US 202 TRAFFIC ANALYSIS
NORRISTOWN BOROUGH
LAFAYETTE STREET TO JOHNSON HIGHWAY

NORRISTOWN

June 1994

Delaware Valley Regional Planning Commission

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Delaware Valley Regional Planning Commission
The Bourse Building
111 South Independence Mall East
Philadelphia, PA 19106

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DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

TITLE	Date Published: June 1994
US 202 TRAFFIC ANALYSIS NORRISTOWN BOROUGH *Lafayette Street to Johnson Highway*	**Publication No.** 94003

Geographic Area Covered:

The streets and intersections analyzed are located in Norristown Borough.

Key Words:

current AADTs, current turning movement counts, travel forcasting, traffic simulation model, alternative scenarios, Dannehower Bridge Ramp, future AADTs, future turning movement counts

ABSTRACT

The purpose of this study is to evaluate seven alternative improvement scenarios to improve traffic operations along US 202 in Norristown Borough, Montgomery County. The seven alternative scenarios included a Base Case alternative, a TSM alternative, a one-way Markley Street with a Dannehower Bridge ramp alternative, a Dannehower Bridge ramp alternative, a two-way Airy Street alternative, a two-way Dekalb Street alternative and a two-way Dekalb Street with a Dannehower Bridge ramp alternative. DVRPC's regional travel simulation model was used to estimate future traffic volumes for the year 2018.

For More Information Contact:

Delaware Valley Regional Planning Commission
Regional Information Services Center
The Bourse Building - 8th Floor
111 Independence Mall East
Philadelphia, PA. 19106-2515
(215) 592-1800

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EXECUTIVE SUMMARY

The purpose of this study is to evaluate seven alternative improvement scenarios to improve traffic operations along US 202 in Norristown Borough, Montgomery County. This report presents current traffic counts as well as Year 2018 traffic forecasts for Markley Street, Dekalb Street, Main Street, Johnson Highway and several key roads and intersections in the surrounding area along the US 202 corridor. It was prepared at the request of, and funded by, Montgomery County and the Pennsylvania Department of Transportation (PennDOT) and conducted in cooperation with the US 202 Norristown Area Task Force. This effort has been coordinated with the traffic analysis prepared by the Delaware Valley Regional Planning Commission (DVRPC) in 1992 for US 202 Section 600 and Section 700 in Montgomery and Bucks counties.

Seven alternative scenarios were investigated to forecast Year 2018 traffic volumes. These included a Base Case alternative, a Transportation Systems Management (TSM) alternative, a one-way Markley Street with a Dannehower Bridge ramp alternative, a Dannehower Bridge ramp alternative, a two-way Airy Street alternative, a two-way Dekalb Street alternative and a two-way Dekalb Street with a Dannehower Bridge ramp alternative.

In preparation for projecting future traffic volumes, extensive daily traffic counts and peak period turning movement counts were collected by DVRPC in the study area during 1992 and 1994. DVRPC also relied upon traffic count information which was available from previous traffic studies conducted in the study area.

DVRPC's regional travel simulation model was used to estimate future traffic volumes. The model is essentially FHWA's standard Urban Transportation Planning System (UTPS) model calibrated for the Philadelphia region. A focused simulation was conducted whereby the travel 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 encompassing the study area was reviewed and modified as needed.

In summary of the traffic volume consequences contained in the Traffic Analysis section, it is concluded that no single alternative is a panacea for the level of traffic volumes expected to traverse Norristown.

The Base Case Alternative's (alternative 1) projected 2018 traffic volume suggests that

traffic growth on the order of 20 to 25 percent over current levels can be expected throughout the borough. These increases will be a direct consequence of ongoing growth in the region, even assuming existing transportation facilities and traffic patterns remain constant within the study influence area.

Similarly, the TSM Alternative (alternative 2) has a global effect on traffic volumes throughout the study area. In this instance, network-wide traffic volumes ranging from 5 to 15 percent above Base Case levels are projected. The increases are attributable to ongoing growth, the widening of US 202 north of Johnson Highway (section 600) and localized traffic improvements at four intersections along Markley Street, from Main Street to Johnson Highway.

The TSM Alternative serves as the base line for the remaining five study alternatives. Each springboards from the TSM's assumed population and traffic improvement conditions with a distinct set of assumed new traffic patterns or other localized traffic improvements. With revised study area traffic patterns and/or localized traffic improvements for each alternative, traffic volume changes within the study area become more readily associated with individual highway facilities verses the study area as an entity. Very often, changes which occur along one facility are offset in another part of the study area.

The Ramp/One-Way Markley Street Alternative (alternative 3) has the greatest traffic volume reductive effect along Markley Street. Corresponding traffic volume increases are noted along Dekalb Street, Harding Boulevard and Lafayette Street. Secondary increases are expected on Elm Street and Marshall Street as northbound traffic seeks alternate paths through the network. The potential ramp will serve approximately 2,500 vehicles per day.

The Ramp Only Alternative (alternative 4) will result in 2,300 vehicles per day on the potential ramp. Because there are no additional traffic pattern changes, only minimal reductions are projected along Markley Street. Corresponding increases along Lafayette Street and Dekalb Street will also be small.

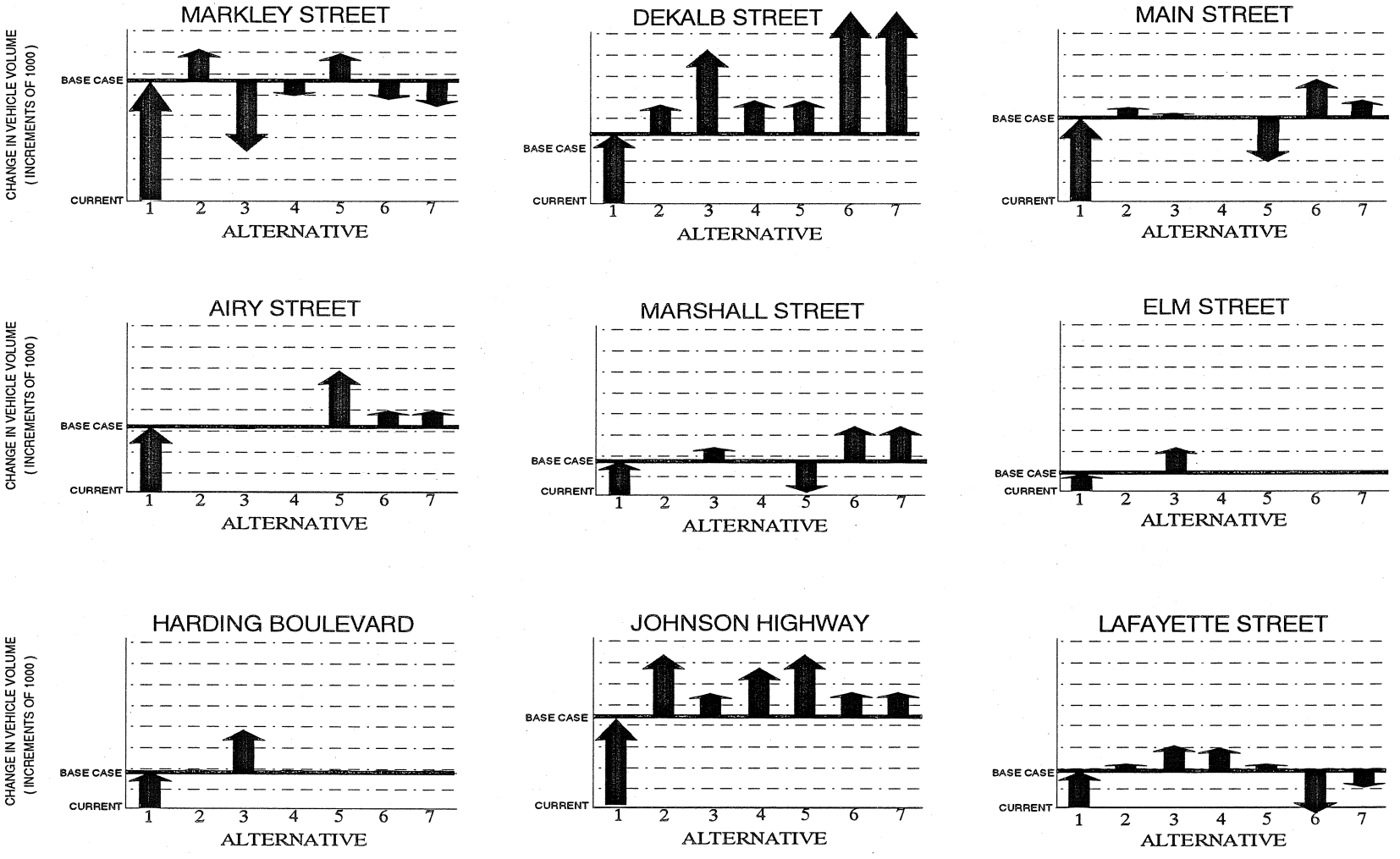
As a consequence of eastbound travel being supplemented by Airy Street, between Main Street and Dekalb Street, the Two-Way Airy Street Alternative (alternative 5) results in the greatest traffic volume reductive effect of all the alternatives for Main Street and Marshall Street. The reductive impact on these facilities is greater than the expected results of any of the "ramp" alternatives.

The Two-Way Dekalb Street Alternative (alternative 6) provides a more even traffic volume distribution between Markley Street and Dekalb Street. As a result this alternative affords the second greatest traffic reductive capability for Markley Street. Conversely, there will be a very significant increase along Dekalb Street. Marshall Street also will experience its highest surcharge given this alternative.

The Ramp/Two-Way Dekalb Street Alternative (alternative 7) largely mimics the Two-Way Dekalb Street Alternative except for the portion of Markley Street just below Main Street. Here, the projected ramp volume of 2,400 vehicles also represents the magnitude of traffic reduction anticipated along Main Street.

Clearly, Alternative 3 through Alternative 7 involve trade offs -- which themselves may be offset if combinations of alternatives are considered. Figure 1 is a graphical summary of these analyses. It depicts average changes in daily traffic volume along major facilities in the study area for each of the alternatives. The first arrow on each bar chart represents the projected average increase in traffic over the current volumes as a result of Alternative 1 (Base Case). The remaining arrows represent the projected average change in traffic as each alternative relates to the Base Case volumes.

Figure 1: AVERAGE CHANGE IN VEHICLE VOLUMES BY ALTERNATIVE



SUGGESTED IMPROVEMENTS BY ALTERNATIVE:

ALT 1 ; No Build

ALT 2 ; 4 Int. Impr., Sect. 600 Impr.

ALT 3 ; 7 Int. Impr., Sect. 600 Impr., 1-Way SB Markley, Ramp

ALT 4 ; 5 Int. Impr., Sect. 600 Impr., Ramp

ALT 5 ; 6 Int. Impr., Sect 600 Impr., 2-Way Airy

ALT 6 ; 9 Int. Impr., Sect. 600 Impr., 2-Way Dekalb

ALT 7 ; 9 Int. Impr., Sect. 600 Impr., 2-Way Dekalb, Ramp

I. INTRODUCTION

This report focuses on the section of US 202 between Lafayette Street and Johnson Highway in Norristown Borough, Montgomery County (Figure 2). The purpose of this study is to evaluate seven alternative improvement scenarios to improve traffic operations at the Main Street/Markley Street intersection and at several key intersections in the surrounding area along the US 202 corridor in Norristown. Within the immediate study area, the southbound direction of Markley Street is designated as US 202 South and Dekalb Street, which operates one-way northbound, is designated as US 202 North.

The Pennsylvania Department of Transportation (PennDOT) is conducting an Environmental Impact Statement (EIS) for improvements along sections of US 202 north of Norristown. PennDOT's US 202 Executive Committee has directed that additional traffic studies be conducted in Norristown to supplement the EIS effort. This effort was led by the US 202 Norristown Area Task Force composed of representatives of PennDOT, the Montgomery County Planning Commission, the Borough of Norristown, East Norriton Township and elected state officials.

Initially, Montgomery County had requested DVRPC to prepare traffic forecasts for five alternative improvement scenarios. The US 202 Norristown Area Task Force met to discuss the findings for these scenarios. At the meeting, the need to analyze two additional alternatives was identified. Therefore, the study area was expanded to add another six intersections and traffic forecasts were prepared for a total of seven alternatives. These forecasts represent daily traffic projections for road sections in the study area for existing and Year 2018 conditions. In addition, peak hour turning movement volumes at several key intersections have been prepared for existing and future conditions.

The Study Area Description section of this report documents the existing physical and operating characteristics of the key roads and intersections in the study area. Current daily traffic volumes on the roadway network at selected locations are presented. Existing turning movement counts collected at the intersections are also included in this section of the report.

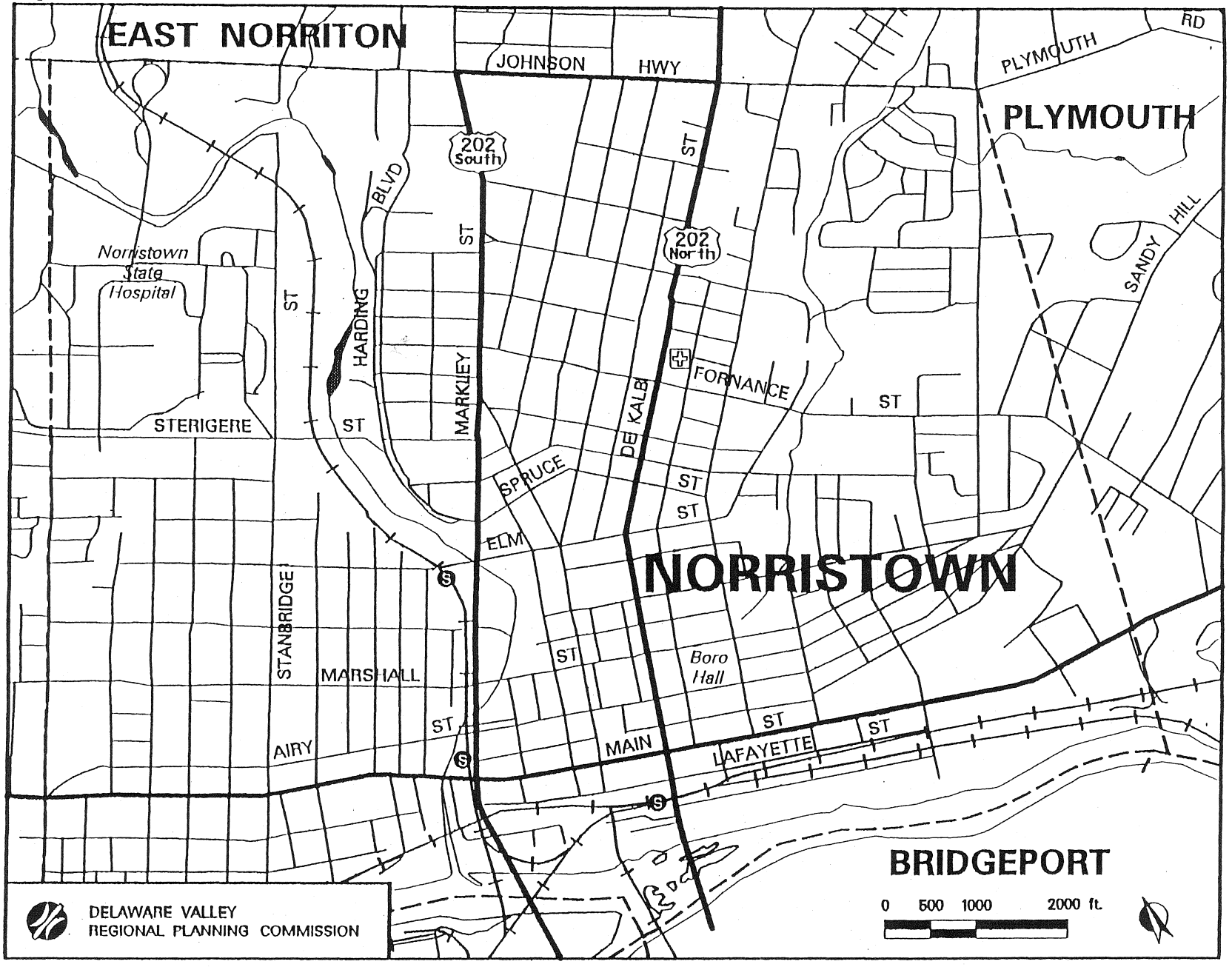
The alternative improvement scenarios are set forth in the Alternatives section. A description of the physical characteristics of each improvement scenario is presented. The seven scenarios for this study are: a base case alternative; a TSM alternative; converting Markley Street to one-way southbound between Harding Boulevard and Johnson Highway

coupled with the construction of a new ramp from the Dannehower Bridge; construction a new ramp from the Dannehower Bridge to Lafayette Street; a two-way Airy Street Alternative, converting Dekalb Street to two-way operation and converting Dekalb Street to two-way operation with a new ramp from the Dannehower Bridge.

The Travel Forecasting Procedures section documents the travel forecasting methodology with a discussion of the focused traffic simulation model used to develop the traffic projections. Input data such as the existing and projected demographics of the study area which are essential factors for the simulation process are also presented.

The final section of the report, Year 2018 Traffic Analysis, presents the results of the travel forecasting procedure. These results document the projected daily traffic volumes and peak hour turning movements for the road segments and study intersections for the various improvement scenarios.

Figure 2: STUDY AREA MAP



II. STUDY AREA DESCRIPTION

In this section, a description of the existing physical characteristics of the US 202 corridor through the study area and the surrounding key roads and intersections will be presented. Along with these descriptions, the current peak hour turning movement counts and daily traffic counts will be presented.

1. Existing Highway Facilities and Land Uses

The study area under consideration for this report encompasses the central portion of the Borough of Norristown. The following intersections are addressed:

Markley Street and Main Street
Markley Street and Marshall Street
Markley Street and Elm Street
Markley Street and Harding Boulevard/Spruce Street
Markley Street and Swede Street/Wood Street
Markley Street and Fornance Street
Markley Street/Swede Road and Johnson Highway
Dekalb Street and Lafayette Street
Dekalb Street and Main Street
Dekalb Street and Airy Street
Dekalb Street and Marshall Street
Dekalb Street and Fornance Street
Dekalb Street and Johnson Highway.
Main Street and Airy Street/Forest Street

The key roads to be addressed include: Markley Street, Main Street, Dekalb Street, Johnson Highway, Lafayette Street, Airy Street, Swede Street, Marshall Street, Harding Boulevard and Fornance Street.

Although Markley Street is a borough-owned street, it is classified as a principal arterial and is designated as US 202 in the southbound direction through the borough. The highway consists of two travel lanes in each direction south of Marshall Street and one travel lane in each direction from Marshall Street to Johnson Highway. On-street parking is permitted on both sides north of Marshall Street. South of Main Street, Markley Street becomes the

Dannehower Bridge which carries two lanes in each direction. The adjacent land use along Markley Street is mostly industrial uses south of Elm Street, mostly residential north of Elm Street and retail in the vicinity of Johnson Highway. The posted speed limit is 25 MPH.

Main Street is also classified as a principal arterial and travels in a generally east-west direction across the Borough. East of Markley Street, this facility provides one travel lane in each direction and on-street parking. West of Markley Street, the cross section of the road changes to provide one travel lane westbound and two travel lanes eastbound with on-street parking permitted on both sides. The Norristown CBD area is located east of Markley Street while residential land uses are found west of Markley Street. The Main Street Station on SEPTA's R6 Regional Rail Line is located adjacent to the Markley Street intersection. The speed limit on Main Street is posted at 25 MPH throughout the study area.

Dekalb Street carries US 202 north through the borough. This one-way principal arterial provides two travel lanes for northbound only movements between Lafayette Street and Johnson Highway. On-street parking can be found on both sides of the street in most blocks north of Lafayette Street. South of Lafayette Street, the newly reconstructed Dekalb Street Bridge carries two travel lanes in each direction over the Schuylkill River. This facility cuts through the Norristown CBD while residential land uses dominate north of Marshall Street. Access to the Norristown Transportation Center Station on SEPTA's R6 regional rail line is available from Dekalb Street just north of the new bridge. The speed limit on Dekalb Street is posted at 25 MPH south of Spruce Street and 35 MPH north of Spruce Street.

Johnson Highway, classified as a principal arterial, is a state-owned road. The westbound direction between Dekalb Street and Markley Street is designated as US 202 south. This facility carries one lane in each direction plus a center left turn lane. There is no on-street parking permitted and the posted speed limit is 35 miles per hour. The land use is mostly commercial with a few residential units located near Dekalb Street.

Lafayette Street is a two-way local street which runs parallel to Main Street on the south side of Main Street. Lafayette Street is not a through street; it is cul-de-saced west of Barbadoes Street and does not intersect with Markley Street. This street provides one travel lane in each direction and allows on-street parking. The Norristown Transportation Center is located on Lafayette Street between Dekalb Street and Swede Street. SEPTA services available at the Transportation Center include access to the R6 regional rail line, the Route 100 Trolley and the Route 91, 93, 96, 97, 98 and 99 buses. In the vicinity of the Transportation

Center, on-street parking spaces are recessed into the sidewalk. In addition to the Transportation Center, the land use along Lafayette Street is mostly industrial uses with some scattered offices. The speed limit along this street is posted at 25 MPH.

Airy Street is classified as a minor arterial. At the time of the preparation of this document, Airy Street operates as a two-way street east of Arch Street and a one-way westbound street west of Arch Street. The Borough Council recently voted to change this condition effective in 1994 to extend the two-way operation to Dekalb Street. For the existing conditions analysis of this study, Airy Street is assumed to operate as a two-way street east of Dekalb Street and a one-way westbound street west of Dekalb Street. The one-way section consists of two westbound travel lanes and on-street parking on both sides of the street. East of Dekalb Street, Airy Street carries one travel lane in each direction and allows on-street parking. Airy Street traverses a residential area west of Markley Street while county and municipal offices and CBD type land uses are evident east of Markley Street. Airy Street crosses Markley Street on a grade-separated structure providing turning movements only from Airy Street to northbound and southbound Markley Street. There are no provisions for turns from either direction on Markley Street to Airy Street. The posted speed limit on Airy Street is 25 MPH.

Swede Street is a borough-owned street that is situated parallel to Dekalb and Markley Streets from Lafayette Street to Elm Street. North of Elm Street, it angles west and intersects Markley Street at Wood Street. This urban collector road provides one travel lane by direction and permits on-street parking. The CBD area and county courthouse are located along the southern section of Swede Street which operates one-way southbound south of Airy Street. The northern section is predominantly residential. the speed limit is posted at 25 miles per hour.

Harding Boulevard is a two lane facility classified as a local road from Markley Street to Sterigere Street and as a collector from Sterigere Street to Johnson Highway. Its cross section is comprised of on street parking and a grass median (between Markley Street and Coolidge Boulevard). Harding Boulevard serves adjacent park and residential land uses as well as a zoo. From a traffic perspective, Harding Boulevard links Sterigere Street to Markley Street, Fornance Street and Johnson Highway. The posted speed limit along Harding Boulevard is 25 MPH.

Fornance Street runs perpendicular to Dekalb and Markley Streets and intersects each

at signalized intersections. This municipally-owned street is classified as an urban collector and offers one travel lane in each direction. On-street parking serves the residences near Markley Street as well as the hospital and offices near Dekalb Street.

The functional classification of Marshall Street changes as it crosses Markley Street. It is classified as an urban collector west of Markley Street and as a local road east of Markley Street. This borough-owned road carries one travel lane in each direction and permits on-street parking. Land use along Marshall is a mix of residential and commercial.

Thirteen key intersections in the study area will be examined under each of the seven alternative scenarios. A 14th intersection, Main Street, Airy Street and Forest Avenue, will be examined under only two of the future scenarios. A description of the physical conditions of each intersection follows.

Main Street and Markley Street

This signalized intersection is controlled by a four phase signal which includes a pre-emption for the train line and provides protected left turns from Markley Street. Both approaches of Markley Street consist of an exclusive left turn lane, two through lanes and an exclusive right turn lane. The westbound Main Street approach consists of an exclusive left turn lane and a shared through/right turn lane. The eastbound Main Street approach provides an exclusive left turn lane, a through lane and an exclusive right turn lane.

Markley Street and Marshall Street

This signalized intersection is controlled by a four phase signal which includes a pre-emption for the train line and provides protected left turns from Markley Street. Marshall Street carries one approach lane to the intersection on both approaches. Both Markley Street approaches consist of an exclusive left turn lane, a through lane and a shared through/right turn lane. North of Marshall Street, Markley Street tapers from two travel lanes to one in each direction.

Markley Street and Elm Street

This intersection is controlled by a two phase signal. All four legs of this intersection consist of one lane approaches. All turning movements are accommodated by the single lane approach. The approach lanes on Markley Street are wide enough that through movements can bypass vehicles queued to turn left. This intersection is

actually built on a structure over the Stoney Creek.

Markley Street and Harding Boulevard/Spruce Street

A two phase signal controls the traffic operations at this intersection. The northbound and southbound approaches on Markley Street consist of one lane. The approach lanes are wide enough that through movements can bypass vehicles queued to turn left. The Harding Boulevard approach is striped for one approach lane but is sufficiently wide enough to accommodate two vehicles lined up abreast. Field observations revealed that the approach actually operates as an exclusive left turn lane and a shared through/right turn lane. Spruce Street intersects Markley Street at an oblique angle and provides a one lane approach to the intersection.

