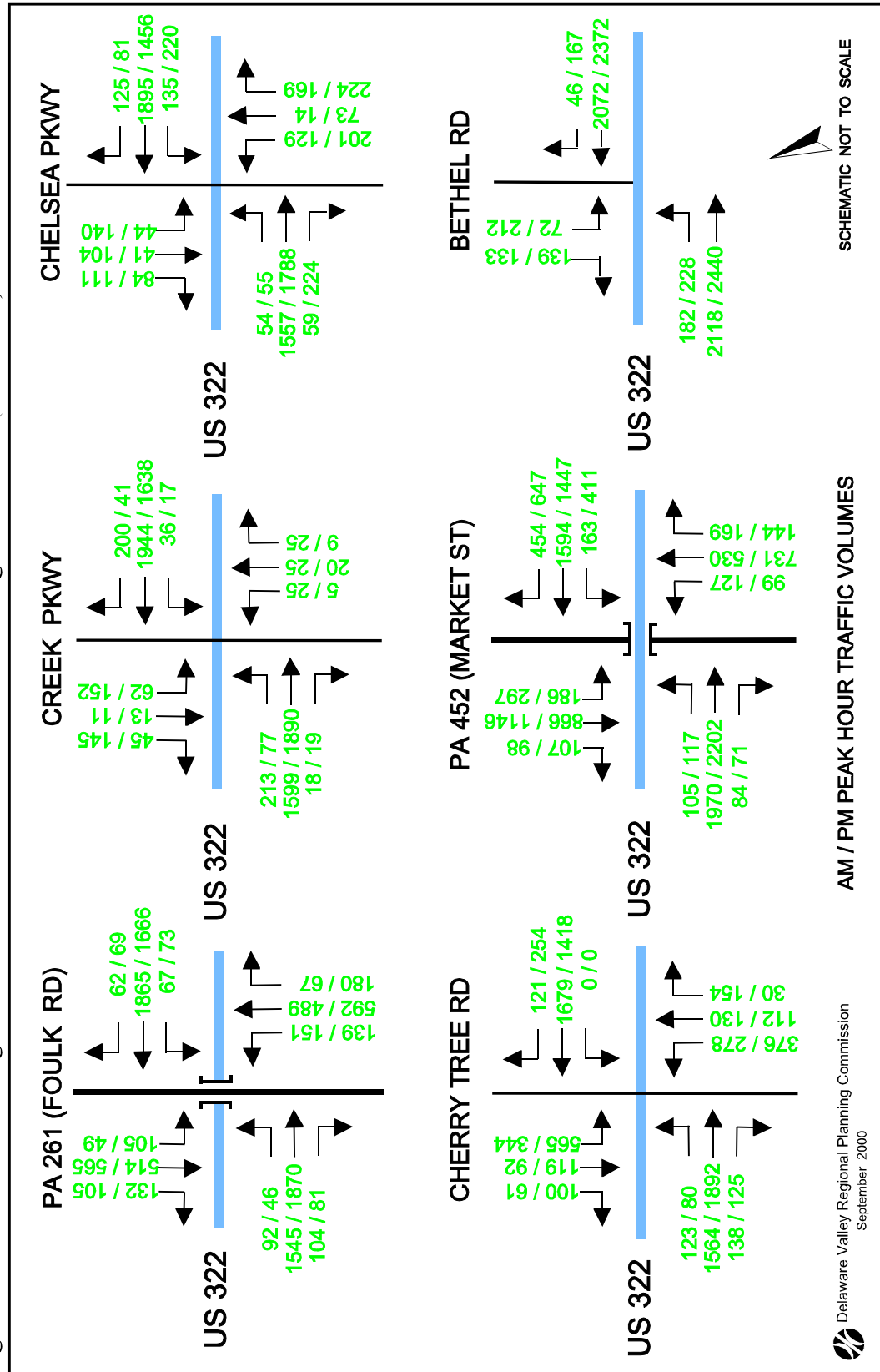


[illegible]