Markley Street and Swede Street/Wood Street

Because Swede Street intersects Markley Street and Wood Street at an oblique angle, traffic movements are channelized through this unsignalized intersection by a concrete island. All legs consist of a one-lane approach. Through movements across the intersection on Wood Street are prohibited.

Markley Street and Fornance Street

All four legs of this intersection consist of a one-lane approach. All turning movements are accommodated by the single lane approach. A two phase signal controls the traffic operations at this intersection.

Markley Street/Swede Road and Johnson Highway

The westbound Johnson Highway approach and the southbound Swede Road approach each receive an advance phase as part of the four phase signal operation at this intersection. Northbound Markley Street carries two approach lanes to the intersection. Westbound Johnson Highway consists of an exclusive left turn lane, a through lane and an exclusive right turn lane. Both the eastbound Johnson Highway and the southbound Swede Road approaches consist of an exclusive left turn lane and a shared through/right turn lane.

Dekalb Street and Lafayette Street

This signalized intersection is controlled by a three phase signal and also provides an all red interval for pedestrian crossings (when actuated). This operation provides an advance for the westbound Lafayette Street approach. Dekalb Street begins one-way

operation north of Lafayette Street therefore there is no southbound approach. The northbound approach consists of a shared through/left turn lane and a shared through/right turn lane. The eastbound Lafayette Street approach consists of a shared through/left turn lane and an exclusive, channelized right turn lane. The westbound approach consists of an exclusive left turn lane and a shared through/right turn lane.

Dekalb Street and Main Street

A three phase signal controls the traffic operations at this intersection. This phasing includes an advance for the eastbound Main Street approach. The northbound Dekalb Street approach consists of a shared through/left turn lane, a through lane and an exclusive right turn lane. Since Dekalb Street is one-way northbound, there is no southbound approach. The eastbound Main Street approach consists of an exclusive left turn lane and a through lane. A one lane approach exists for westbound Main Street; both the through movements and the right turns utilize this lane.

Dekalb Street and Airy Street

Since Dekalb Street operates in only one direction and Airy Street is assumed to convert to two-way operation east of Dekalb Street, there are only two approach legs at this intersection. The northbound Dekalb Street approach consists of a shared through/left turn lane and a shared through/right turn lane. The westbound Airy Street approach consists of a through lane and a right turn lane. Airy Street provides two-way operation east of Dekalb Street. A two phase signal controls the traffic operations at this intersection. This phasing also provides an all red interval for pedestrian crossings (when actuated).

Dekalb Street and Marshall Street

A two phase signal controls the traffic operations at this intersection. The northbound Dekalb Street approach consists of a shared through/left turn lane and a shared through/right turn lane. On Marshall Street, the westbound approach consists of a shared through/right turn lane and the eastbound approach consists of a shared through/left turn lane.

Dekalb Street and Fornance Street

A two phase signal controls the traffic operations at this intersection. The northbound Dekalb Street approach consists of a shared through/left turn lane and a shared

through/right turn lane. On Fornance Street, the westbound approach consists of a shared through/right turn lane and the eastbound approach consists of a shared through/left turn lane.

Dekalb Street and Johnson Highway

Dekalb Street begins two-way operation at Johnson Highway. The southern leg of the intersection consists of three approach lanes: an exclusive left turn lane, a through lane and a shared through/right turn lane. The northern leg of the intersection consists of two departure lanes and two approach lanes. This southbound approach consists of an exclusive left turn lane and a channelized right turn lane. Johnson Highway carries an exclusive right turn and a through lane into the intersection on the westbound approach and an exclusive left turn lane and a through lane on the eastbound approach. Traffic operations are controlled by a four phase signal which provides an advance for the southbound approach and one for the eastbound approach.

Main Street and Airy Street/Forest Avenue

This five leg intersection is controlled by a two phase signal and also provides an all red interval for pedestrian crossings (when actuated). Forest Avenue is a one-way street with both legs carrying traffic away from the intersection. Airy Street is also a one-way street, however it operates towards the direction of the intersection. The Airy Street approach consists of a left turn lane, a through lane and a shared through/right turn lane. Both the eastbound and westbound approaches on Main Street consist of a shared through/left turn lane and a shared through/right turn lane.

For purposes of this study, it is necessary to include a network of roads within the study area for the traffic simulation model to accurately project future traffic volumes. This network includes roads that serve local trips in the borough as well as principal and minor arterials of a more regional significance. In addition to the key roads described above, segments of the following roads are included in the network:

Stanbridge Street	Spruce Street
Sterigere Street	Arch Street
New Hope Street	

The majority of these roads are two lane roads classified as either minor arterials or collectors. In general, they are narrow roads, through residentially developed areas, which

carry trips of a more local nature. Travel speeds and traffic volumes on these roads are generally lower than on the key roads described above.

2. Existing Traffic Volumes

The DVRPC staff collected existing traffic counts on the key roads in the study area in 1991 and 1992 prior to the closure and reconstruction of the Dekalb Street Bridge. Additional traffic counts were required as a result of the need to analyze the two added alternatives. These counts, done in March 1994, were collected a sufficient time after the re-opening of the Dekalb Street Bridge for traffic patterns to return to normal. The resulting average annual daily traffic (AADT) volumes are displayed on Figures 3a and 3b; AADT's collected in 1992 and 1994 can be found in Appendix A. 1991 AADT's have been published in previous US 202 reports prepared by DVRPC. The AADTs are displayed as directional volumes with arrows designating the direction of traffic flow. To facilitate a comparison with future volumes, some AADTs were estimated, based on adjacent intersection turning movement counts and "K" factors, for street segments where no current daily counts were available.

The existing volumes counted by DVRPC on Markley Street indicated 32,600 vehicles per day crossed the Dannehower Bridge and 26,200 vehicles per day were counted between Elm Street and Harding Boulevard. Current counts indicate 21,100 vehicles per day cross the Dekalb Street Bridge and 11,600 vehicles per day were counted on Dekalb Street between Main Street and Airy Street. A count of 28,600 vehicles per day was recorded on Main Street west of Markley Street.

Manual turning movement counts were collected at the 14 key intersections within the study area. The current peak hour turning movement counts are shown graphically in Appendix A on Figures A1a through A3. These counts were collected by several sources. In August of 1992, DVRPC collected turning movement counts at the following five intersections: Main Street and Markley Street, Markley Street and Marshall Street, Dekalb Street and Main Street, Dekalb Street and Lafayette Street and Dekalb Street and Marshall Street. DVRPC also performed traffic counts at the following three intersections in 1994 to accommodate the two additional alternatives: Markley Street and Swede Street/Wood Street, Markley Street/Swede Street and Johnson Highway and Dekalb Street and Johnson Highway. Appendix B displays the peak hour turning movement counts conducted by DVRPC.

Traffic Planning and Design, Inc. counted the following four intersections for their report, Norristown State Hospital Farm Traffic Study, Montgomery County, PA, April 1991: Markley Street and Harding Boulevard/Spruce Street, Markley Street and Elm Street, Main Street and Airy Street/Forest Avenue and Dekalb Street and Airy Street. The Downtown Traffic Study of the Borough of Norristown prepared by Orth-Rodgers-Thompson and Associates Inc. in May 1988 contained turning movement counts for the Markley Street and Fornance Street intersection and the Dekalb Street and Fornance Street intersection. The peak hour counts for all of these intersections were modified by DVRPC to bring them up to current conditions based upon the current AADTs and turning movement counts at adjacent or nearby intersections which were conducted by DVRPC for this study.

Since the base case scenario assumes changing the operation of Airy Street east of Dekalb Street to two-way operation, modifications to the turning movements at the Dekalb Street and Airy Street intersection were required. Counts from an Orth-Rodgers & Associates, Inc. 1993 traffic study of two-way operation of Airy Street were reviewed. To estimate two-way volumes, Orth-Rodgers-Thompson relied upon their 1988 traffic study which projected traffic volumes at this intersection. The counts from the 1993 study were modified by DVRPC to be consistent with actual surrounding traffic volumes.

Figure 3a : CURRENT AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

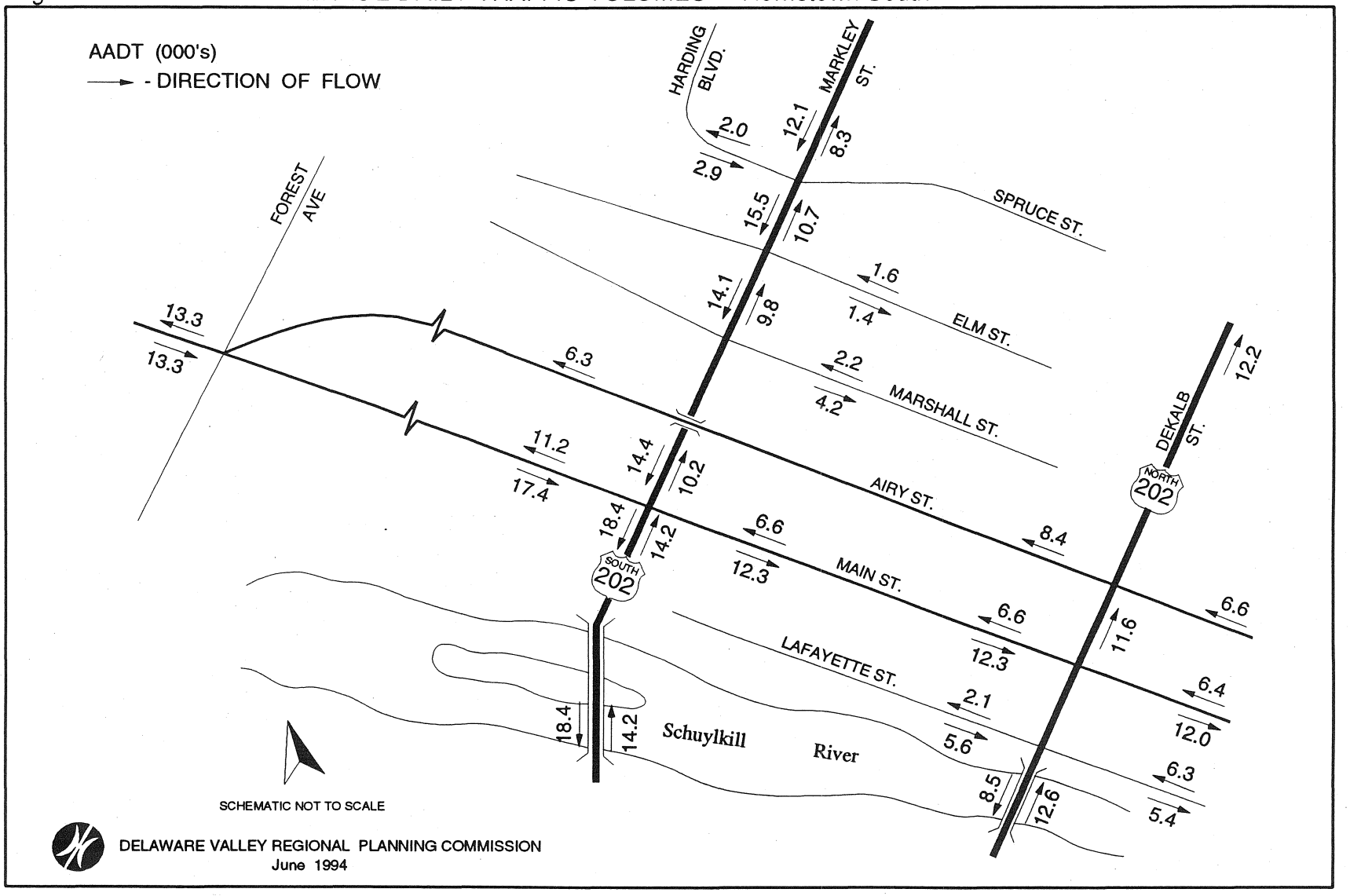
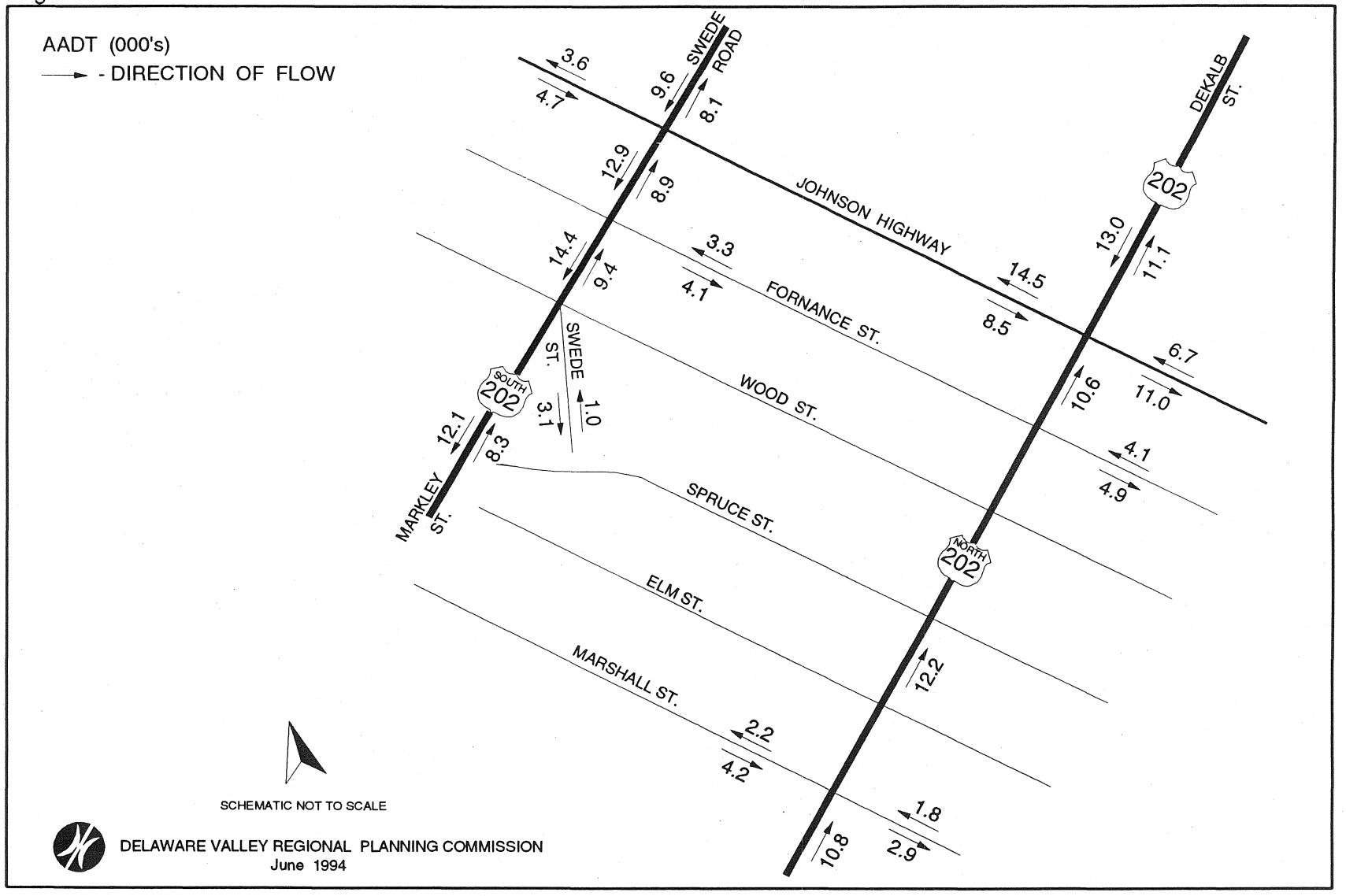


Figure 3b : CURRENT AVERAGE DAILY TRAFFIC VOLUMES - Norristown North



III. ALTERNATIVES

A description of the alternatives which were analyzed are presented in this section. The travel simulation model was used to assess the impact of the improvement alternatives on the key roads and intersections. These alternatives resulted from discussions among the Norristown Area Task Force. The seven alternatives are described below and shown graphically on Figure 4. Table 1 lists the physical improvements assumed for each alternative.

The following is a description of the alternatives tested for this study:

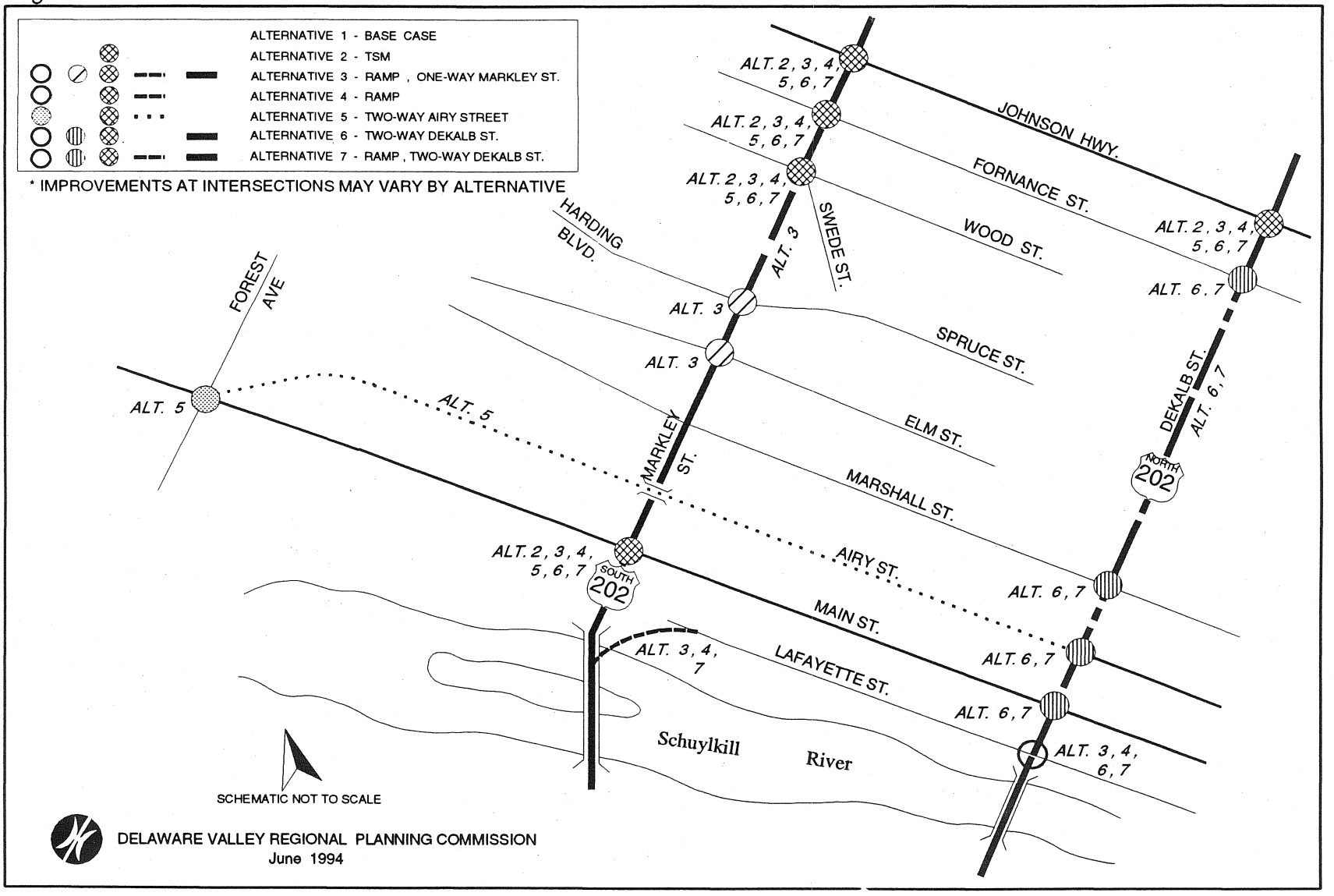
1. Alternative 1 - Base Case

In this alternative, no specific corridor-wide improvements are to be made to the key roads or intersections in the study area. This alternative assumes that the section of Airy Street between Arch and Dekalb Streets operates as a two-way street as approved by Norristown Borough Council and expected to take effect in 1994. Spot improvements at isolated locations such as improvement projects currently programmed on PennDOT's Twelve Year Program or listed on DVRPC's 1992-1997 Transportation Improvement Program (TIP) are included in this alternative. Programmed highway improvements of regional significance such as the widening of US 202 between PA 252 and I-76, the Chester-Montgomery Connector and the I-95/I-276 interchange, which may or may not affect the study area, are also part of the Year 2018 network for this alternative. This alternative does not assume any widening to US 202 north of Johnson Highway.

2. Alternative 2 - TSM Alternative

Transportation systems management improvements (TSM) represent small scale isolated improvements to increase capacity and improve traffic flow. These improvements do not require major widening, relocation or new alignments. This alternative includes base case assumptions and traffic flow improvements to the following intersections: Markley Street and Main Street, Markley Street and Swede Street/Wood Street, Markley Street and Fornance Street, Markley Street/Swede Street and Johnson Highway and Dekalb Street and Johnson Highway. Specific improvements at these intersections are listed in Table 1. This alternative serves as the base condition from which other improvements are built upon in alternatives 3 through 7. This alternative also assumes the widening of US 202 north of Johnson Highway has been completed.

Figure 4 : HIGHWAY IMPROVEMENT ALTERNATIVES



3. Alternative 3 - Ramp/One-Way Markley Street Alternative

In this alternative, Markley Street would be converted to one-way operation southbound from Johnson Highway to Harding Boulevard/Spruce Street. South of Harding Boulevard it would remain two-way. This alternative also calls for the construction of a ramp from the northbound side of the Dannehower Bridge to Lafayette Street. This change would provide two southbound travel lanes on Markley Street from Johnson Highway to Main Street. The southbound approach to Harding Boulevard would change to provide a shared through/left turn lane and a shared through/right turn lane, while the northbound approach would consist of a shared left turn and right turn lane. The southbound approach to Elm Street would also change to provide a shared through/left turn lane and a shared through/right turn lane, while the northbound approach to Elm Street would consist of a shared through/left turn lane and a right turn lane. This alternative assumes the removal of on-street parking on Markley Street between Marshall Street and Harding Boulevard by recessing them into the sidewalks. This alternative also assumes on-street parking, which is not recessed, would be removed on Lafayette Street and a continuous two-way center left turn lane would be added. The eastbound Lafayette Street approach to Dekalb Street would be upgraded to consist of an exclusive left turn lane, a through lane and a right turn lane. This alternative assumes the inclusion of the TSM alternative intersection improvements and the widening of US 202 north of Johnson Highway.

4. Alternative 4 - Ramp Only Alternative

This alternative calls for the construction of a ramp from the northbound side of the Dannehower Bridge to Lafayette Street. On-street parking, which is not recessed, would be removed on Lafayette Street and a continuous two-way center left turn lane would be added. The eastbound Lafayette Street approach to Dekalb Street would be upgraded to consist of an exclusive left turn lane, a through lane and a right turn lane. This alternative assumes the inclusion of the TSM alternative intersection improvements and the widening of US 202 north of Johnson Highway.

5. Alternative 5 - Two-Way Airy Street Alternative

Airy Street will be converted to a two-way operation in this alternative from Dekalb Street to its intersection with Main Street/Forest Avenue. Airy Street will carry one lane in each direction and provide a shared through/left turn lane on the eastbound approach to Dekalb Street. At the Main Street/Forest Avenue intersection, Airy Street will operate with two lanes approaching the intersection, operating as a shared

through/right turn lane and a shared through/left turn lane, and one eastbound lane departing the intersection. On-street parking will continue to be permitted on both sides of the street. This alternative assumes the inclusion of the TSM alternative intersection improvements and the widening of US 202 north of Johnson Highway.

6. Alternative 6 - Two-Way Dekalb Street Alternative

Dekalb Street will be converted to a two-way operation in this alternative, carrying one lane in each direction from Lafayette Street to Johnson Highway. Exclusive left turn lanes will be provided on Dekalb Street at all approaches to signalized intersections. This will be accomplished by localized on-street parking removal. Improvements to other Dekalb Street intersections include: add an eastbound left turn lane on Lafayette Street; add a westbound left turn lane at the intersection with Main Street; convert westbound Airy Street to a left turn and a through right configuration; install a traffic signal at Elm Street; convert westbound Fornance Street to a left turn and a through right configuration. At Johnson Highway the following improvements are included: restripe southbound Dekalb Street for separate left, through and right turn lanes; widen the southern leg for one departure lane and separate left, through and shared through/right turn lanes; widen the eastbound approach for an additional shared through/right turn lane and widen the westbound approach for separate left, through and shared through/right turn lanes. This alternative also assumes the inclusion of the TSM alternative intersection improvements and the widening US 202 north of Johnson Highway.

7. Alternative 7 - Ramp/Two-Way Dekalb Street Alternative

This alternative assumes all the improvements included in alternative 6 plus several other substantial improvements. These improvements include the construction of a ramp from the northbound side of the Dannehower Bridge to Lafayette Street. On-street parking, which is not recessed, would be removed on Lafayette Street and a continuous two-way center left turn lane would be added. The eastbound Lafayette Street approach to Dekalb Street would be upgraded to consist of an exclusive left turn lane, a through lane and a right turn lane.

TABLE 1

Alternative Scenarios

Improvements	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5	ALT 6	ALT 7
Widening of US 202 Sections 600 and 700		X	X	X	X	X	X
Airy St							
Two-way from Arch St to Dekalb St	X	X	X	X	X	X	X
One-way from Dekalb St to Main St	X	X	X	X		X	X
Two-way from Arch St to Main St					X		
Markley St one-way with two lanes SB between Johnson Hwy and Harding Blvd			X				
Dekalb St one-way with two lanes NB between Lafayette St and Johnson Hwy	X	X	X	X	X		
Dekalb St two-way with one lane each direction between Lafayette St and Johnson Hwy						X	X
Ramp from Dannehower Bridge to Lafayette St			X	X			X
Add two-way center left turn lane on Lafayette St			X	X			X
Main St and Markley St Intersection							
Add through lane on EB Main St		X	X	X	X	X	X
Add through lane on WB Main St		X	X	X	X	X	X
Convert right lane to through/right on SB Markley St		X	X	X	X	X	X
Extend left turn lane on NB Markley St		X	X	X	X	X	X
Markley St and Elm St Intersection							
Convert SB Markley St to through/left and through/right			X				
Convert NB Markley St to through/left and right			X				

Alt 1 - Base Case *Alt 2 - TSM* *Alt 3 - Ramp/One-way* *Alt 4 - Ramp Only*
Alt 5 - Two-way Airy *Alt 6 - Two-way Dekalb without Ramp* *Alt 7 - Two-way Dekalb with Ramp*

TABLE 1 (continued)

Alternative Scenarios

Improvements	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5	ALT 6	ALT 7
Markley St and Harding St							
Convert SB Markley St to through/left and through/right			X				
Convert NB Markley St to left/right			X				
Terminate NB Markley St through movement			X				
Markley St and Swede St/Wood St Intersection							
Convert Markley St to two SB through lanes			X				
Install traffic signal		X		X	X	X	X
Provide NB and SB left turn lanes on Markley St		X		X	X	X	X
Widen/channelize along Wood St to allow cross street movement		X		X	X	X	X
Markley St and Fornance St							
Convert Markley St to two SB through lanes			X				
Provide NB and SB left turn lanes along Markley St		X		X	X	X	X
Provide WB left turn lane on Fornance St		X		X	X	X	X
Markley St/Swede Rd and Johnson Hwy							
Convert Markley St to two SB through lanes			X				
Convert Swede Rd SB left turn lane to a left/through lane			X				
Add through lane on Markley St NB		X		X	X	X	X
Add separate right turn lane on Swede Rd SB		X		X	X	X	X
Dekalb St and Lafayette St Intersection							
Add EB left turn lane on Lafayette St			X	X			X
Add separate left turn lanes on Dekalb St						X	X
Dekalb St and Main St Intersection							
Add WB left turn lane on Main St						X	X
Add separate left turn lanes on Dekalb St						X	X

Alt 1 - Base Case *Alt 2 - TSM* *Alt 3 - Ramp/One-way* *Alt 4 - Ramp Only*
Alt 5 - Two-way Airy *Alt 6 - Two-way Dekalb without Ramp* *Alt 7 - Two-way Dekalb with Ramp*

TABLE 1 (continued)

Alternative Scenarios

Improvements	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5	ALT 6	ALT 7
Dekalb St and Airy St Intersection							
Provide separate WB right turn lane	X	X	X	X	X		
Convert EB Airy St to through/left (two-way Airy St operation)					X		
Add separate left turn lanes on Dekalb St						X	X
Convert WB Airy St to a left turn and through/right lane configuration						X	X
Dekalb St and Marshall St							
Add separate left turn lanes on Dekalb St						X	X
Dekalb St and Elm St Intersection							
Install traffic signal						X	X
Add separate left turn lanes on Dekalb St						X	X
Dekalb St and Fornance St Intersection							
Convert WB Fornance St to a left turn and through/right lane configuration						X	X
Add separate left turn lanes on Dekalb St						X	X
Dekalb St and Johnson Hwy							
Widen SB Dekalb St for additional right turn lane		X	X	X	X		
Widen the NB Dekalb St approach for a separate right turn lane		X	X	X	X		
Widen WB Johnson for additional through lane		X	X	X	X		
Widen EB Johnson for additional through lane		X	X	X	X		

(more on next page)

Alt 1 - Base Case *Alt 2 - TSM* *Alt 3 - Ramp/One-way* *Alt 4 - Ramp Only*
Alt 5 - Two-way Airy *Alt 6 - Two-way Dekalb without Ramp* *Alt 7 - Two-way Dekalb with Ramp*

TABLE 1 (continued)

Alternative Scenarios

Improvements	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5	ALT 6	ALT 7
Dekalb St and Johnson Hwy *(continued)*							
Restripe SB Dekalb St for separate left, through and right turn lanes						X	X
Designate south leg for one SB departure lane, widen the NB approach to replace existing (a NB left, a through and a through/right)						X	X
Widen EB for additional through/right lane						X	X
Widen/convert WB approach for a separate left, a through and a through/right lane						X	X
Airy St and Main St/Forest St Intersection							
Convert WB Airy to through/left and through/right configuration					X		

Alt 1 - Base Case *Alt 2 - TSM* *Alt 3 - Ramp/One-way* *Alt 4 - Ramp Only*
Alt 5 - Two-way Airy *Alt 6 - Two-way Dekalb without Ramp* *Alt 7 - Two-way Dekalb with Ramp*

IV. TRAVEL FORECASTING PROCEDURES

The process used to generate Year 2018 travel forecasts for the study area alternatives is a straightforward application of DVRPC's focused travel simulation process. Simulation runs for the various alternatives were conducted to assess the impacts to the key roads and intersections. The focused traffic simulation process is graphically shown on Figure 5.

1. Socio-Economic Projections

Travel forecasting models require that the estimates of demographic and employment data be made for small areas or zones. This requires estimates for the following variables:

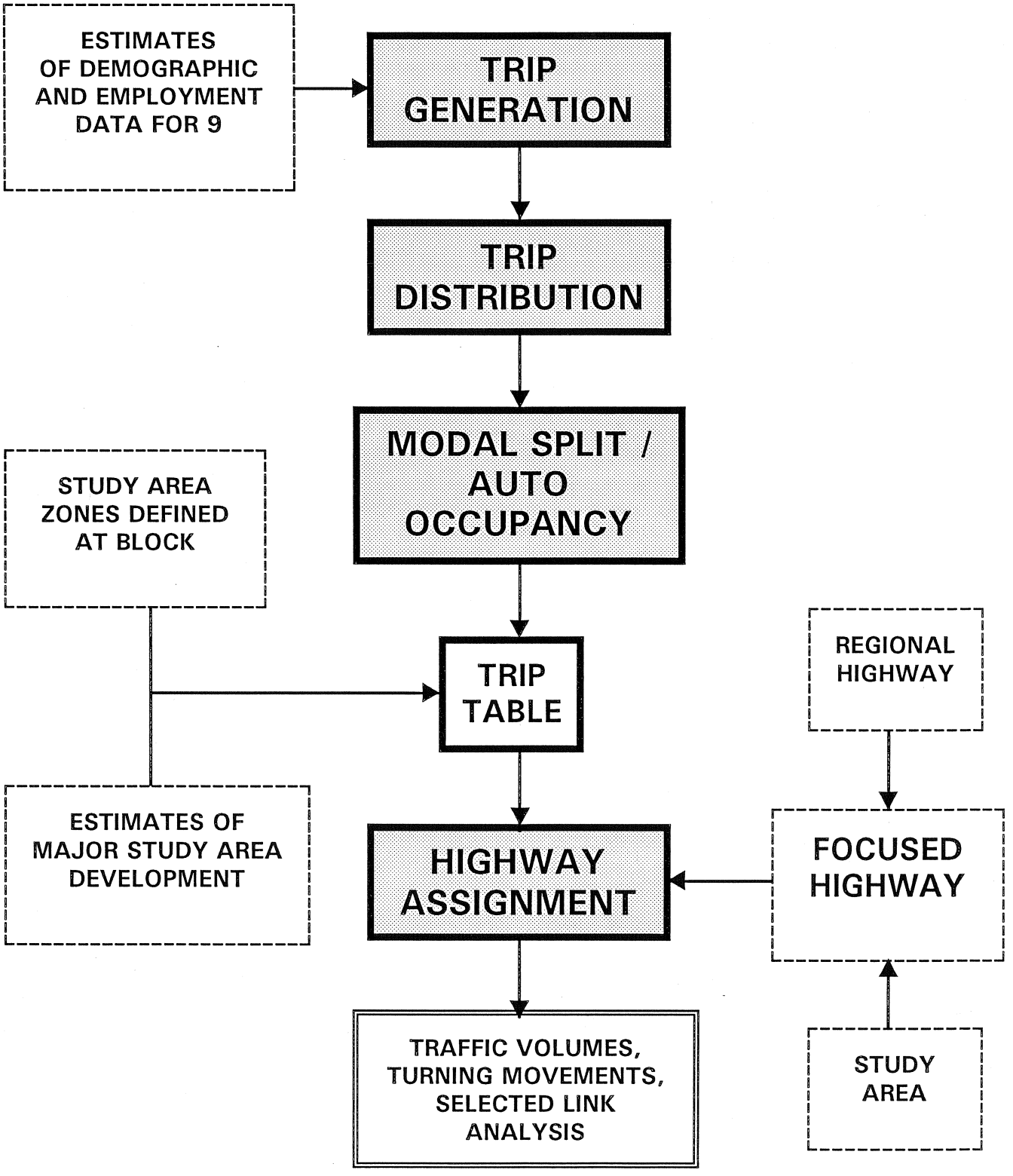
- population
- employment

This requirement derives from the need to assign trip making associated with households and businesses to the streets and transit facilities serving them. For regional travel simulations, the traffic zone system is based on census tracts within the nine-county region. The census tracts defined for Center City Philadelphia and one suburban county, however, do not provide sufficient detail for the "grain" of the network, so block groups, the next smaller level of detail, are used to define the traffic zones in these areas. This results in 1,335 traffic zones for the entire DVRPC region, which encompasses an area of 3,833 square miles.

To be consistent with the traffic analysis prepared for US 202 Sections 600 and 700, this report used the zonal forecasts of the socio-demographic inputs to the travel simulation process that were used for the US 202 studies. These inputs form the basis for the travel projections included in this report.

Subsequent to the original US 202 studies for Sections 600 and 700, socio-demographic forecasts were developed for the Year 2020 as part of the Direction 2020 effort undertaken by DVRPC. In these forecasts, regional population is expected to grow 11 percent in the 30 years between 1990 and 2020. The population of Montgomery County is expected to increase by 12 percent. Employment across the region is expected to increase faster than population, reflecting a continuation of the current trend toward two-earner households. The regional increase in employment is expected to be approximately 20 percent and employment in Montgomery County is expected to increase by 21 percent.

Figure 5: Focused Highway Travel Simulation Process



Year 2018 population and employment data for the study area municipalities have been extrapolated from the 2020 projections which were endorsed by the DVRPC Board as part of Direction 2020 and are presented in Table 2. This table illustrates the past and projected population and employment trends within the study area municipalities using the most up to date information produced. A 1.3 percent decrease in population is expected for the study area between 1990 and 2018. These projections also indicate an increase in employment of 14.4% in the study area during the same time period.

TABLE 2

Population and Employment Data for Study Area Municipalities

			1980-1990			1990-2018	
	1980	1990	Abs.	%	2018	Abs.	%
Population							
Norristown	34,684	30,749	-3,935	-7.3%	29,150	-1,599	-5.2%
East Norriton	12,711	13,324	613	4.8%	13,100	-224	-1.6%
West Norriton	14,034	15,209	1,175	8.4%	15,390	181	1.2%
Bridgeport	4,843	4,292	-551	-11.4%	4,160	-132	-2.7%
Upper Merion	26,138	25,722	-416	-1.4%	26,320	598	2.3%
TOTAL	92,410	89,296	-3,114	-3.4%	88,120	-1176	-1.3%
Employment							
Norristown	18,480	16,559	-1,921	-10.4%	16,610	51	0.3%
East Norriton	6,517	7,737	1220	18.7%	9,430	1,693	21.9%
West Norriton	4,672	6,856	2,184	46.7%	7,950	1,094	16.0%
Bridgeport	2,442	1,616	-826	-33.8%	1,660	44	2.7%
Upper Merion	32,926	46,428	13,502	41.0%	54,980	8,552	18.4%
TOTAL	65,037	79,196	14,159	21.8%	90,630	11,434	14.4%

Source: Delaware Valley Regional Planning Commission

The 2018 population and employment forecasts used in this report have been updated since the completion of the US 202 Section 600 and 700 reports and are different than the 2018 forecasts used in those reports. Tables 2 and 3 represent the updated numbers. The updated population forecasts for the study area municipalities are lower than the forecasts used for the US 202 reports. The new forecast for these municipalities is 6.5 percent lower than the previous forecast. The 2018 employment forecast for the study area municipalities was 101,565 in the US 202 reports and is projected to be 90,630 in this report. This represents a downward adjustment of approximately 10.8 percent. The simulation runs of the model for this study used the zonal forecasts and trip table which were produced for the previous US 202 reports. An analysis was conducted in which a weighting factor was applied to the new population and employment forecasts to properly assess the number of trips produced. The result of this analysis indicated a difference of approximately seven percent in the number of trips generated by the old and new forecasts. No adjustment in the number of trips was used in this study since the difference of seven percent is not significant enough to warrant reducing the travel forecast from those prepared for the US 202 Section 600 and Section 700 reports.

Commuting patterns to and from Norristown were analyzed by reviewing the journey to work data from the 1990 Census. Table 3 shows that over 27 percent of Norristown's resident workers work within Norristown with the next highest place of work being Upper Merion (9.9 percent). Norristown is the number one work destination for the resident workers of East Norriton with over 12 percent of East Norriton's resident workers going to work in Norristown. 10.2 percent of East Norriton's resident workers stay in East Norriton to work.

Table 4 shows that over 25 percent of the jobs in Norristown are held by people who live in Norristown. Residents of West Norriton hold the next highest number of jobs in Norristown (5.9 percent). In East Norriton, 13 percent of the jobs are filled by East Norriton residents and another 13 percent by Norristown residents. These commuting patterns are shown graphically on Figures 6 and 7.

Figure 6 : 1990 COMMUTING PATTERNS FROM NORRISTOWN

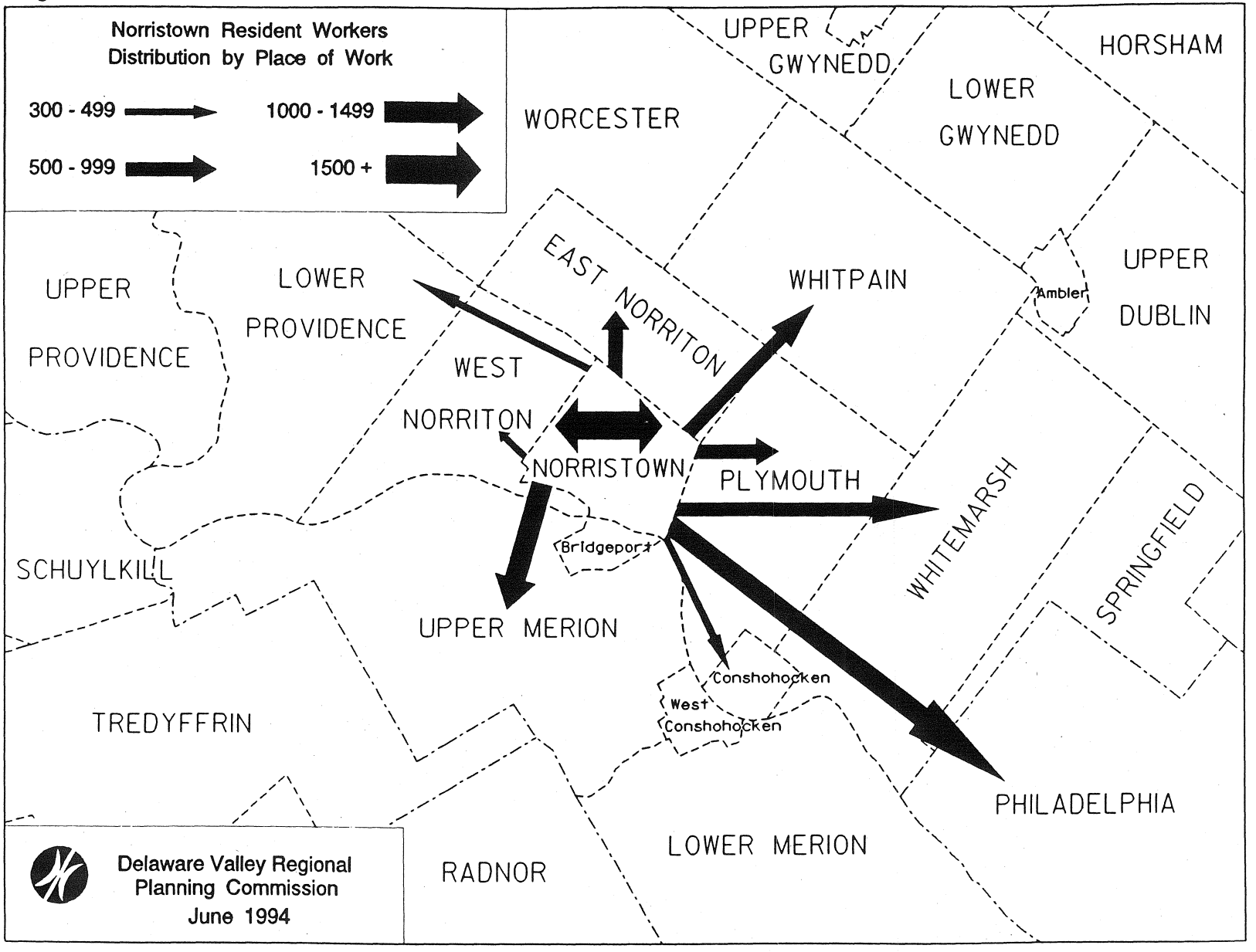


TABLE 3

Norristown and East Norriton
Resident Workers
Distribution by Place of Work
1990

Place of Work	Norristown Resident Workers	Norristown Percent of Total	East Norriton Resident Workers	East Norriton Percent of Total
Norristown Borough	4,072	27.5%	882	12.3%
Upper Merion Township	1,463	9.9%	590	8.3%
Philadelphia	1,039	7.0%	629	8.8%
Whitpain Township	803	5.4%	561	7.9%
Plymouth Township	746	5.0%	329	4.6%
East Norriton Township	730	4.9%	731	10.2%
Whitemarsh Township	513	3.5%	290	4.1%
Lower Providence Township	486	3.3%	215	3.0%
West Norriton Township	483	3.3%	173	2.4%
Conshohocken Borough	413	2.8%	109	1.5%
Tredyffrin Township	269	1.8%	222	3.1%
Radnor Township	259	1.7%	206	2.9%
Upper Dublin Township	218	1.5%	117	1.6%
Easttown Township	196	1.3%	5	0.1%
Bridgeport Borough	188	1.3%	130	1.8%
Lower Merion Township	185	1.2%	147	2.1%
Other	2,740	18.5%	1,806	25.3%
TOTAL	14,803	100.0%	7,142	100.0%

Source: US Bureau of the Census

Figure 7 : 1990 COMMUTING PATTERNS TO NORRISTOWN

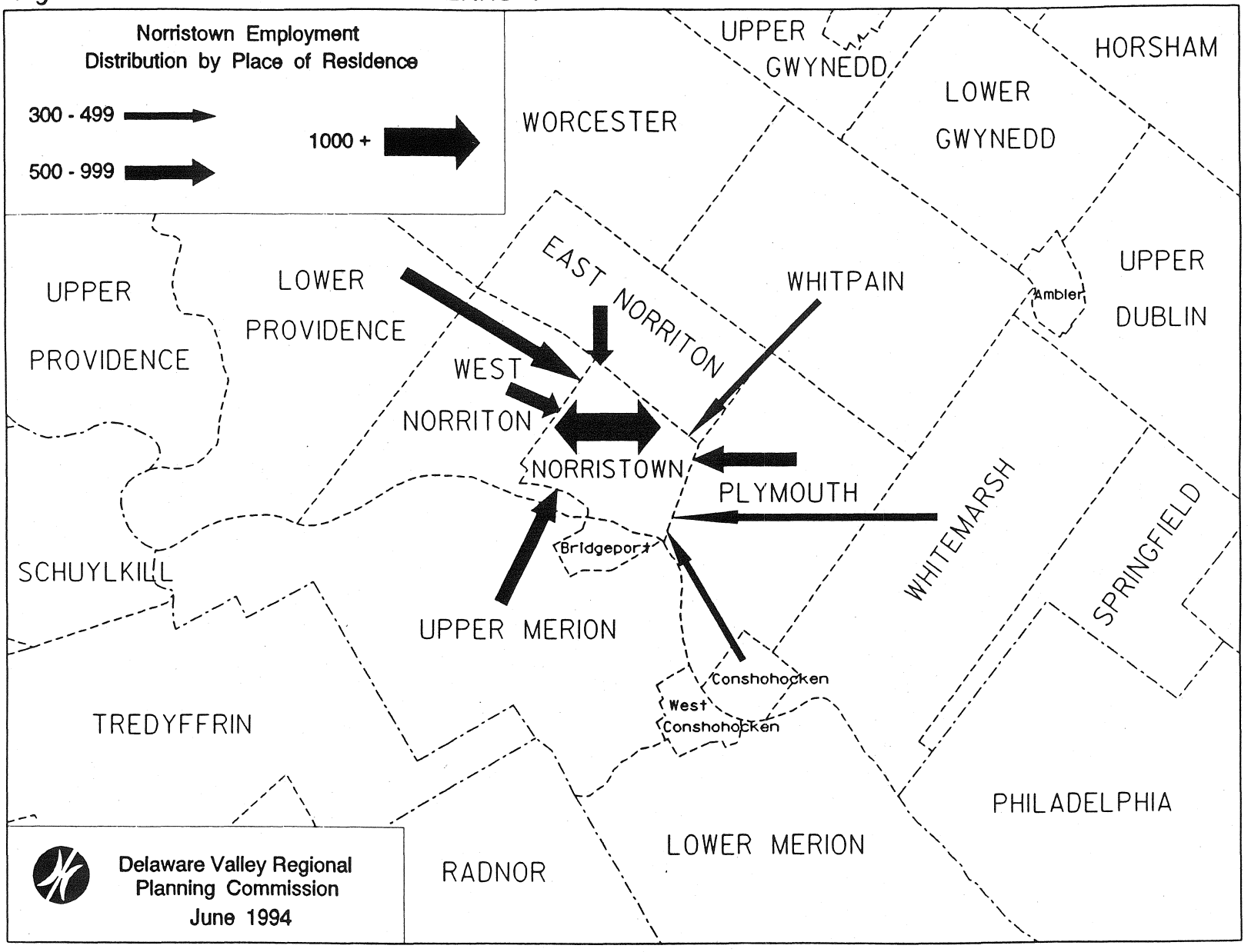


TABLE 4

Norristown and East Norriton
Employment
Distribution by Place of Residence
1990

	Norristown		East Norriton	
Place of Residence	Workers	Percent of Total	Workers	Percent of total
Norristown Borough	4,072	25.1%	730	13.0%
West Norriton Township	949	5.9%	650	11.6%
Plymouth Township	893	5.5%	285	5.1%
East Norriton Township	882	5.4%	731	13.0%
Lower Providence Township	749	4.6%	425	7.6%
Upper Merion Township	541	3.3%	145	2.6%
Whitpain Township	399	2.5%	224	4.0%
Conshohocken Borough	337	2.1%	78	1.4%
Whitemarsh Township	306	1.9%	123	2.2%
Abington Township	281	1.7%	31	0.6%
Lower Merion Township	276	1.7%	28	0.5%
Bridgeport Borough	270	1.7%	93	1.7%
Pottstown Borough	226	1.4%	46	0.8%
Upper Providence Township	172	1.1%	116	2.1%
Skippack Township	170	1.1%	61	1.1%
Upper Gwynedd Township	168	1.0%	83	1.5%
Phoenixville Borough	167	1.0%	53	0.9%
Upper Dublin Township	162	1.0%	46	0.8%
Towamencin Township	154	1.0%	55	1.0%
Other	5,029	31.0%	1,618	28.8%
TOTAL	16,203	100.0%	5,621	100.0%

Source: US Bureau of the Census

2. Regional Traffic Simulation Model

Basically, this focused simulation process involves focusing and enhancing the output of DVRPC's regional travel forecasting models within the detailed study area, while maintaining the regional level of detail elsewhere. The regional forecasting process consists of applying the following models in sequence:

Trip Generation

Both internal trips (those made within the region) and external trips (those which cross the boundary of the region) must be considered to simulate regional travel. Internal trip generation is based on 2015 zonal forecasts of population and employment, whereas external trips are extrapolated from cordon line traffic counts. The latter also include trips which pass through the Delaware Valley Region. Estimates of internal trip productions and attractions by zone are established on the basis of trip rates applied to the zonal estimates of demographic and employment data.

In total, about 18 million person-trips are projected to be made within the Delaware Valley Region on an average weekday in the Year 2015. Of these, 4.4 million will be home based work trips. Total trip making is projected to increase by almost 12 percent over the 25-year period between 1990 and 2015.