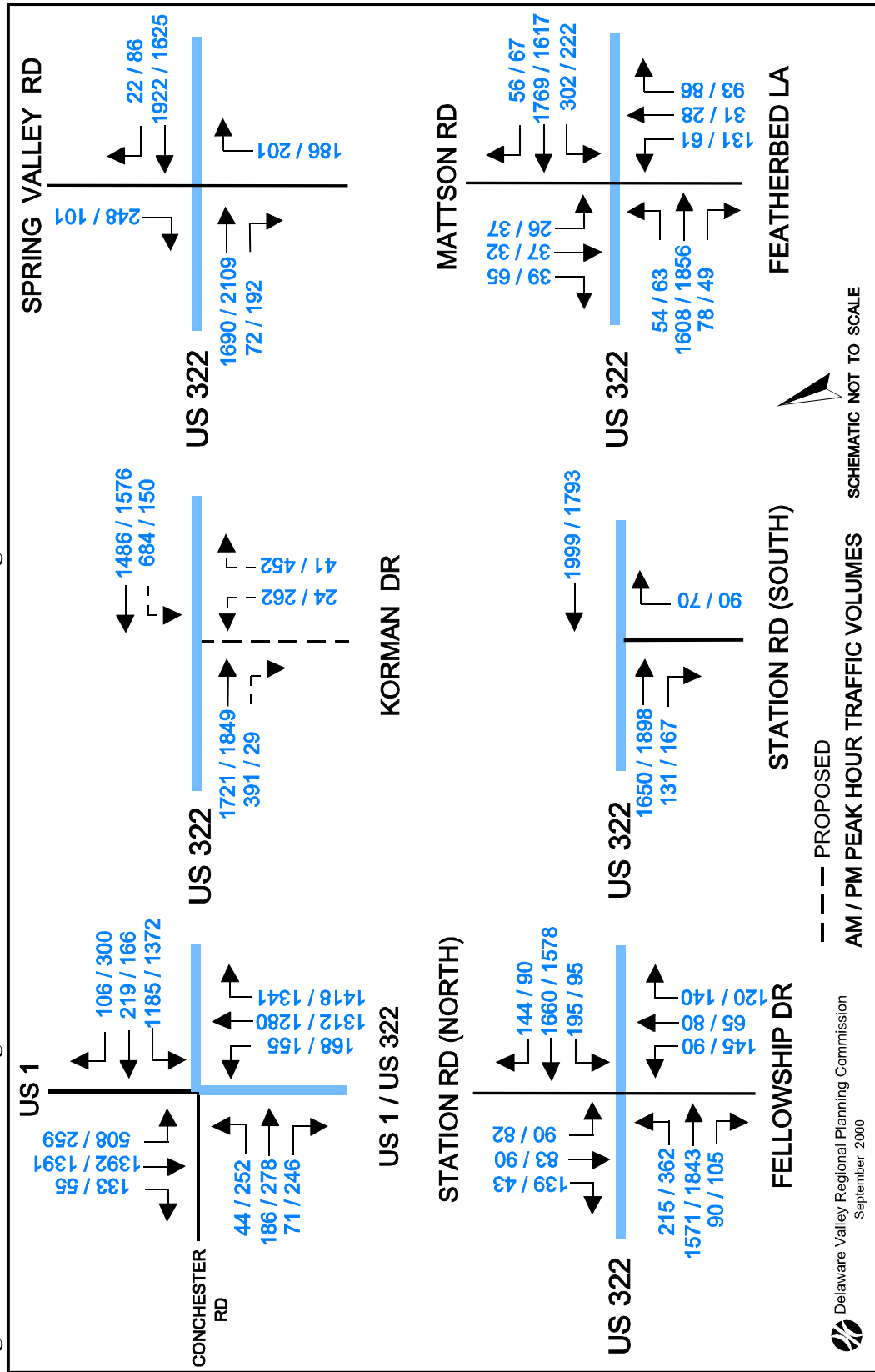
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-14 : 2026 Widening Alternative 1 AM / PM Peak Hour Turning Movements