In the summer of 1988, DVRPC conducted a complete review of cordon stations around the nine-county region. Altogether, 114 cordon stations were identified as significant regional entry/exit points. A composite growth factor was prepared for each external station, based on anticipated growth in travel across the cordon line. This factor was prepared by establishing growth trends for each station based on 1970, 1975, 1980, 1985, and 1990 traffic counts. The trends implicit in these counts were then extrapolated to the year 2015. Total cordon traffic is expected to grow to more than 1.6 million daily trips, which is 60 percent higher than that measured in 1990. Cordon traffic represents the fastest growing component in the simulation model.

Trip Distribution

Trip distribution is the process whereby the zonal trip ends established in the trip generation analysis are linked together to form origin and destination patterns in the trip table

format. For the simulation of Year 2015 travel demands, a series of seven gravity-type distribution models were applied at the zonal level. These models follow the trip purpose and vehicle type stratifications established in trip generation. Overall, average trip times are projected to increase slightly as a result of disproportionate increases in travel in the suburban and rural parts of the region.

Modal Split

The modal split model calculates the fraction of each person-trip interchange in the trip table which should be allocated to transit, and then assigns the residual to the highway side. The choice between highway and transit usage is made on the basis of comparative cost, travel time, and frequency of service, with other aspects of modal choice being used to modify this basic relationship. In general, the better the transit service, the higher the fraction assigned to transit, although trip purpose and auto ownership also affect the allocation. The model subdivides highway trips into auto drivers and passengers. Auto driver trips are added to the truck, taxi, and external vehicle trips in preparation for assignment to the highway network.

Overall, the model projects transit's share of regional trips will decline slightly from 5.6 percent in 1990 to 5.1 percent by the Year 2015, primarily as a result of projected growth in residential and commercial activity in suburban and rural areas unserved by transit. Actual transit ridership is projected to increase by 1.3 percent to slightly more than 900,000 trips on an average weekday.

The average automobile moving on the region's highways is projected to carry 1.43 persons. Residents are most likely to drive alone when traveling to or from work, averaging an occupancy of only 1.14, and least likely when traveling between home and non-work destinations, when the occupancy is 1.68.

Total automobile trips internal to the region are expected to increase 12 percent to approximately 12 million trips per weekday. Currently, commutation accounts for 27.3 percent of weekday automobile trips. This fraction may increase slightly as the number of non-workers per household declines, pushing non-work trips to weekends. All trip categories are expected to increase, but the larger increases will be found in the home based work and non-home based categories. Including all vehicle types and trip categories -- truck, taxi, external-local, and trips made through the region as well as internal automobile trips -- the 2015 highway loading matrix contained some 15,819,000 daily vehicle trips.

3. Focused Highway Assignment Process

The final step in the travel forecasting process is the highway assignment, which associates highway trip making with specific roadways. The focused highway simulation process involves adding missing streets to the regional network representing the revised Year 2000 Plan for Highways. In addition, simulation zones inside the study area are subdivided so that traffic from existing and proposed developments may be loaded onto the network. This process results in a traffic assignment model capable of estimating accurate traffic volumes for most streets and intersections within the study area. In addition, this focused network explicitly includes the impact of all highway facilities outside of the detailed study area on the projected volumes. These facilities include the improvements in the Year 2000 Transportation Plan such as the construction of the Exton Bypass, the I-95/Pennsylvania Turnpike Interchange and so forth, as well as all existing expressways, major arterials, and minor arterials within the region.

The first step in the preparation of this focused assignment process was to review the streets and intersections included in the model's highway network for the study area to determine if any additional roads were required. In cases where the network detail was inadequate, roads were added in order to properly assign trips from the zones to the network so that accurate traffic volumes could be projected.

4. Highway Assignment Model

The final step in the focused simulation process is the assignment of estimated Year 2018 vehicle trips to the highway network representative of each of the alternatives. This assignment model produces the forecasted traffic volumes for additional highway links that are required for the evaluation of the alternatives. The regional nature of the highway network and trip table underlying the focused assignment process allows the diversion of travel into and through the detailed study area to various points of entry and exit in response to the improvements made to the key roads and intersections.

Highway trips are assigned to the network representative of a given alternative by determining the best (minimum time) route through the highway network for each zonal interchange and then allocating the interzonal highway travel to the highway facilities along that route. This assignment model is capacity restrained in that congestion levels are considered when determining the best route. The equilibrium assignment method is used to implement the capacity constraint. When the assignment reaches equilibrium, no path faster than the one actually assigned can be found through the network, given the "capacity constrained" travel times on each link.

V. TRAFFIC ANALYSIS

Projected 2018 average daily traffic volumes for selected streets in Norristown are presented and analyzed in this part of the report. In Figure 8a, 2018 Base Case projected daily volumes are posted with the current traffic volumes for the southern half of the study area, and in Figure 8b future Base Case traffic volumes for the northern portion of the Norristown study area are shown. In each figure the current volume count is posted first followed by the corresponding 2018 Base Case projected volume; traffic volumes are also posted by direction, with the arrow above or below the line showing the direction of travel. In a similar fashion, Figures 9a and 9b contrast the TSM alternative with Base Case traffic volumes in the south and north, respectively; Figures 10a and 10b compare the Ramp/One-Way Markley Street Alternative with the Base Case Alternative; Figures 11a and 11b compare the Ramp Only and Base Case Alternatives; Figures 12a and 12b display the Two-Way Airy Street Alternative with Base Case traffic volumes; Figures 13a and 13b illustrate the Two-Way Dekalb Street Alternative and the Base Case Alternative, and finally; Figures 14a and 14b compare the Ramp/Two-Way Dekalb Street Alternative with the Base Case.

To facilitate a comparison among alternatives, Table 5 displays traffic volumes at selected locations for the current counts and all seven 2018 alternatives. Traffic volumes are presented by direction and total link volume for the same road segments shown on the figures.

1. Base Case

Traffic volumes in the study area are projected to experience a moderate growth under the Base Case Alternative as a result of areawide growth trends in the general area surrounding Norristown. The largest increases are expected on Markley Street followed by Main Street and Dekalb Street.

Markley Street will experience a 5,000-7,000 vehicle increase over current daily traffic volumes. The largest increases will occur near Main Street, and they will gradually diminish as they approach Johnson Highway. On Dekalb Street, the Dekalb Street Bridge and the Dekalb Pike segments will experience the largest increases, 4,000-4,500 vehicles per day, because they are the two-way segments. The one-way section will experience increases on the order of 2,300-2,800 vehicles over current conditions. The traffic increases on Markley Street and Dekalb Street represent an approximate 20-25 percent growth over current traffic levels.

Figure 8a : 2018 BASE CASE AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

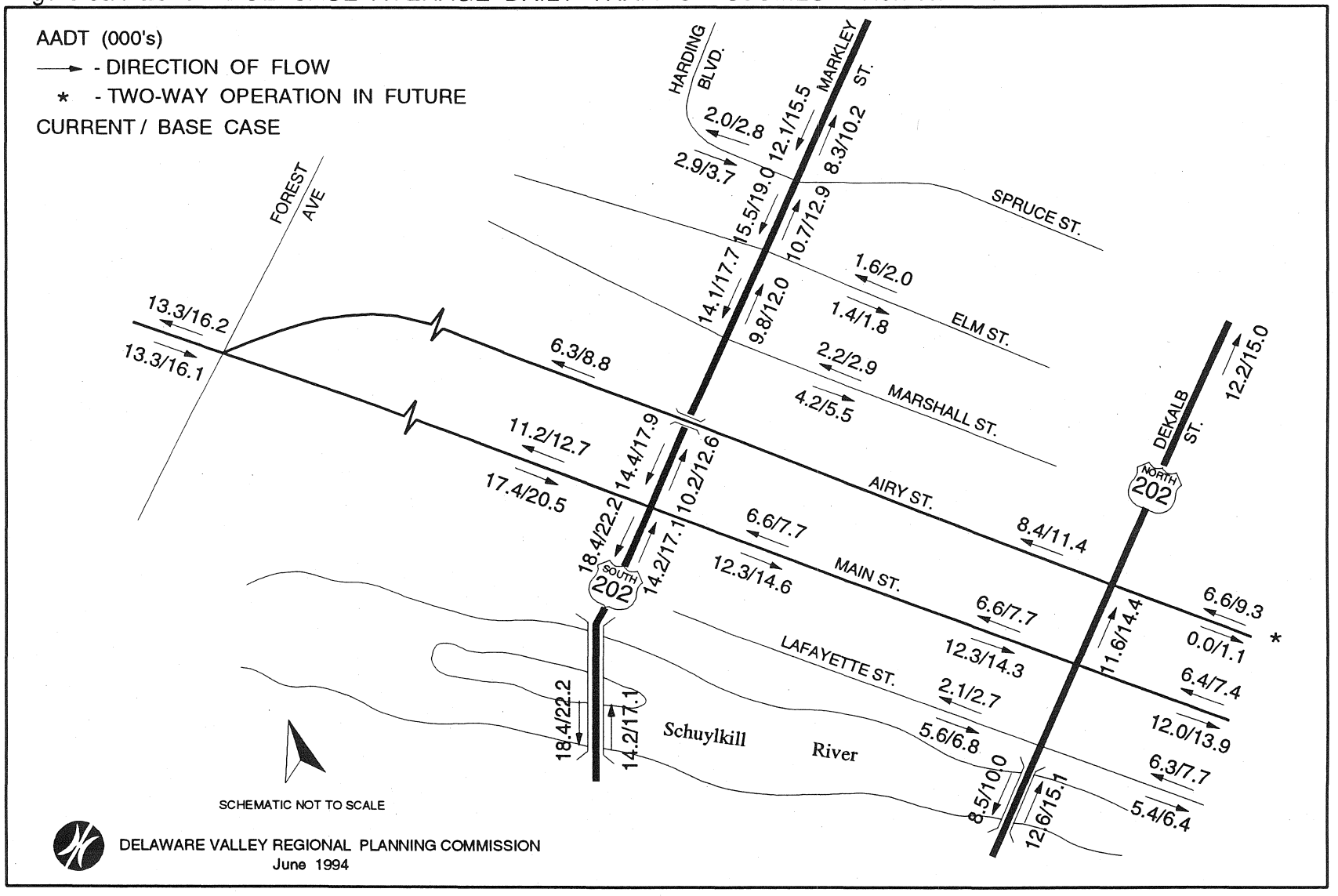


Figure 8b : 2018 BASE CASE AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

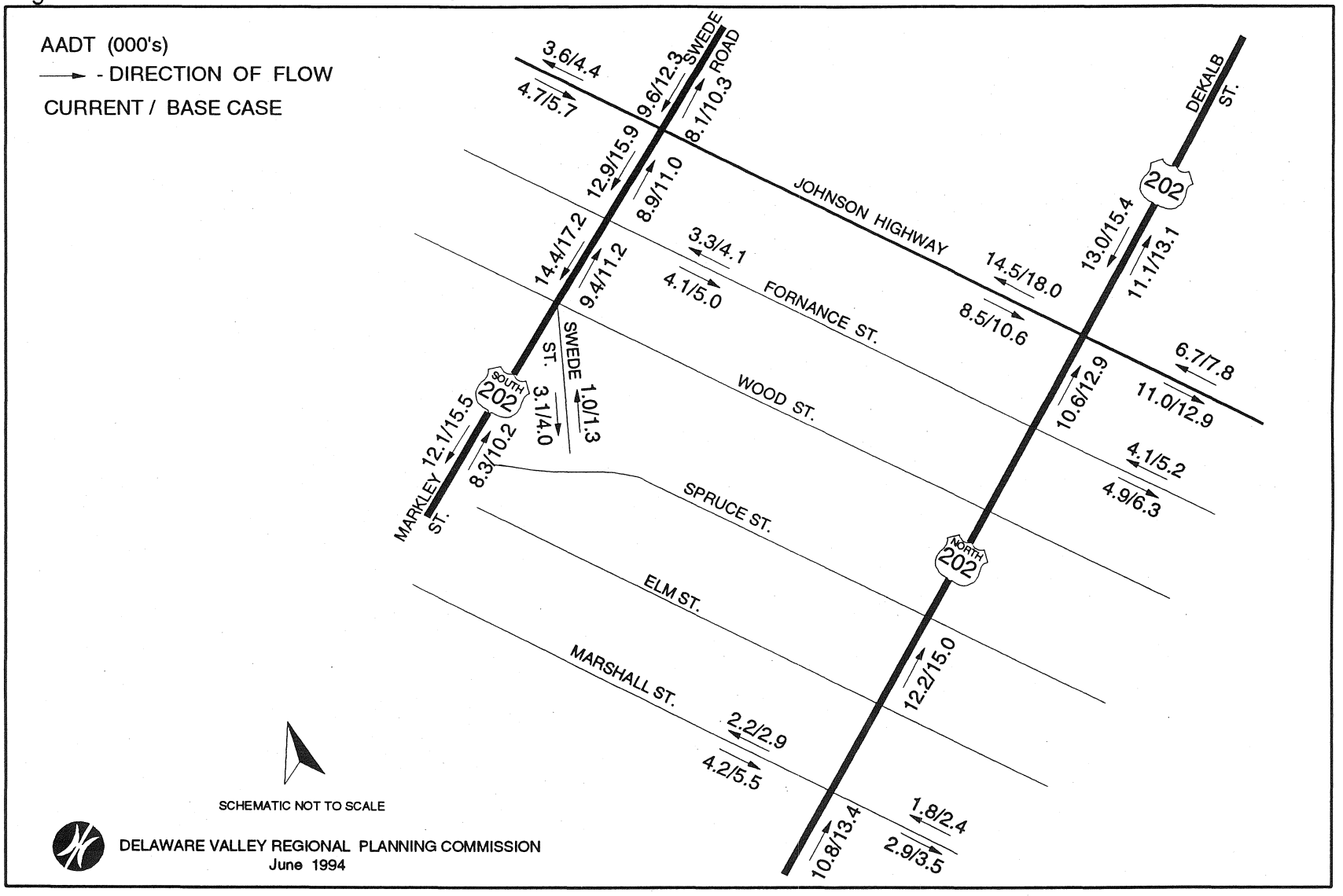


Figure 9a : 2018 TSM ALTERNATIVE AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

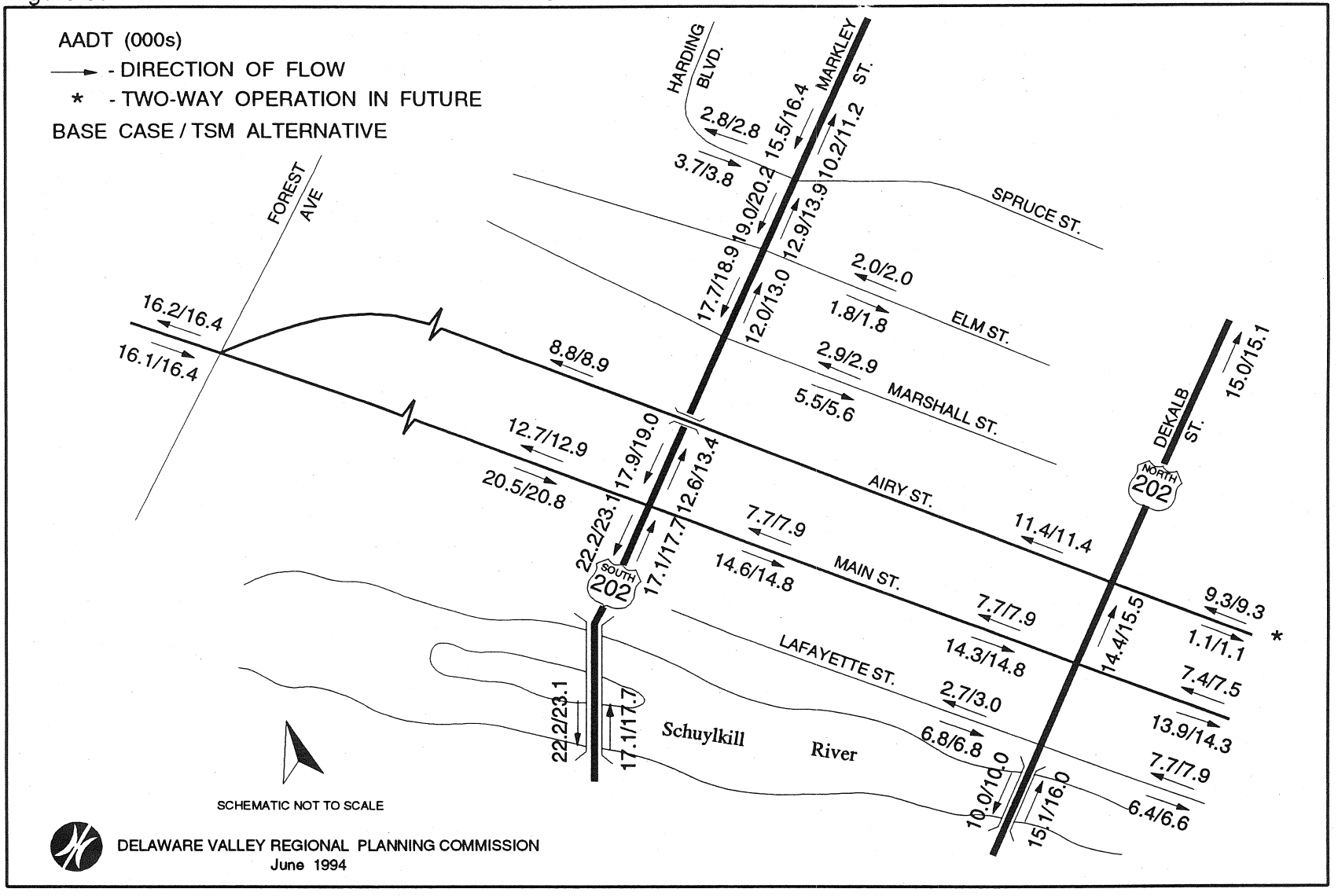


Figure 9b : 2018 TSM ALTERNATIVE AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

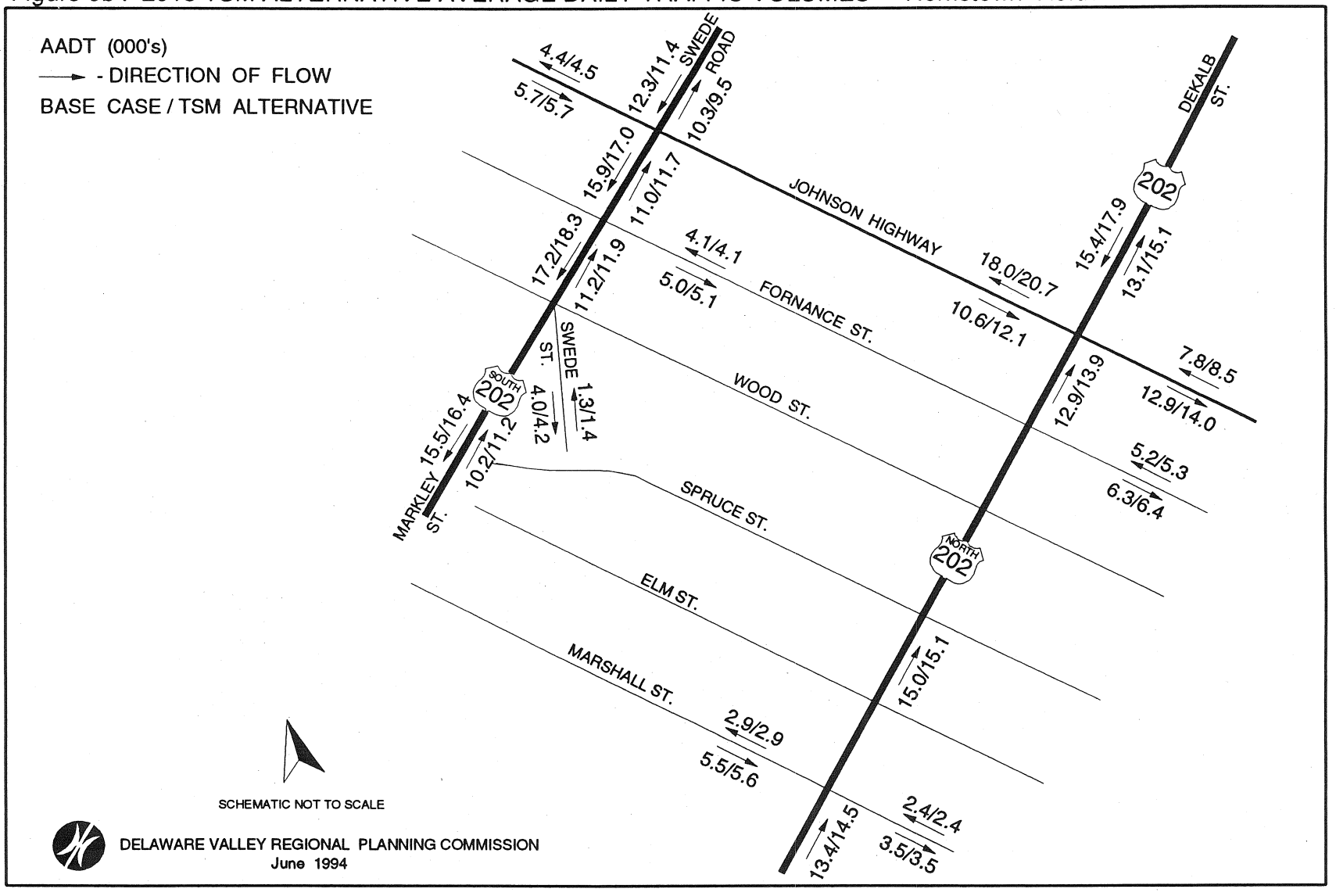


Figure 10a : 2018 RAMP/ONE-WAY MARKLEY ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

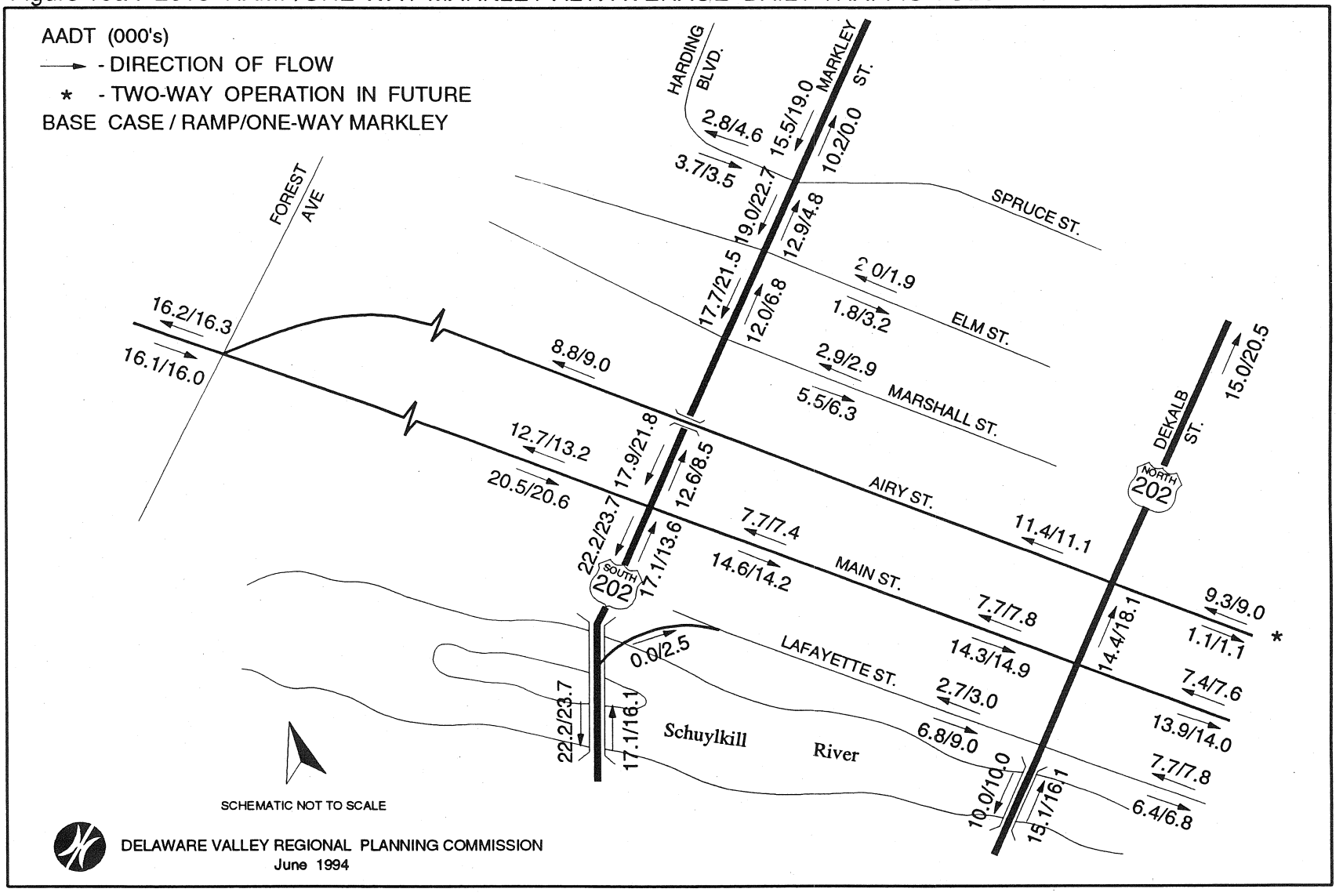


Figure 10b : 2018 RAMP/ONE-WAY MARKLEY ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

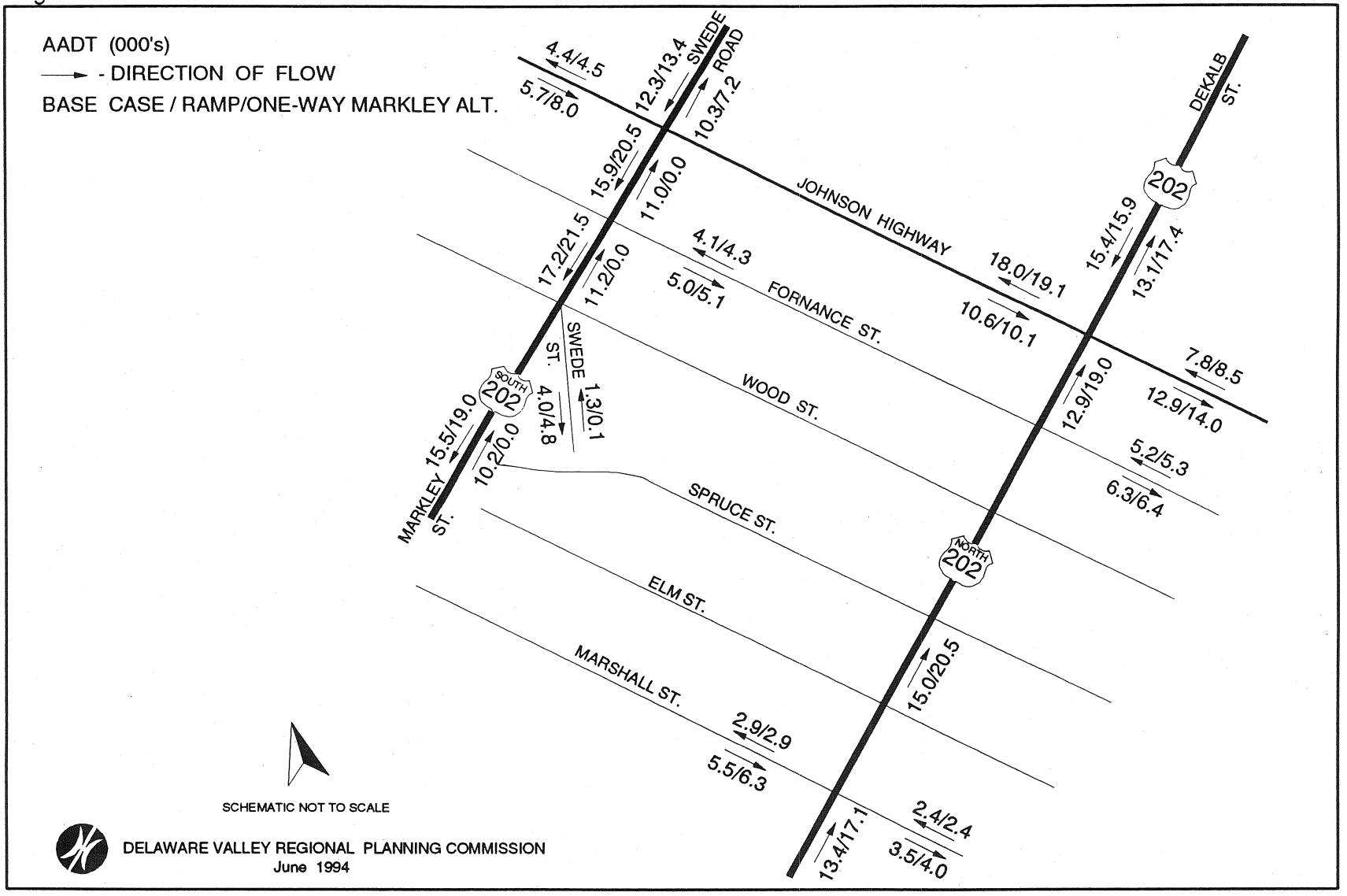


Figure 11a : 2018 RAMP ONLY ALTERNATIVE AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

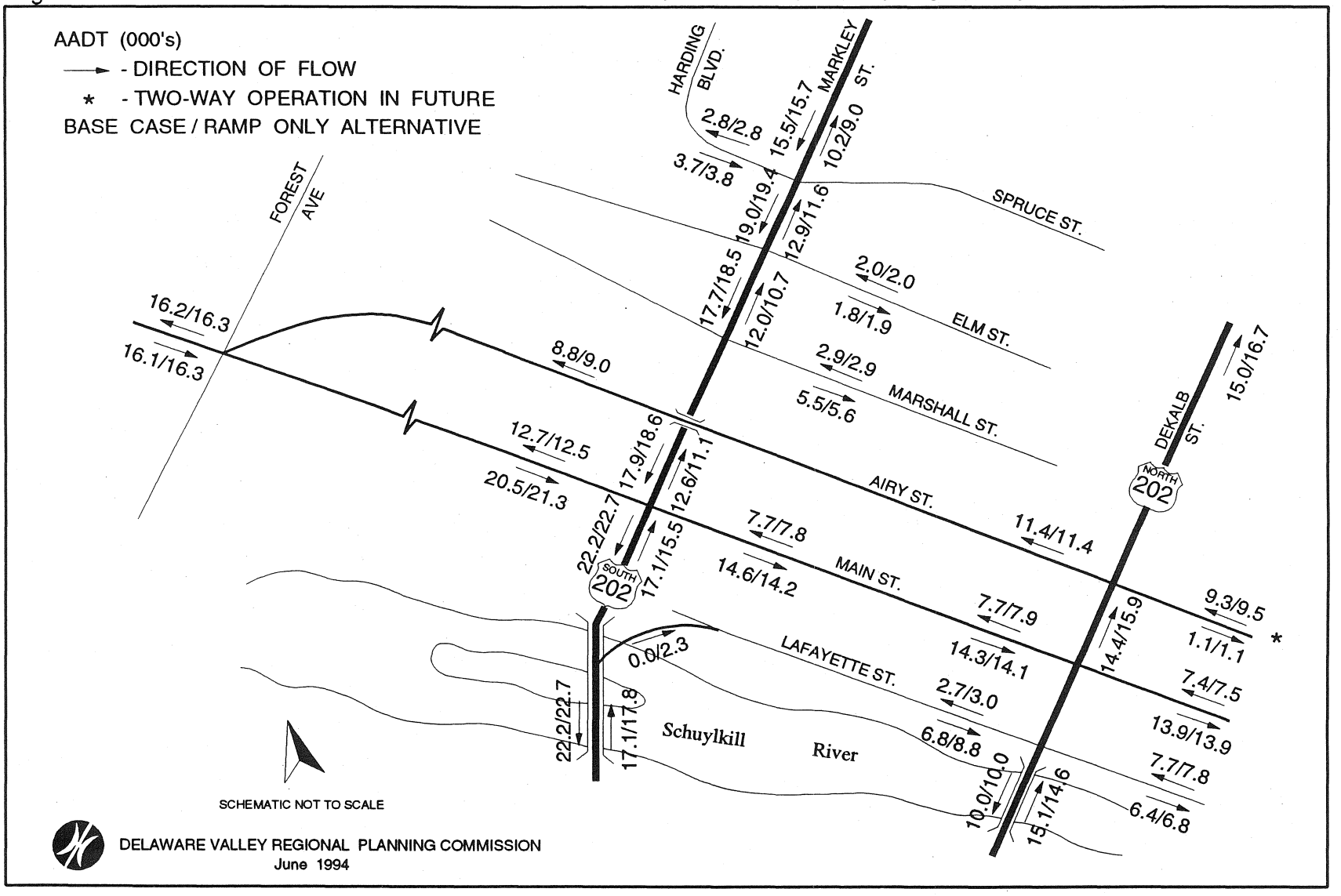


Figure 11b : 2018 RAMP ONLY ALTERNATIVE AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

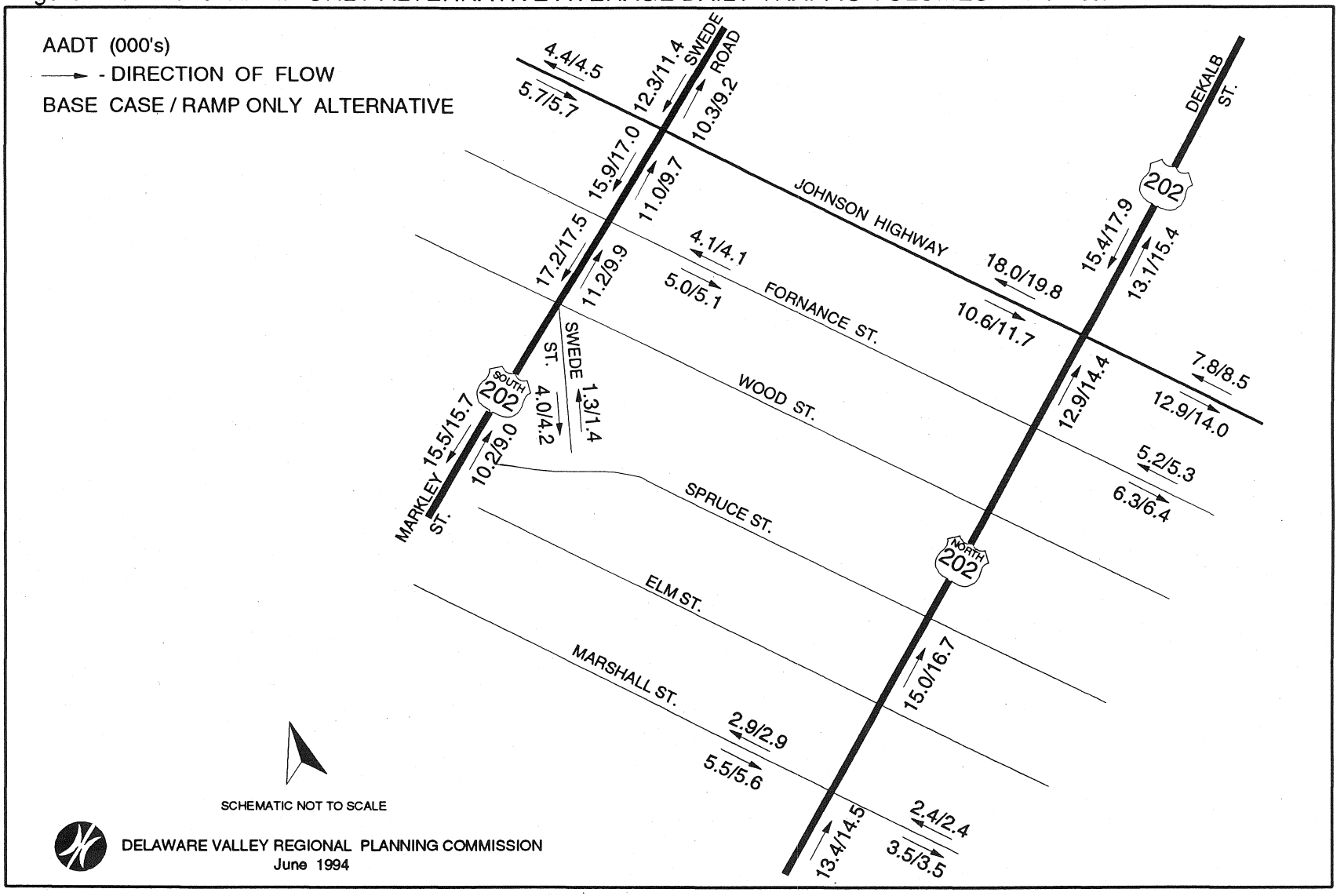


Figure 12a : 2018 TWO-WAY AIRY STREET ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

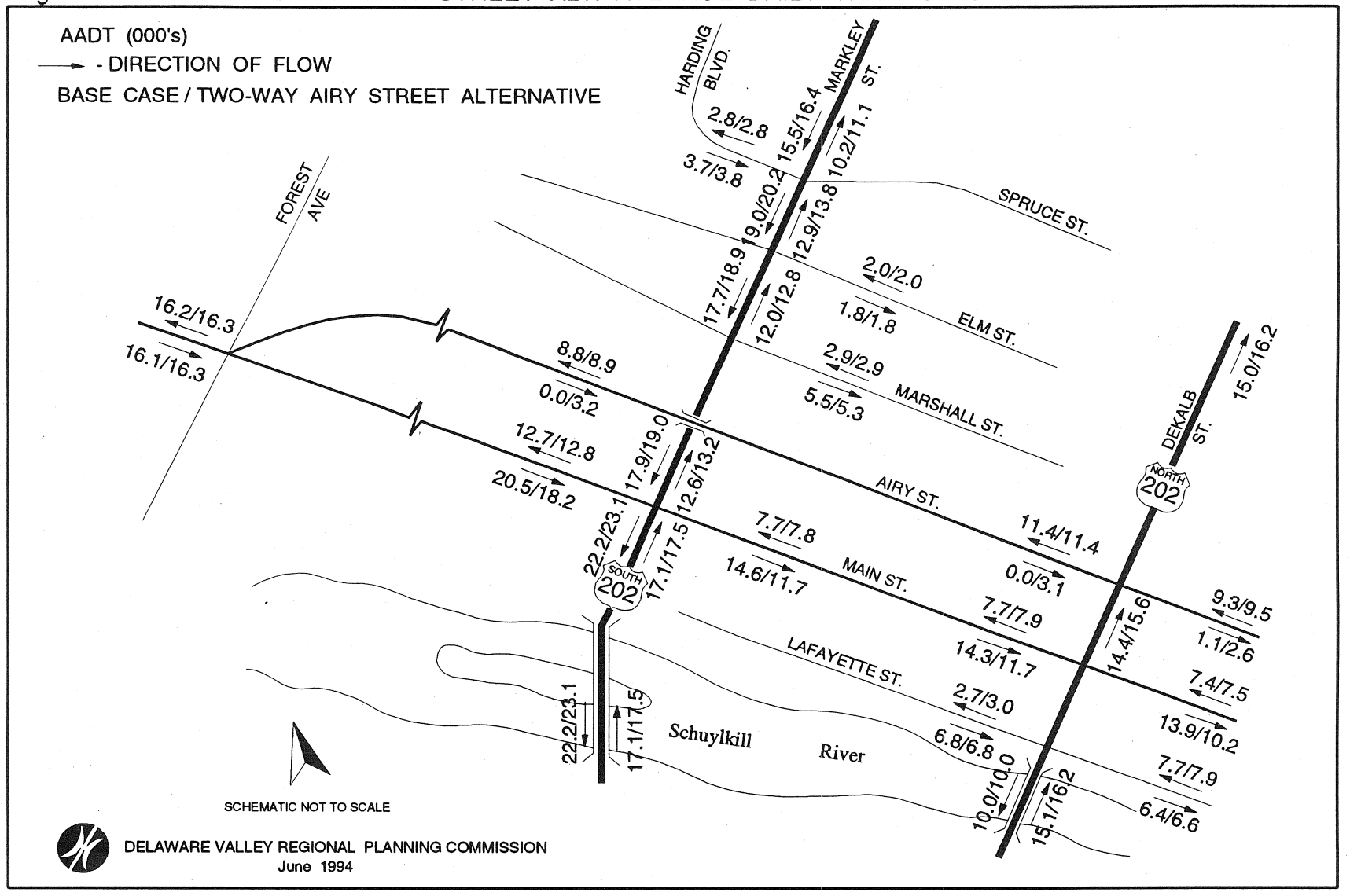


Figure 12b : 2018 TWO WAY AIRY STREET ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

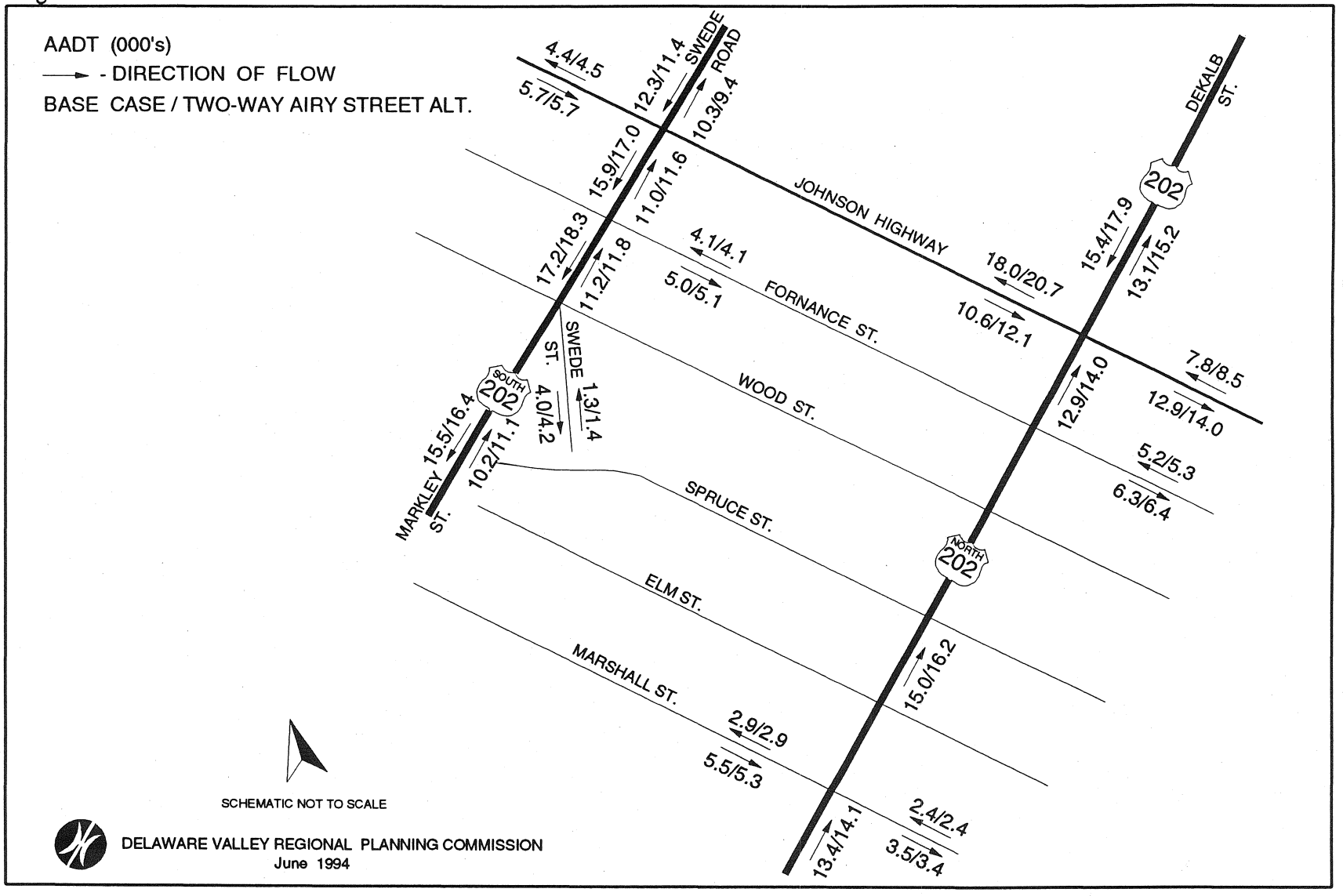


Figure 13a : 2018 TWO-WAY DEKALB STREET ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

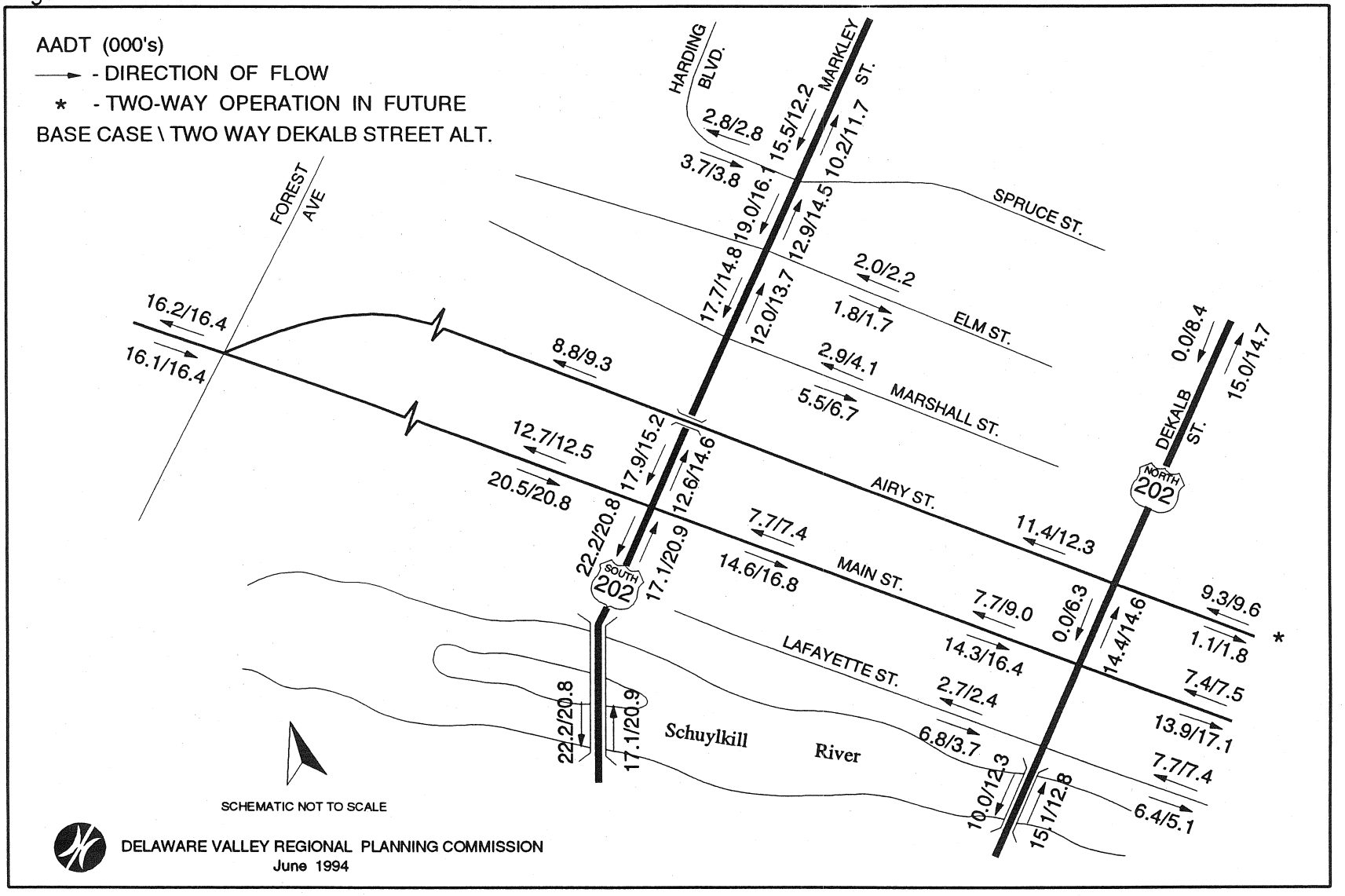


Figure 13b : 2018 TWO-WAY DEKALB STREET ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

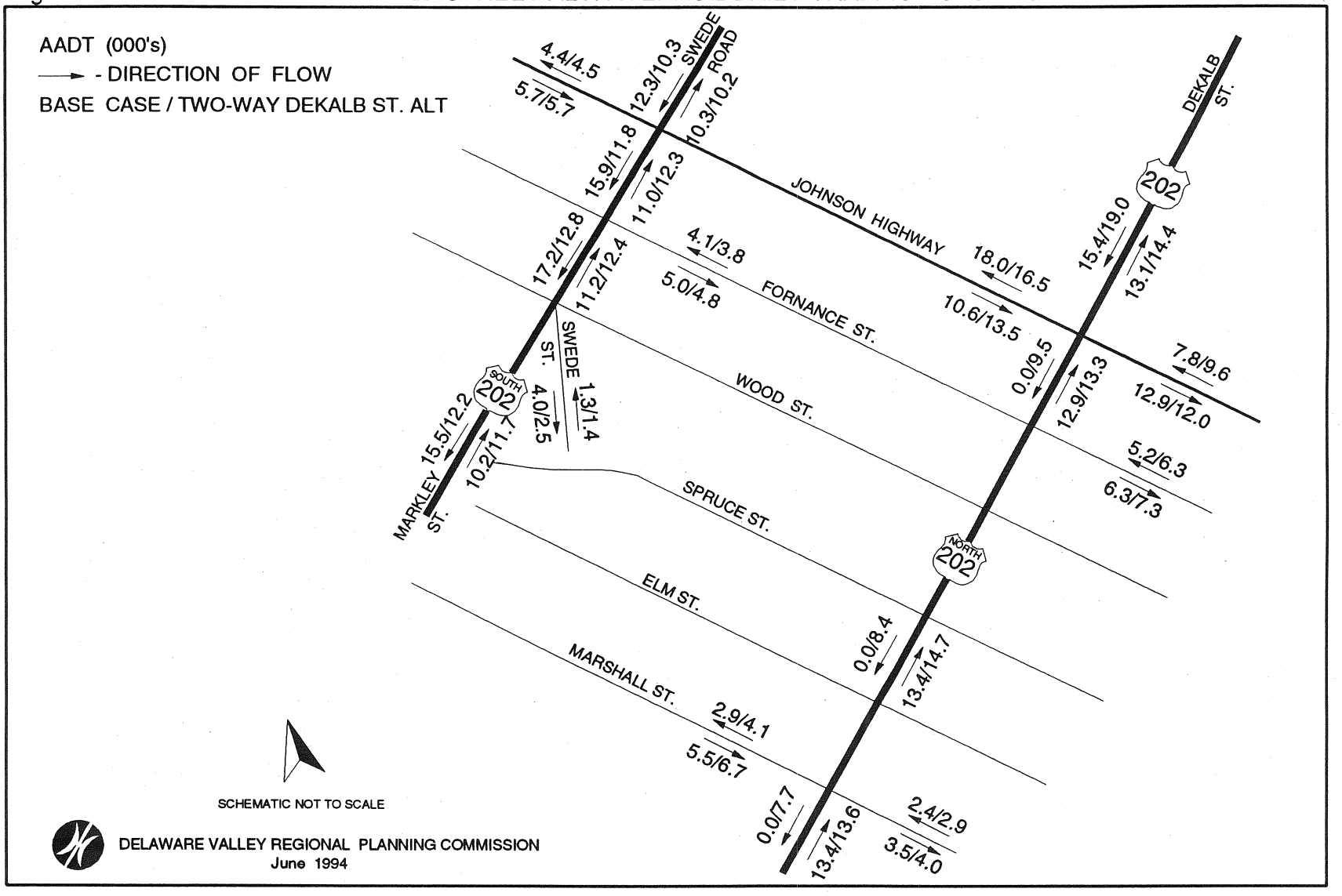


Figure 14a : 2018 RAMP / TWO-WAY DEKALB ST. ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown South