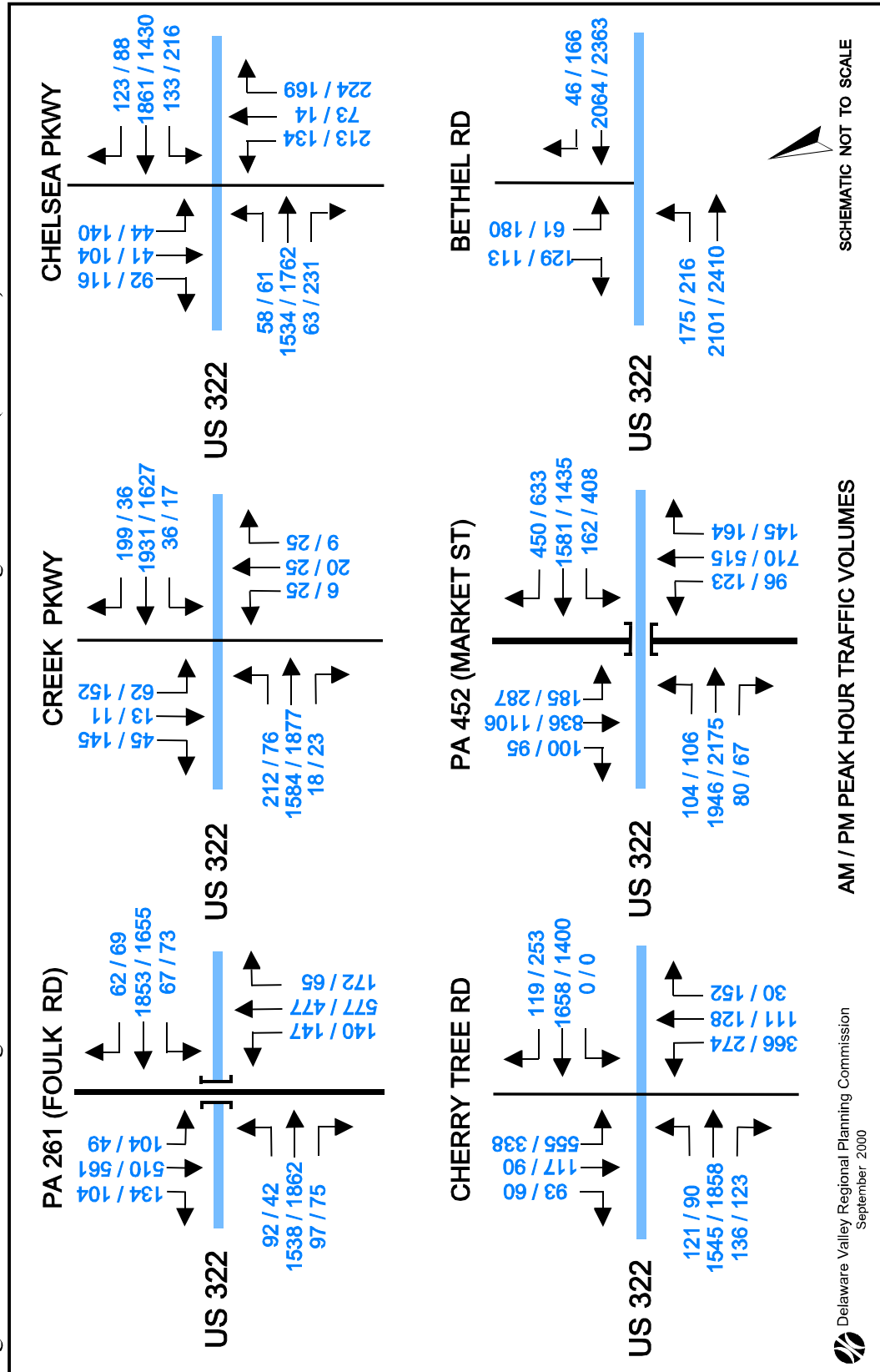
PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-15 : 2026 Widening Alternative 1 AM / PM Peak Hour Turning Movements (Continued)