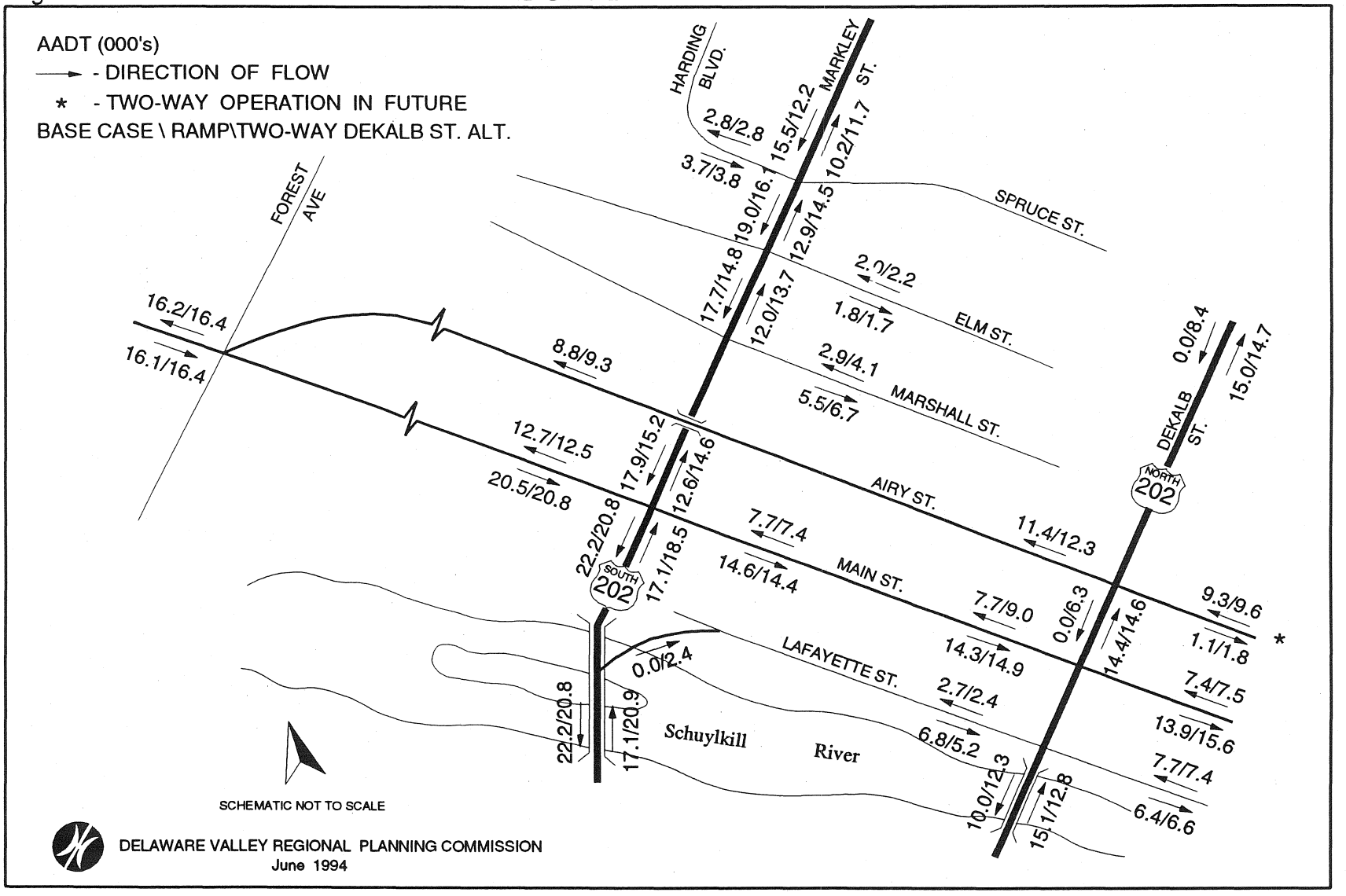


Figure 14b : 2018 RAMP / TWO-WAY DEKALB ST. ALT. AVERAGE DAILY TRAFFIC VOLUMES - Norristown North

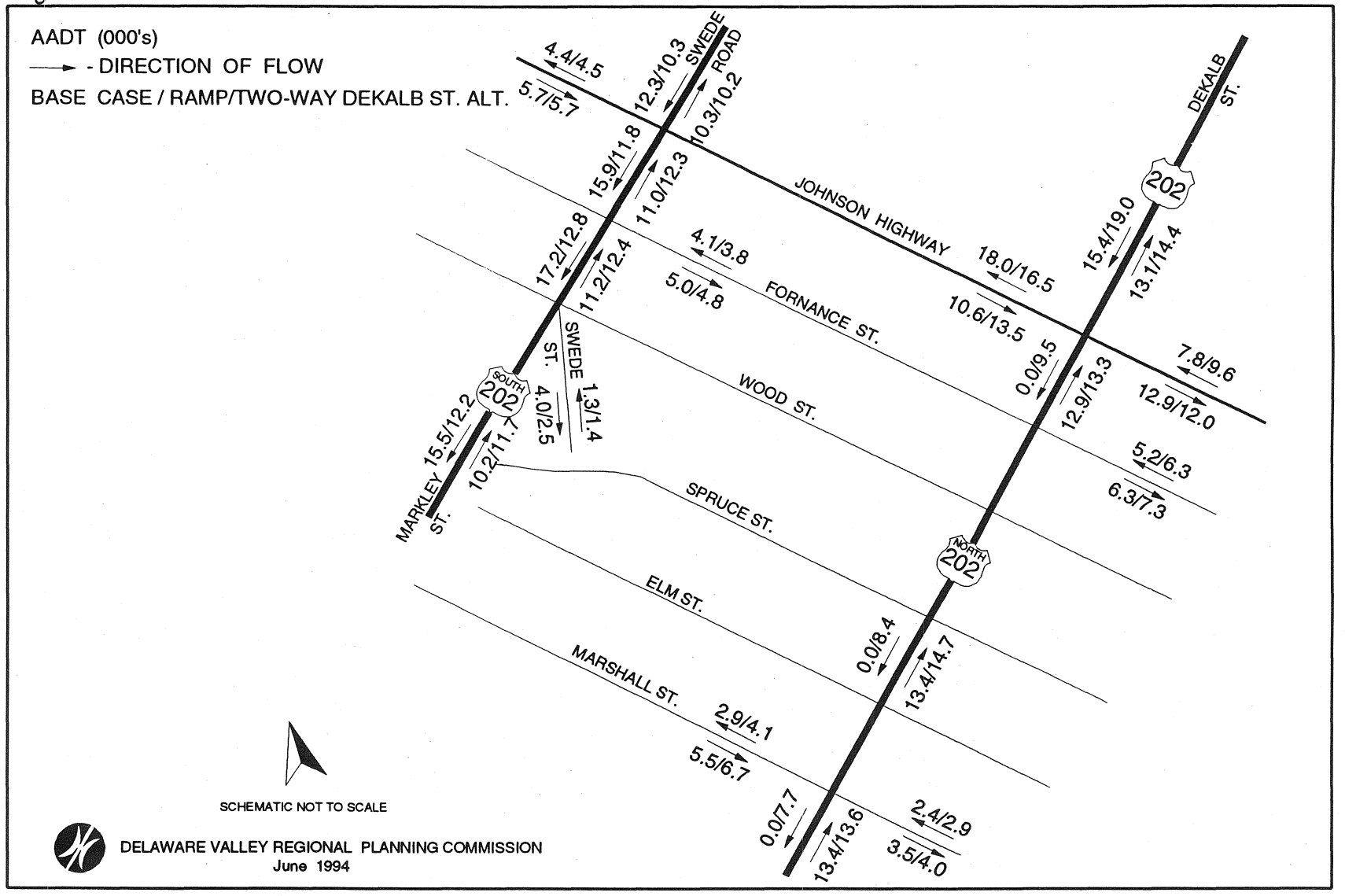


TABLE 5
Comparison of Alternatives' Average Daily Traffic Volumes (ADT)

Road/Segment		CURRENT ADT	2018 BASE CASE ADT	2018 TSM ADT	2018 RAMP/ ONE-WAY MARKLEY ADT	2018 RAMP ONLY ADT	2018 TWO-WAY AIRY ADT	2018 TWO-WAY DEKALB ADT	2018 RAMP/ TWO-WAY DEKALB ADT
MARKLEY STREET									
-Dannehower Bridge	Northbound	14.2	17.1	17.7	16.1	17.8	17.5	20.9	20.9
	Southbound	18.4	22.2	23.1	23.7	22.7	23.1	20.8	20.8
	Total	32.6	39.3	40.8	39.8	40.5	40.6	41.7	41.7
-Ramp to Main St.	Northbound	14.2	17.1	17.7	13.6	15.5	17.5	20.9	18.5
	Southbound	18.4	22.2	23.1	23.7	22.7	23.1	20.8	20.8
	Total	32.6	39.3	40.8	37.3	38.2	40.6	41.7	39.3
-Main St. to Airy St.	Northbound	10.2	12.6	13.4	8.5	11.1	13.2	14.6	14.6
	Southbound	14.4	17.9	19.0	21.8	18.6	19.0	15.2	15.2
	Total	24.6	30.5	32.4	30.3	29.7	32.2	29.8	29.8
-Marshall St. to Elm St.	Northbound	9.8	12.0	13.0	6.8	10.7	12.8	13.7	13.7
	Southbound	14.1	17.7	18.9	21.5	18.5	18.9	14.8	14.8
	Total	23.9	29.7	31.9	28.3	29.2	31.7	28.5	28.5
-Elm St.to Harding Blvd.	Northbound	10.7	12.9	13.9	4.8	11.6	13.8	14.5	14.5
	Southbound	15.5	19.0	20.2	22.7	19.4	20.2	16.1	16.1
	Total	26.2	31.9	34.1	27.5	31.0	34.0	30.6	30.6
-Harding Blvd. to Swede	Northbound	8.3	10.2	11.2	---	9.0	11.1	11.7	11.7
	Southbound	12.1	15.5	16.4	19.0	15.7	16.4	12.2	12.2
	Total	20.4	25.7	27.6	19.0	24.7	27.5	23.9	23.9
-Swede St. to Fornance	Northbound	9.4	11.2	11.9	---	9.9	11.8	12.4	12.4
	Southbound	14.4	17.2	18.3	21.5	17.5	18.3	12.8	12.8
	Total	23.8	28.4	30.2	21.5	27.4	30.1	25.2	25.2
-Fornance to Johnson Hwy.	Northbound	8.9	11.0	11.7	---	9.7	11.6	12.3	12.3
	Southbound	12.9	15.9	17.0	20.5	17.0	17.0	11.8	11.8
	Total	21.8	26.9	28.7	20.5	26.7	28.6	24.1	24.1
-North of Johnson Hwy.	Northbound	8.1	10.3	9.5	7.2	9.2	9.4	10.2	10.2
	Southbound	9.6	12.3	11.4	13.4	11.4	11.4	10.3	10.3
	Total	17.7	22.6	20.9	20.6	20.6	20.8	20.5	20.5

TABLE 5 (continued)
Comparison of Alternatives' Average Daily Traffic Volumes (ADT)

Road/Segment		CURRENT ADT	2018 BASE CASE ADT	2018 TSM ADT	2018 RAMP/ ONE-WAY MARKLEY ADT	2018 RAMP ONLY ADT	2018 TWO-WAY AIRY ADT	2018 TWO-WAY DEKALB ADT	2018 RAMP/ TWO-WAY DEKALB ADT
DEKALB STREET									
-Dekalb Street Bridge	Northbound	12.6	15.1	16.0	16.1	14.6	16.2	12.8	12.8
	Southbound	8.5	10.0	10.0	10.0	10.0	10.0	12.3	12.3
	Total	21.1	25.1	26.0	26.1	24.6	26.2	25.1	25.1
-Main St. to Airy St.	Northbound	11.6	14.4	15.5	18.1	15.9	15.6	14.6	14.6
	Southbound	---	---	---	---	---	---	6.3	6.3
	Total	11.6	14.4	15.5	18.1	15.9	15.6	20.9	20.9
-Airy St. to Marshall St.	Northbound	10.8	13.4	14.5	17.1	14.5	14.1	13.6	13.6
	Southbound	---	---	---	---	---	---	7.7	7.7
	Total	10.8	13.4	14.5	17.1	14.5	14.1	21.3	21.3
-Marshall St. to Wood St.	Northbound	12.2	15.0	15.1	20.5	16.7	16.2	14.7	14.7
	Southbound	---	---	---	---	---	---	8.4	8.4
	Total	12.2	15.0	15.1	20.5	16.7	16.2	23.1	23.1
-Fornance St. to Johnson	Northbound	10.6	12.9	13.9	19.0	14.4	14.0	13.3	13.3
	Southbound	---	---	---	---	---	---	9.5	9.5
	Total	10.6	12.9	13.9	19.0	14.4	14.0	22.8	22.8
-North of Johnson Hwy.	Northbound	11.1	13.1	15.1	17.4	15.4	15.2	14.4	14.4
	Southbound	13.0	15.4	17.9	15.9	17.9	17.9	19.0	19.0
	Total	24.1	28.5	33.0	33.3	33.3	33.1	33.4	33.4
DANNEHOWER BRIDGE RAMP									
-Dannehower Bridge to Lafayette St.		---	---	---	2.5	2.3	---	---	2.4
LAFAYETTE STREET									
-West of Dekalb St.	Eastbound	5.6	6.8	6.8	9.0	8.8	6.8	3.7	5.2
	Westbound	2.1	2.7	3.0	3.0	3.0	3.0	2.4	2.4
	Total	7.7	9.5	9.8	12.0	11.8	9.8	6.1	7.6
-East of Dekalb St.	Eastbound	5.4	6.4	6.6	6.8	6.8	6.6	5.1	6.6
	Westbound	6.3	7.7	7.9	7.8	7.8	7.9	7.4	7.4
	Total	11.7	14.1	14.5	14.6	14.6	14.5	12.5	14.0

TABLE 5 (continued)
Comparison of Alternatives' Average Daily Traffic Volumes (ADT)

Road/Segment		CURRENT ADT	2018 BASE CASE ADT	2018 TSM ADT	2018 RAMP/ ONE-WAY MARKLEY ADT	2018 RAMP ONLY ADT	2018 TWO-WAY AIRY ADT	2018 TWO-WAY DEKALB ADT	2018 RAMP/ TWO-WAY DEKALB ADT
MAIN STREET									
-West of Forest Ave.	Eastbound	13.3	16.1	16.4	16.0	16.3	16.3	16.4	16.4
	Westbound	13.3	16.2	16.4	16.3	16.3	16.3	16.4	16.4
	Total	26.6	32.3	32.8	32.3	32.6	32.6	32.8	32.8
-West of Markley St.	Eastbound	17.4	20.5	20.8	20.6	21.3	18.2	20.8	20.8
	Westbound	11.2	12.7	12.9	13.2	12.5	12.8	12.5	12.5
	Total	28.6	33.2	33.7	33.8	33.8	31.0	33.3	33.3
-East of Markley St.	Eastbound	12.3	14.6	14.8	14.2	14.2	11.7	16.8	14.4
	Westbound	6.6	7.7	7.9	7.4	7.8	7.8	7.4	7.4
	Total	18.9	22.3	22.7	21.6	22.0	19.5	24.2	21.8
-West of Dekalb St.	Eastbound	12.3	14.3	14.8	14.9	14.1	11.7	16.4	14.9
	Westbound	6.6	7.7	7.9	7.8	7.9	7.9	9.0	9.0
	Total	18.9	22.0	22.7	22.7	22.0	19.6	25.4	23.9
-East of Dekalb St.	Eastbound	12.0	13.9	14.3	14.0	13.9	10.2	17.1	15.6
	Westbound	6.4	7.4	7.5	7.6	7.5	7.5	7.5	7.5
	Total	18.4	21.3	21.8	21.6	21.4	17.7	24.6	23.1
AIRY STREET									
-West of Markley St.	Eastbound	---	---	---	---	---	3.2	---	---
	Westbound	6.3	8.8	8.9	9.0	9.0	8.9	9.3	9.3
	Total	6.3	8.8	8.9	9.0	9.0	12.1	9.3	9.3
-West of Dekalb St.	Eastbound	---	---	---	---	---	3.1	---	---
	Westbound	8.4	11.4	11.4	11.1	11.4	11.4	12.3	12.3
	Total	8.4	11.4	11.4	11.1	11.4	14.5	12.3	12.3
-East of Dekalb St.	Eastbound*	---	1.1	1.1	1.1	1.1	2.6	1.8	1.8
	Westbound*	6.6	9.3	9.3	9.0	9.5	9.5	9.6	9.6
	Total*	6.6	10.4	10.4	10.1	10.6	12.1	11.4	11.4
MARSHALL STREET									
-East of Markley St.	Eastbound	4.2	5.5	5.6	6.3	5.6	5.3	6.7	6.7
	Westbound	2.2	2.9	2.9	2.9	2.9	2.9	4.1	4.1
	Total	6.4	8.4	8.5	9.2	8.5	8.2	10.8	10.8
-East of DeKalb St.	Eastbound	2.9	3.5	3.5	4.0	3.5	3.4	4.0	4.0
	Westbound	1.8	2.4	2.4	2.4	2.4	2.4	2.9	2.9
	Total	4.7	5.9	5.9	6.4	5.9	5.8	6.9	6.9

* TWO-WAY OPERATION UNDER FUTURE CONDITIONS

TABLE 5 (continued)
Comparison of Alternatives' Average Daily Traffic Volumes (ADT)

Road/Segment		CURRENT ADT	2018 BASE CASE ADT	2018 TSM ADT	2018 RAMP/ ONE-WAY MARKLEY ADT	2018 RAMP ONLY ADT	2018 TWO-WAY AIRY ADT	2018 TWO-WAY DEKALB ADT	2018 RAMP/ TWO-WAY DEKALB ADT
ELM STREET									
-East of Markley St.	Eastbound	1.4	1.8	1.8	3.2	1.9	1.8	1.7	1.7
	Westbound	1.6	2.0	2.0	1.9	2.0	2.0	2.2	2.2
	Total	3.0	3.8	3.8	5.1	3.9	3.8	3.9	3.9
HARDING BOULEVARD									
-West of Markley St.	Eastbound	2.9	3.7	3.8	3.5	3.8	3.8	3.8	3.8
	Westbound	2.0	2.8	2.8	4.6	2.8	2.8	2.8	2.8
	Total	4.9	6.5	6.6	8.1	6.6	6.6	6.6	6.6
SWEDE STREET									
-Appr. Wood St./Markley St.	Northbound	1.0	1.3	1.4	0.1	1.4	1.4	1.4	1.4
	Southbound	3.1	4.0	4.2	4.8	4.2	4.2	2.5	2.5
	Total	4.1	5.3	5.6	4.9	5.6	5.6	3.9	3.9
FORNANCE STREET									
-East of Markley St.	Eastbound	4.1	5.0	5.1	5.1	5.1	5.1	4.8	4.8
	Westbound	3.3	4.1	4.1	4.3	4.1	4.1	3.8	3.8
	Total	7.4	9.1	9.2	9.4	9.2	9.2	8.6	8.6
-East of DeKalb St.	Eastbound	4.9	6.3	6.4	6.4	6.4	6.4	7.3	7.3
	Westbound	4.1	5.2	5.3	5.3	5.3	5.3	6.3	6.3
	Total	9.0	11.5	11.7	11.7	11.7	11.7	13.6	13.6
JOHNSON HIGHWAY									
-West of Markley St.	Eastbound	4.7	5.7	5.7	8.0	5.7	5.7	5.7	5.7
	Westbound	3.6	4.4	4.5	4.5	4.5	4.5	4.5	4.5
	Total	8.3	10.1	10.2	12.5	10.2	10.2	10.2	10.2
-East of Markley St.	Eastbound	8.5	10.6	12.1	10.1	11.7	12.1	13.5	13.5
	Westbound	14.5	18.0	20.7	19.1	19.8	20.7	16.5	16.5
	Total	23.0	28.6	32.8	29.2	31.5	32.8	30.0	30.0
-East of DeKalb St.	Eastbound	11.0	12.9	14.0	14.0	14.0	14.0	12.0	12.0
	Westbound	6.7	7.8	8.5	8.5	8.5	8.5	9.6	9.6
	Total	17.7	20.7	22.5	22.5	22.5	22.5	21.6	21.6

Traffic on Main Street is projected to increase by 3,000-5,700 vehicles over current volumes, resulting in a 16-20 percent increase in traffic. Similarly, Johnson Highway is expected to increase between 3,000-5,600 vehicles per day. Traffic increases on Lafayette Street, Marshall Street, Elm Street, Harding Boulevard and Fornance Street are projected to be in the magnitude of about 1,000-2,500 vehicles per day. Airy Street will experience a slightly higher absolute growth in traffic, between 2,500 and 4,000 daily vehicles. This growth represents a 20-40 percent increase over existing traffic. Most of the other cross streets in the study area will experience minor increases in traffic.

At the Main Street and Markley Street intersection, the Markley Street through movements and the Main Street eastbound right turns will experience moderate increases as compared to current conditions during peak hours.

2. TSM Alternative

Under the TSM alternative, Markley Street, Dekalb Street, Johnson Highway and Main Street will experience a slight increase in traffic as compared to base case conditions. The increases are attributable to the widening of US 202 above Johnson Highway and the TSM improvements along Markley Street between Main Street and Johnson Highway. Other streets in the study area show negligible increases over base case volumes.

Markley Street, south of Johnson Highway, will experience an approximate 2,000 vehicle increase over base volumes, representing a 4-7 percent increase in traffic; north of Johnson Highway (Swede Road), marginal declines are anticipated due to the attraction of the widened Dekalb Pike. Dekalb Street volumes, south of Johnson Highway, will increase by approximately 1,000 vehicles over base case volumes, a 4-8 percent increase in traffic. North of Johnson Highway, Dekalb Pike will experience a 15 percent increase in daily traffic demand due to US 202 widening. Similar growth rates are projected for Johnson Highway in the vicinity of the US 202 section 600 improvement.

Main Street will experience a minor increase in traffic under the TSM alternative, approximately 500 vehicles per day (2-3%), due to motorists using Main Street to access the widened US 202 (Section 600) via Markley Street.

At the Main Street and Markley Street intersection, minor increases are projected in the peak hour turning movements. The largest increase, Markley Street through movements, will

increase by less than 100 vehicles per hour in each direction during the peak periods.

3. Ramp/One-Way Markley Street Alternative

The proposed Dannehower Bridge ramp is projected to carry 2,500 vehicles per day, about 2,200 of them will continue eastward on Lafayette towards Dekalb Street.

Markley Street will experience an overall reduction of traffic, ranging from 2,000 vehicles in the vicinity of Main Street to almost 7,000 vehicles near Fornance Street as compared to base case conditions. Northbound Markley Street will experience a gradual loss of the 11,000 vehicles traversing the segment between Harding Boulevard and Johnson Highway in the Base Case Alternative. Southbound Markley Street will gain 1,500-4,500 vehicles over base case conditions due to the two southbound lanes between Johnson Highway and the Dannehower Bridge, and lack of impedance from northbound traffic.

Diversion patterns from northbound Markley Street can be observed on Figures 10a and 10b. The ramp will divert approximately 2,200 vehicles onto Dekalb Street, Marshall Street eastbound will gain 800 vehicles, Elm Street eastbound will gain 1,400 vehicles, and Harding Boulevard/Johnson Highway, west of Markley Street, will increase between 1,800 to 2,300 vehicles. The grid like street pattern of Norristown provides motorists flexibility to use these streets and other streets not shown on the figure to avoid the one-way section. As can be observed, the diversion of traffic from Markley Street is a gradual process. Comparing this alternative to the base case conditions reveals cumulative increases on Dekalb Street in the northbound direction. Just south of Johnson Highway, the increases are expected to accumulate to about 6,100 vehicles per day over the Base Case conditions.

Main Street is not offered much relief by this alternative. The ramp reduces eastbound traffic just east of Markley Street by approximately 400 vehicles. However, one-way Markley Street forces CBD traffic to use Dekalb Street in lieu of Markley Street thus increasing Main Street traffic near Dekalb Street.

At the Main Street/Markley Street intersection, there will be a moderate decrease in the northbound through movement (100-200 vehicles per hour); however, the southbound through movement will increase by 200-300 vehicles per hour during peak periods. The northbound right turns will decrease by 50-60 vehicles per hour representing a 30-45 percent reduction in that movement as compared to base case turns.

4. Ramp Only Alternative

The proposed Dannehower Bridge ramp is projected to carry 2,300 vehicles per day, about 2,000 of them will continue eastward on Lafayette towards Dekalb Street.

Markley Street, north of Main Street, will experience a slight overall decrease in traffic volumes as compared to the Base Case, approximately 1,000 to 2,000 vehicles per day, or about 2-3 percent of base case volume. Northbound Markley Street traffic will lose 1,100-1,600 vehicles, or about 9-12 percent of base case traffic, largely attributable to the new ramp diverting traffic. However, southbound Markley Street will experience a minor increase over base case conditions, a 200-1,100 vehicle increase in traffic, about 2-7 percent of base case conditions.

Main Street eastbound in Norristown's CBD will experience some minor relief, 200-400 vehicles due to the new ramp diverting some CBD bound traffic to Lafayette Street.

At the Main Street and Markley Street intersection, peak hour southbound through movements will slightly increase over base case conditions due to the widening of US 202 above Norristown. The northbound through movement and the northbound right turn onto Main Street decrease because of the diversion of traffic to Lafayette Street via the proposed ramp.

5. Two-Way Airy Street Alternative

The impact of the Two-Way Airy Street Alternative is largely limited to diverting eastbound traffic from Main and Marshall Streets to Airy Street.

Eastbound Airy Street is projected to carry approximately 3,200 vehicles per day. No changes are expected in westbound Airy Street traffic. Of the 3,200 vehicles projected to use eastbound Airy Street, about 3,000 vehicles will come from eastbound Main Street and 200 vehicles from eastbound Marshall Street. Other east-west movements will experience negligible change.

At the Main Street and Markley Street intersection, the eastbound through movement will experience a substantial decrease in traffic, about 25 percent of base case levels. Markley Street through movements will slightly increase over base case conditions due to the widening of US 202 above Johnson Highway.

6. Two-Way Dekalb Street Alternative

Due to the addition of a southbound travel lane and corresponding loss of a northbound travel lane on Dekalb Street through the Borough, there will be a redistribution of traffic demand between Markley Street and Dekalb Street. Generally, the redistribution will lead to more balanced traffic demand between both arteries.

Markley Street, north of Main Street, will experience two-way traffic reductions between 700-3,200 vehicles per day, if compared with the Base Case due to improved access via Dekalb Street. The southbound direction's heavier losses of 1,400-4,400 vehicles will be offset by northbound traffic volume increases of 1,200 to 3,800 vehicles.

Dekalb Street's increase in total volume ranges from 5,000-10,000 vehicles per day, about 50-75 percent over the base. Southbound volume between Johnson Highway and Lafayette Street will range between 6,500 and 9,500 daily vehicles. These increases outstrip northbound's particularly in the northern study area. As a new, convenient southbound entry route to the Borough has been "added" by converting Dekalb Street to two-way operation, traffic is diverted from existing southbound paths.

On the southern end of the study area Dekalb Street northbound traffic declines approximately 2,300 vehicles as a consequence of the reduced capacity along the route. As an alternate, traffic will find it more convenient to divert to Markley Street northbound to gain access to the Norristown CBD, via Main Street eastbound (plus 2,200-3,200 vehicles compared to the base), and/or through the Borough, via Markley Street northbound (1700 added vehicles north of Marshall Street) and Marshall Street eastbound (plus 1,200 vehicles east of Markley Street). Marshall Street westbound in the same section will be impacted by a similar volume due to the improved accessibility from Dekalb Street.

Johnson Highway, between Markley Street and Dekalb Street will have offsetting traffic volume effects. Eastbound is projected to rise by about 2,900 vehicles due to the US 202 section 600 improvement and access to southbound Dekalb Street. Westbound will decline 1,500 vehicles due to more direct southbound service via Dekalb Street.

7. Ramp/Two-Way Dekalb Street Alternative

This alternative is identical in projected traffic volumes with the preceding alternative

except from Main Street south -- the immediate vicinity of the area served by the Dannehower Bridge ramp to Lafayette Street. The potential ramp is projected to serve 2,400 vehicles on a daily basis, of which 1,500 will continue eastward across Dekalb Street. Corresponding traffic reductions along Main Street eastbound, east of Markley Street, will result if comparison is made to the previous alternative. Other network traffic volumes are essentially the same as the two-way Dekalb Street alternative.

8. Peak Hour Turning Movements

Future AM and PM peak hour turning movements for the intersections studied are presented in this section. Peak hour turns for the Base Case Alternative are presented in Figures A4a-A6, the TSM Alternative turning movements are presented in Figures A7a-A8b, Figures A9a-A10b display Ramp/One-Way Markley Street Alternative turns, Ramp Only Alternative turns are shown on Figures A11a-A12b, Two-Way Airy Street Alternative is presented in Figures A13a-A15, peak turning movement traffic volumes for the Two-Way Dekalb Street Alternative are shown on Figures A16a-A17b, and; the Ramp/Two-Way Dekalb Street Alternative is shown on Figures A18a-A19b. For each alternative Dekalb Street and Markley Street turning movements are presented on separate figures, turning movements at the Main Street/Airy Street intersection are only presented for Base Case and Two-Way Airy Street Alternatives. On the turning movement figures, the first number for each movement represents the AM turning volume, the second number is the corresponding PM volume.

In summary of the traffic volume consequences contained in the Traffic Analysis section, it is concluded that no single alternative is a panacea for the level of traffic volumes expected to traverse Norristown.

The Base Case Alternative's (alternative 1) projected 2018 traffic volume suggests that traffic growth on the order of 20 to 25 percent over current levels can be expected throughout the borough. These increases will be a direct consequence of ongoing growth in the region, even assuming existing transportation facilities and traffic patterns remain constant within the study influence area.

Similarly, the TSM Alternative (alternative 2) has a global effect on traffic volumes throughout the study area. In this instance, network-wide traffic volumes ranging from 5 to 15 percent above Base Case levels are projected. The increases are attributable to ongoing growth, the widening of US 202 north of Johnson Highway (section 600) and localized traffic improvements at four intersections along Markley Street, from Main Street to Johnson Highway.

The TSM Alternative serves as the base line for the remaining five study alternatives. Each springboards from the TSM's assumed population and traffic improvement conditions with a distinct set of assumed new traffic patterns or other localized traffic improvements. With revised study area traffic patterns and/or localized traffic improvements for each alternative, traffic volume changes within the study area become more readily associated with individual highway facilities verses the study area as an entity. Very often, changes which occur along one facility are offset in another part of the study area.

The Ramp/One-Way Markley Street Alternative (alternative 3) has the greatest traffic volume reductive effect along Markley Street. Corresponding traffic volume increases are noted along Dekalb Street, Harding Boulevard and Lafayette Street. Secondary increases are expected on Elm Street and Marshall Street as northbound traffic seeks alternate paths through the network. The potential ramp will serve approximately 2,500 vehicles per day.

The Ramp Only Alternative (alternative 4) will result in 2,300 vehicles per day on the potential ramp. Because there are no additional traffic pattern changes, only minimal reductions are projected along Markley Street. Corresponding increases along Lafayette Street and Dekalb Street will also be small.

As a consequence of eastbound travel being supplemented by Airy Street, between Main Street and Dekalb Street, the Two-Way Airy Street Alternative (alternative 5) results in the greatest traffic volume reductive effect of all the alternatives for Main Street and Marshall Street. The reductive impact on these facilities is greater than the expected results of any of the "ramp" alternatives.

The Two-Way Dekalb Street Alternative (alternative 6) provides a more even traffic volume distribution between Markley Street and Dekalb Street. As a result this alternative affords the second greatest traffic reductive capability for Markley Street. Conversely, there will be a very significant increase along Dekalb Street. Marshall Street also will experience its highest surcharge given this alternative.

The Ramp/Two-Way Dekalb Street Alternative (alternative 7) largely mimics the Two-Way Dekalb Street Alternative except for the portion of Markley Street just below Main Street. Here, the projected ramp volume of 2,400 vehicles also represents the magnitude of traffic reduction anticipated along Main Street.

Clearly, Alternative 3 through Alternative 7 involve trade offs -- which themselves may be offset if combinations of alternatives are considered.

APPENDIX A

CURRENT AND YEAR 2018

PEAK HOUR

TURNING MOVEMENT COUNTS

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Figure A-1a : CURRENT PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

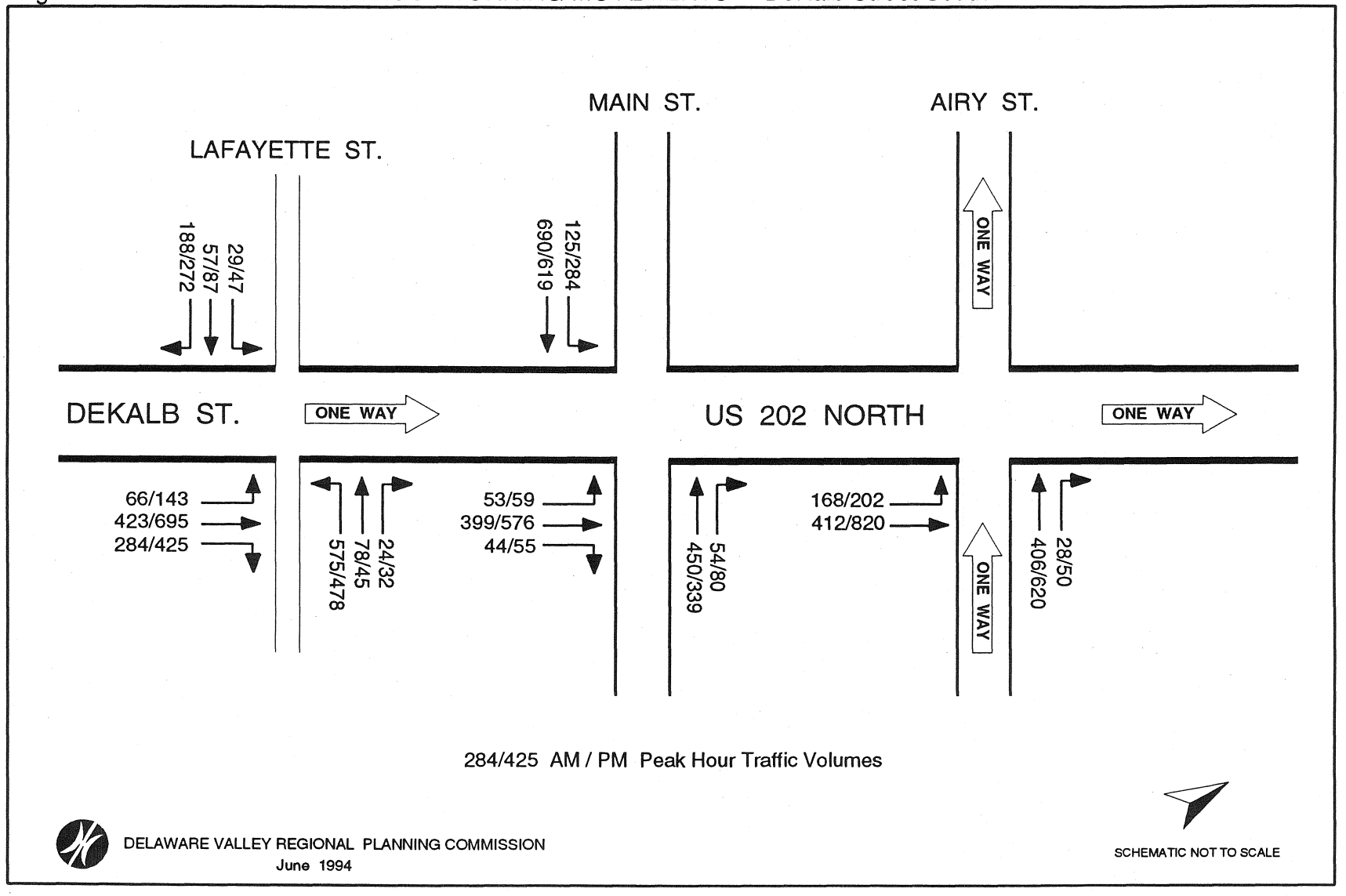


Figure A-1b : CURRENT PEAK HOUR TURNING MOVEMENTS - Dekalb Street North

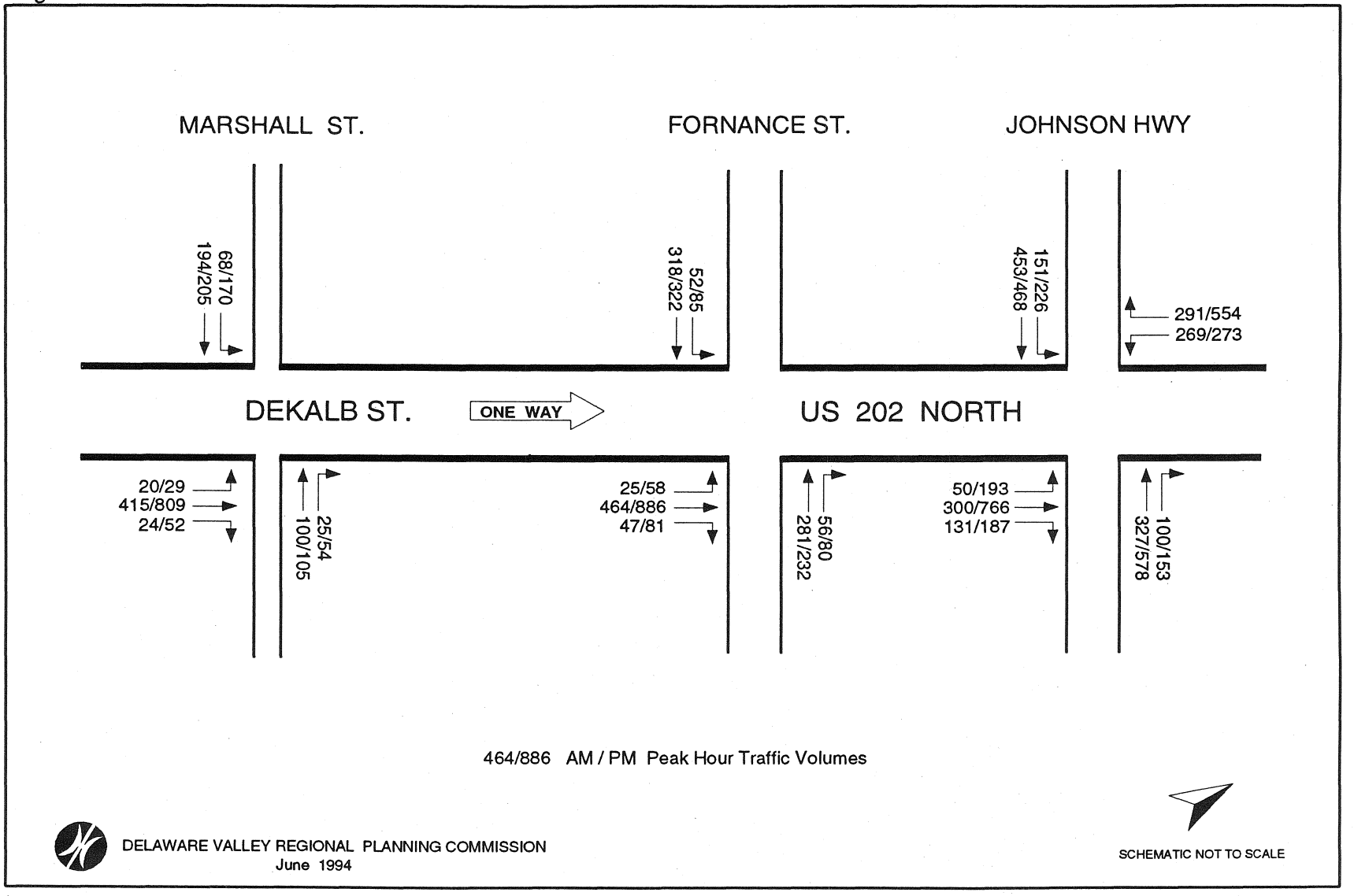


Figure A-1c : CURRENT PEAK HOUR TURNING MOVEMENTS WITH REVISED TRAVEL PATTERN ON AIRY ST.

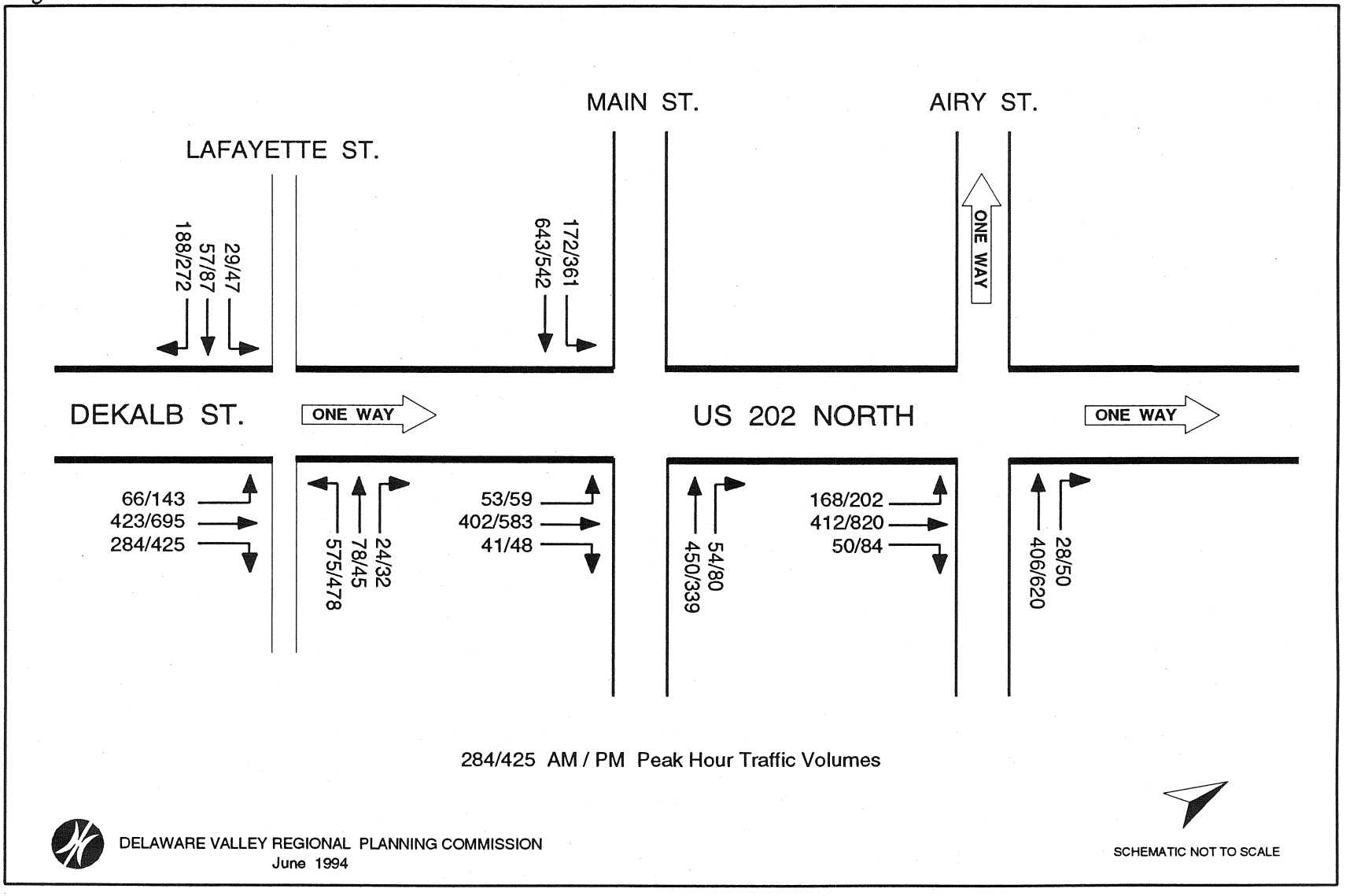
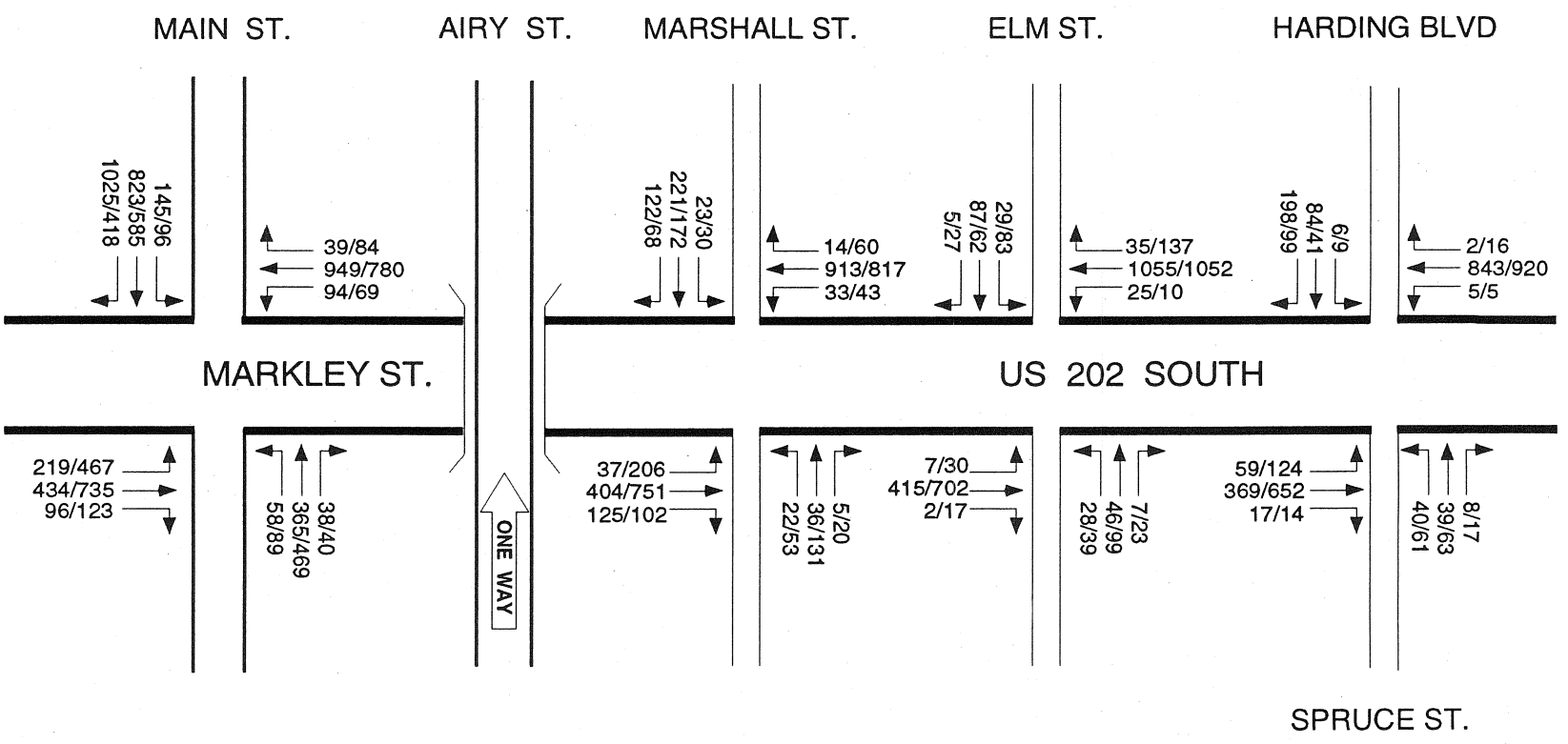


Figure A-2a : CURRENT PEAK HOUR TURNING MOVEMENTS - Markley Street South



125/102 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-2b : CURRENT PEAK HOUR TURNING MOVEMENTS - Markley Street North