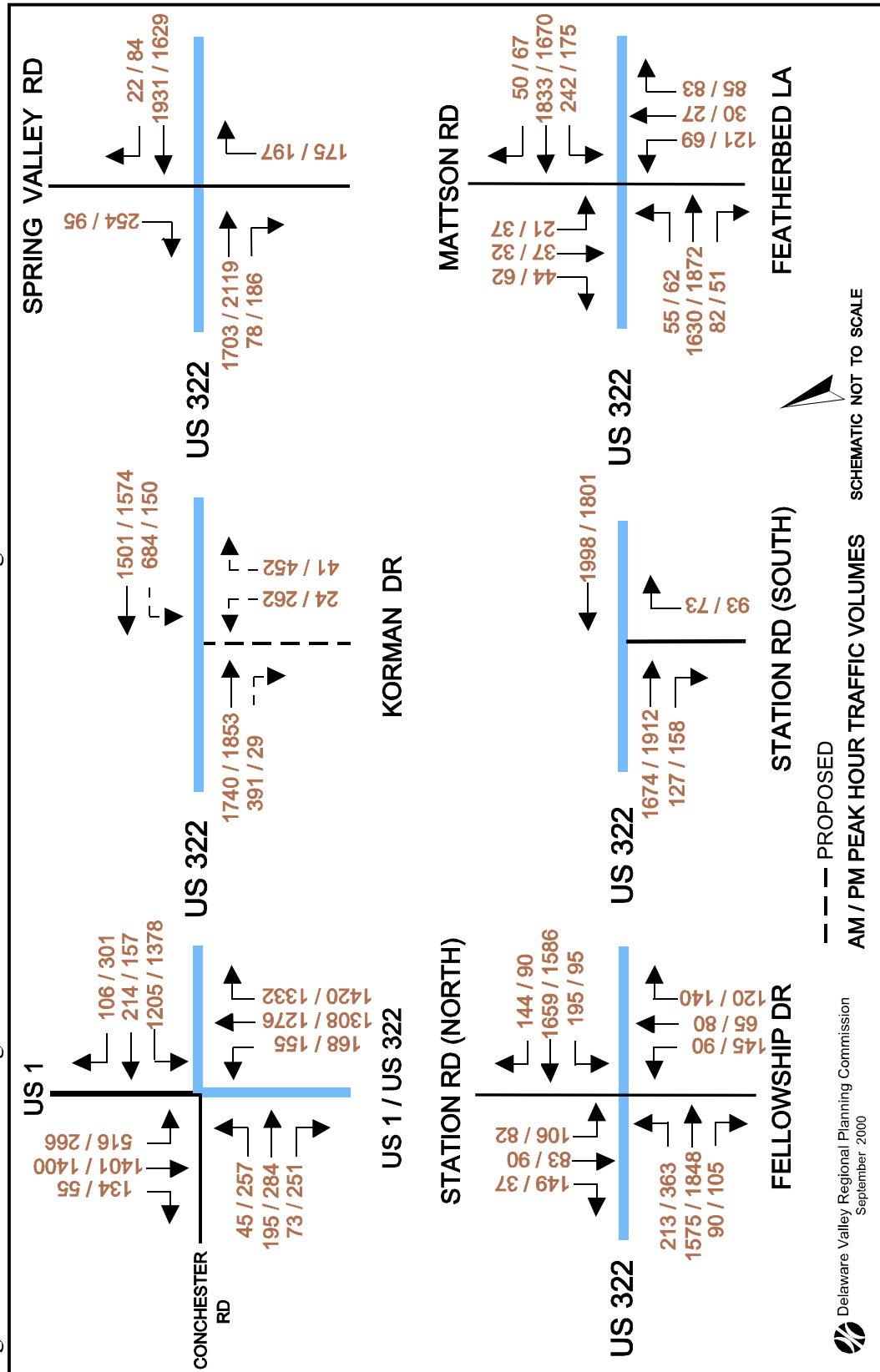
US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-16 : 2026 Widening Alternative 2 AM / PM Peak Hour Turning Movements



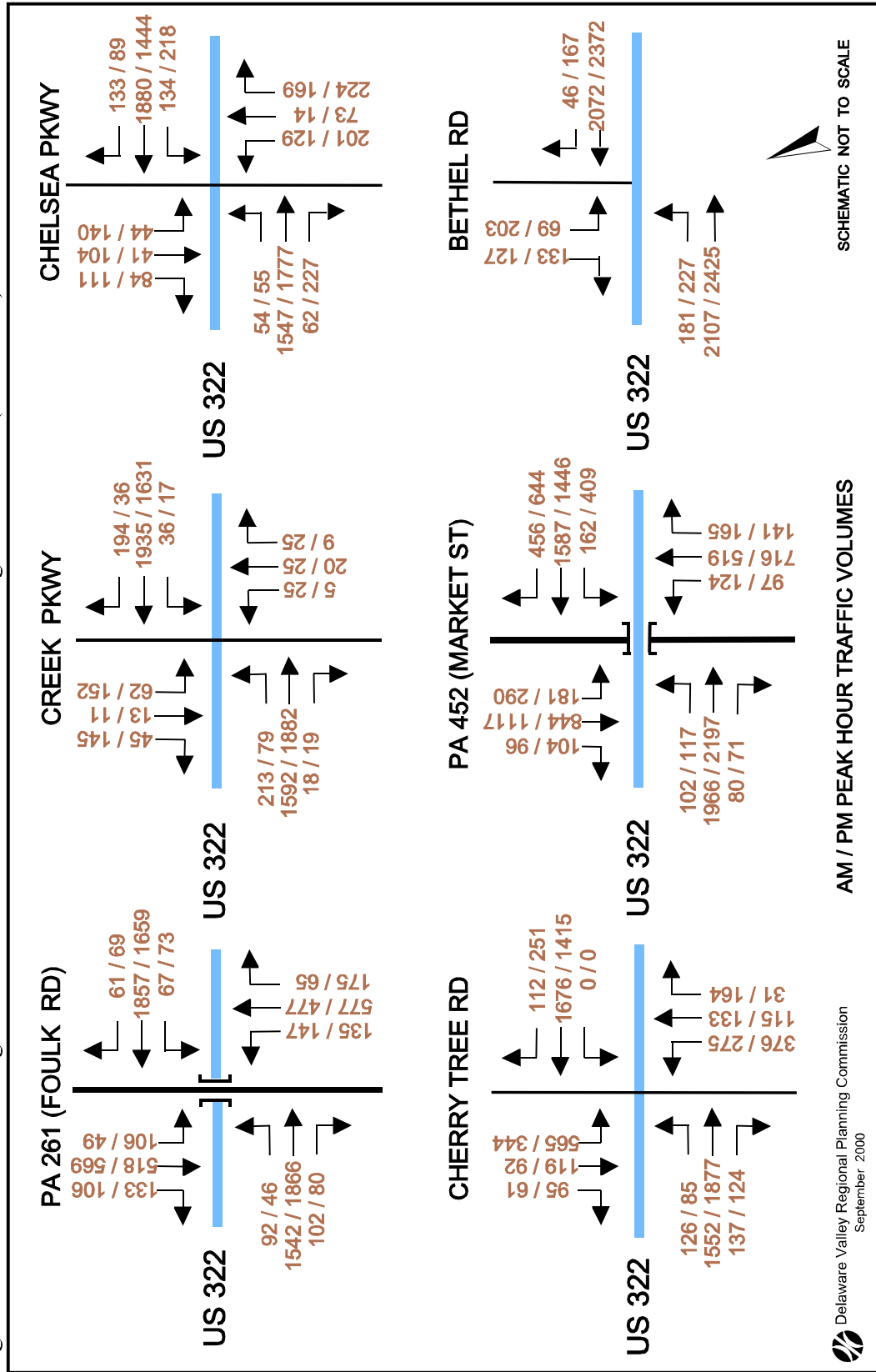
PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-17 : 2026 Widening Alternative 2 AM / PM Peak Hour Turning Movements (Continued)



US 1 / US 322, Korman Dr, Spring Valley Rd, Station Rd N & S and Featherbed La / Mattson Rd Intersections
 Figure B-18 : 2026 Widening Alternative 3 AM / PM Peak Hour Turning Movements



PA 261, Creek Pkwy, Chelsea Pkwy, Cherry Tree Rd, PA 452, and Bethel Rd Intersections
 Figure B-19 : 2026 Widening Alternative 3 AM / PM Peak Hour Turning Movements (Continued)



US 322 Traffic Analysis Study I-95 To US 1 - Supplement No. 1

Publication No.: 00002

Date Published: November 2000

Geographic Area Covered: The US 322 Corridor includes the following municipalities in Delaware County: Aston, Bethel, Chester, Concord, Upper Chichester, and Lower Chichester townships, and Chester Heights Borough.

Key Words: US 322, existing traffic volumes, focused highway assignment process, proposed development activity, highway assignment model, improvement alternatives, future traffic volumes, turning movement forecasts.

ABSTRACT

The 1994 DVRPC report, *US 322 Traffic Analysis Study - I-95 to US 1*, presented traffic counts and 2016 forecasts for a 6.1-mile segment of US 322 between I-95 and US 1 in Delaware County. This supplement presents updated traffic counts and socio-economic data necessary to prepare 2006 and 2026 forecasts for the no-build and three modified build alternatives for this segment of US 322. It was prepared at the request of the Pennsylvania Department of Transportation who is conducting preliminary engineering studies for improvements to US 322 in Delaware County. DVRPC's regional travel simulation model was used to estimate future traffic volumes for four alternatives. These alternatives included: no-widening, a four-lane divided section with left turn lanes at selected intersections, a four lane divided section with jughandles at selected intersections, and a mixed four divided section with jughandles / five lane section with a center left-turn lane.

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