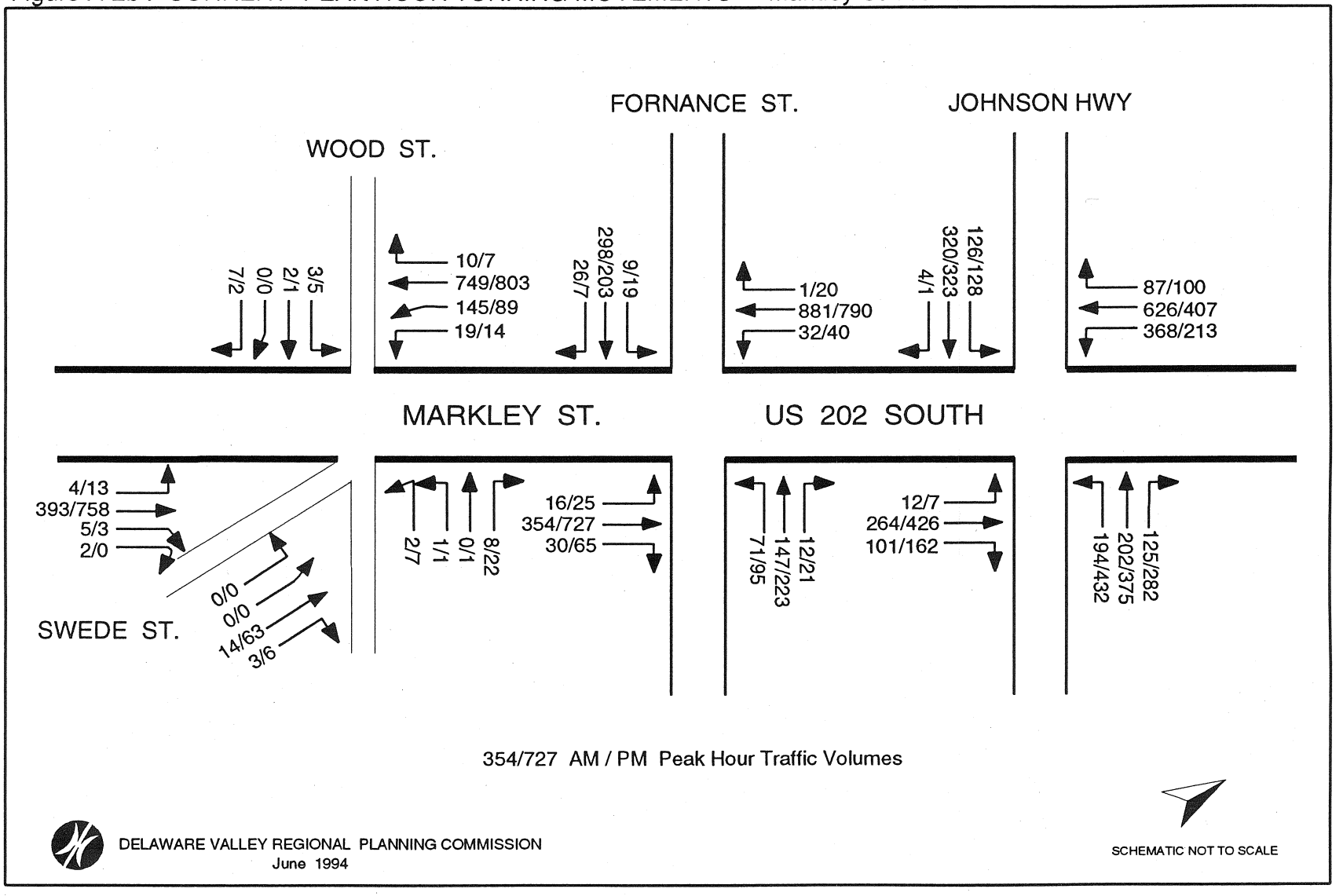


Figure A-3 : CURRENT PEAK HOUR TURNING MOVEMENTS - Main and Airy Streets

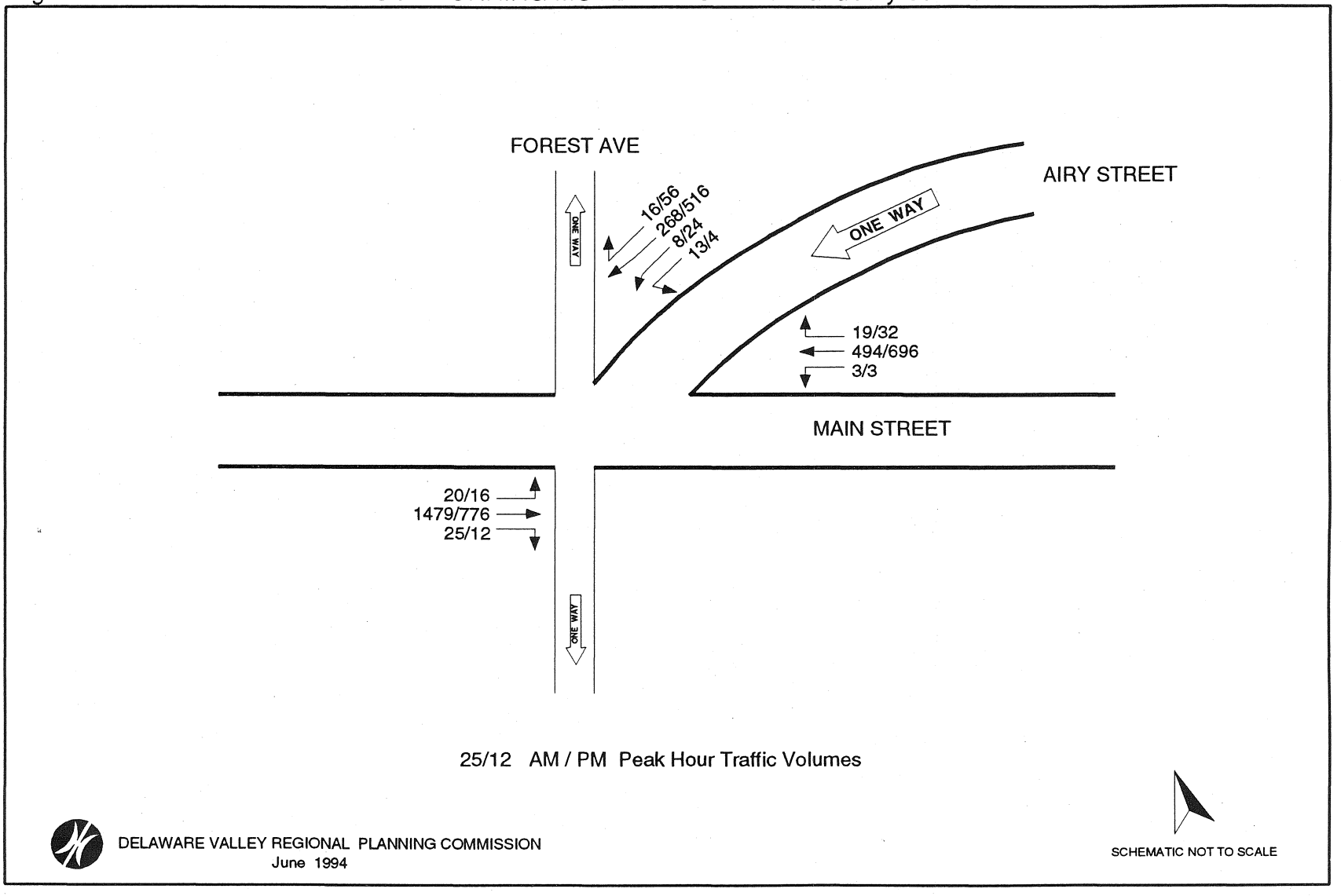


Figure A-4a : 2018 BASE CASE PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

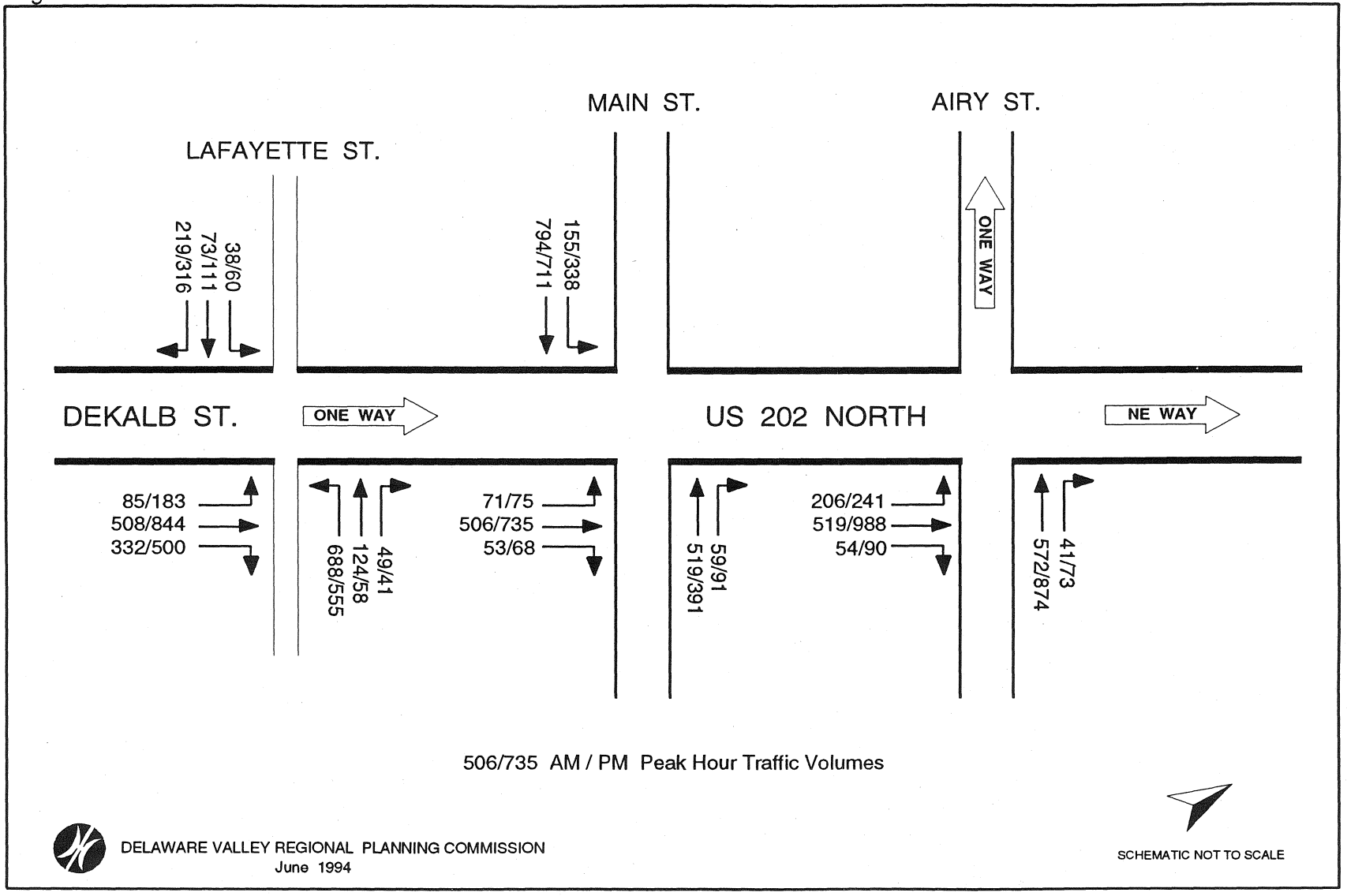


Figure A-4b : 2018 BASE CASE PEAK HOUR TURNING MOVEMENTS - Dekalb Street North

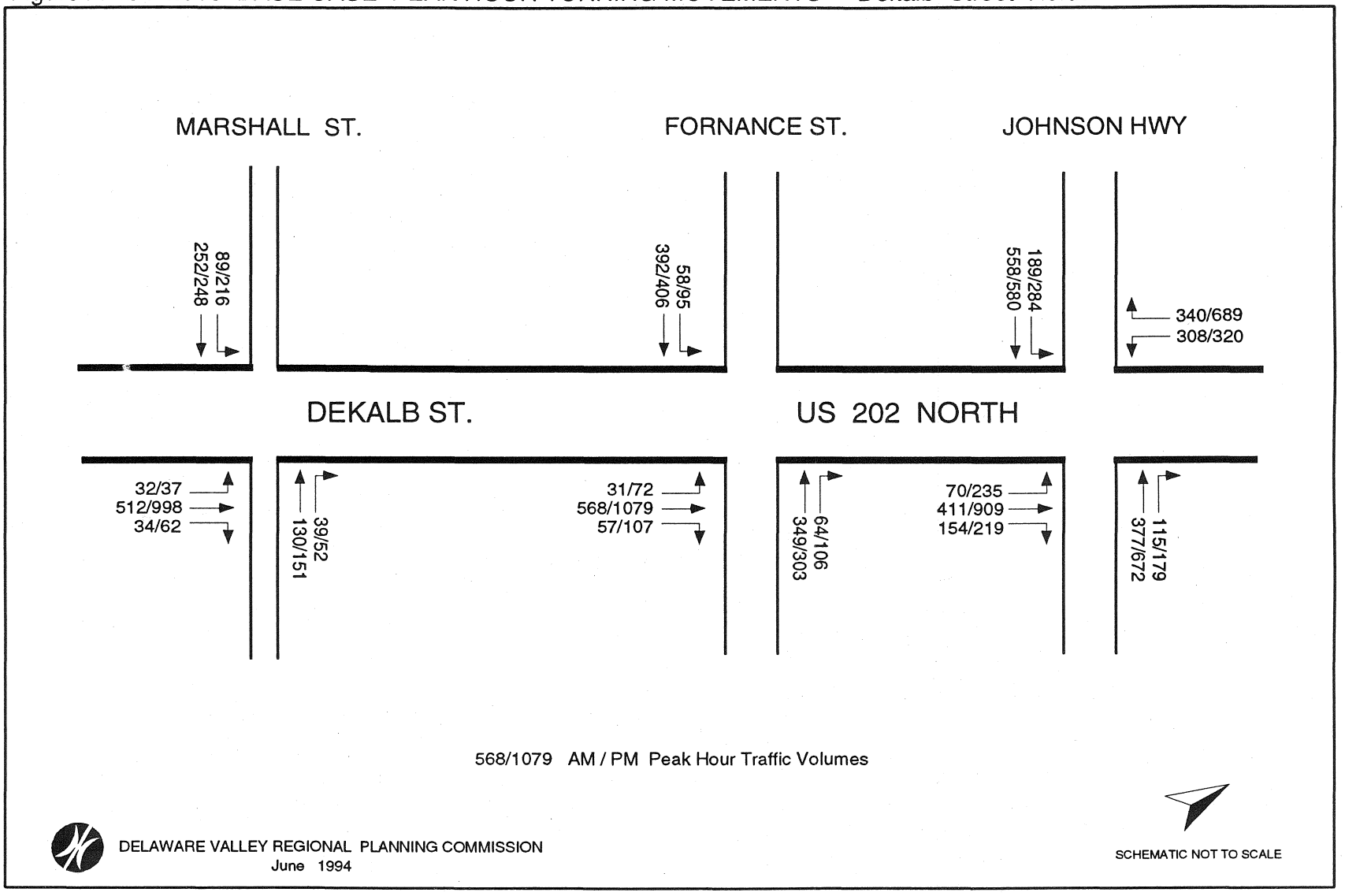


Figure A-5a : 2018 BASE CASE PEAK HOUR TURNING MOVEMENTS - Markley Street South

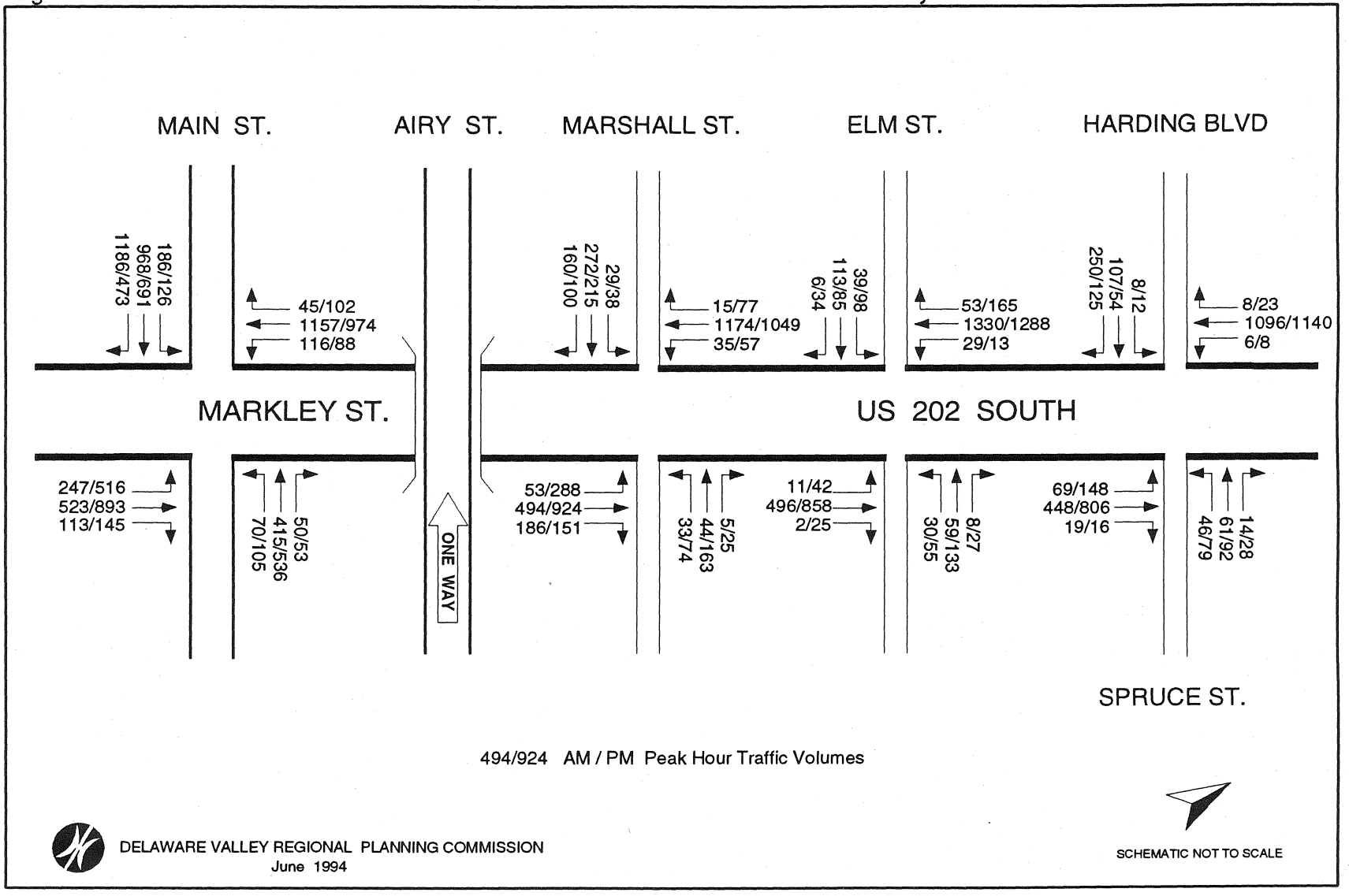


Figure A-5b : 2018 BASE CASE PEAK HOUR TURNING MOVEMENTS - Markley Street North

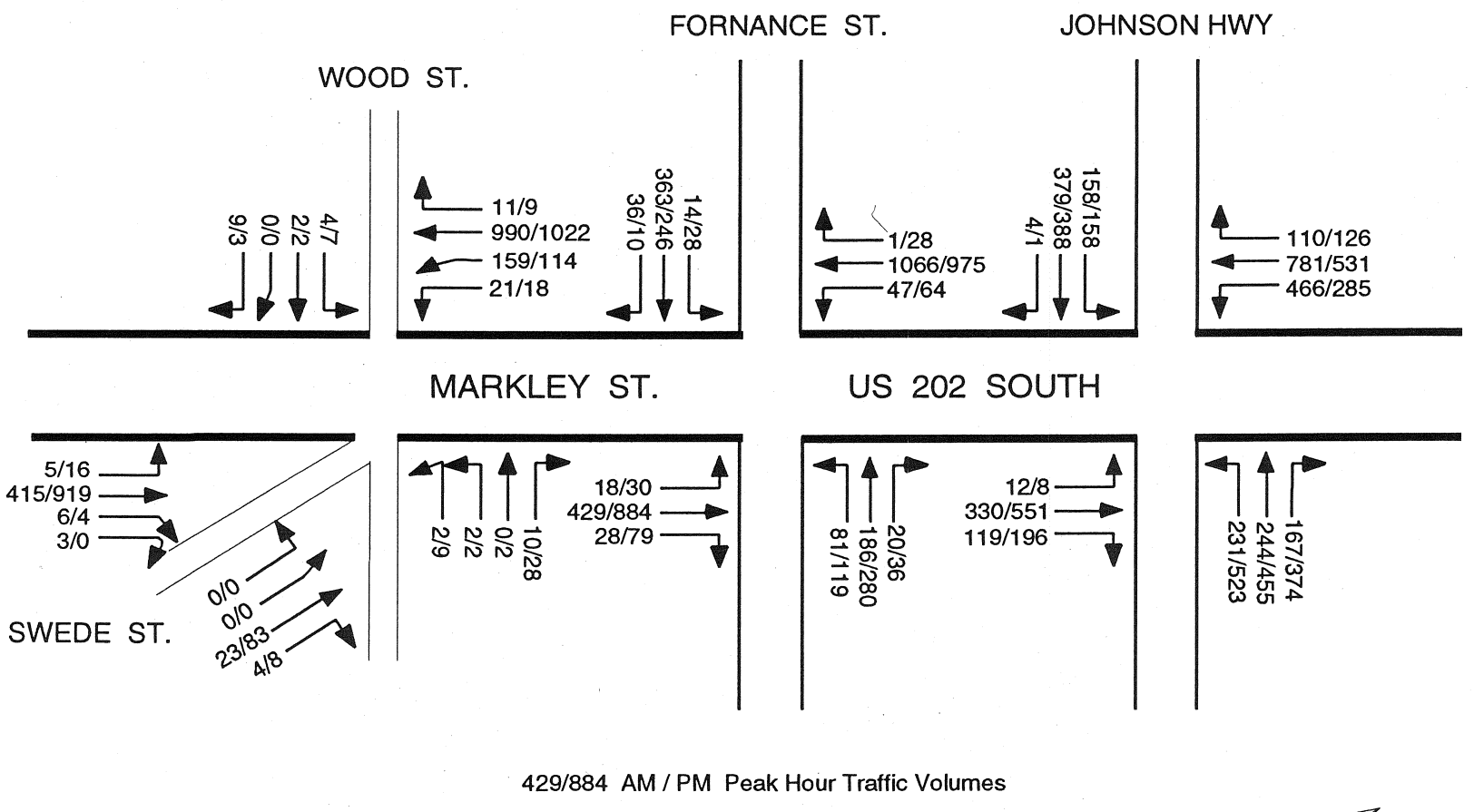
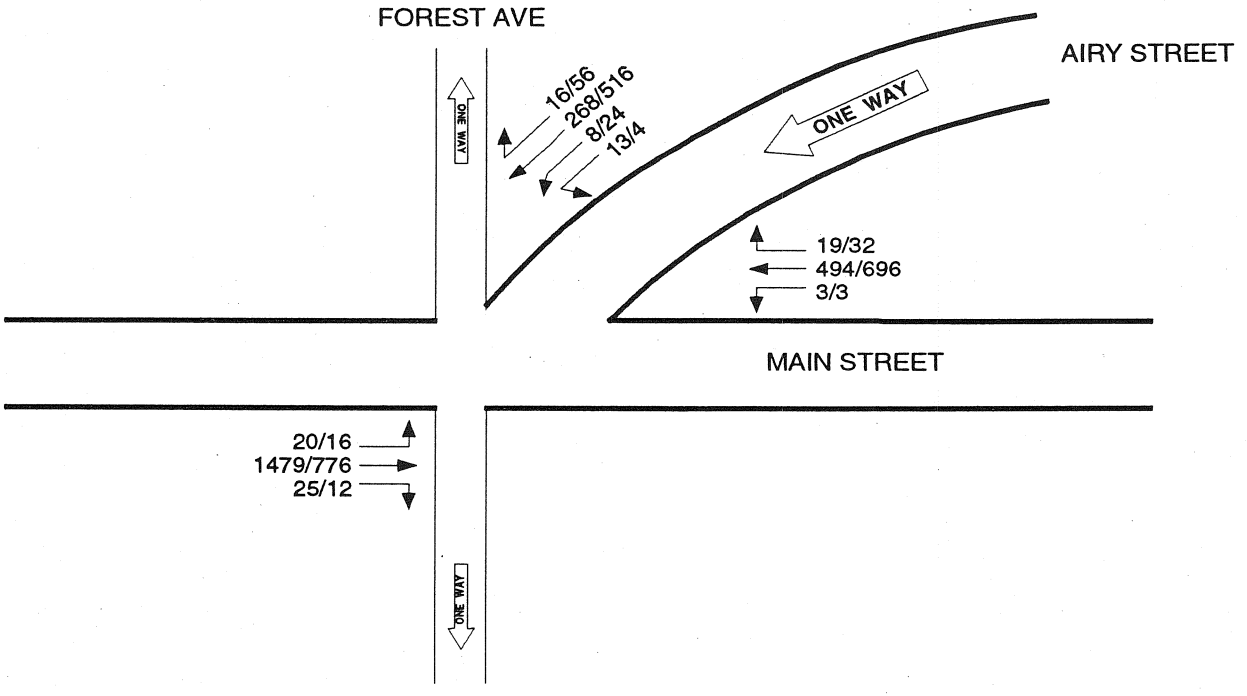


Figure A-6 : 2018 BASE CASE PEAK HOUR TURNING MOVEMENTS - Main and Airy Streets



25/12 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-7a : 2018 TSM ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

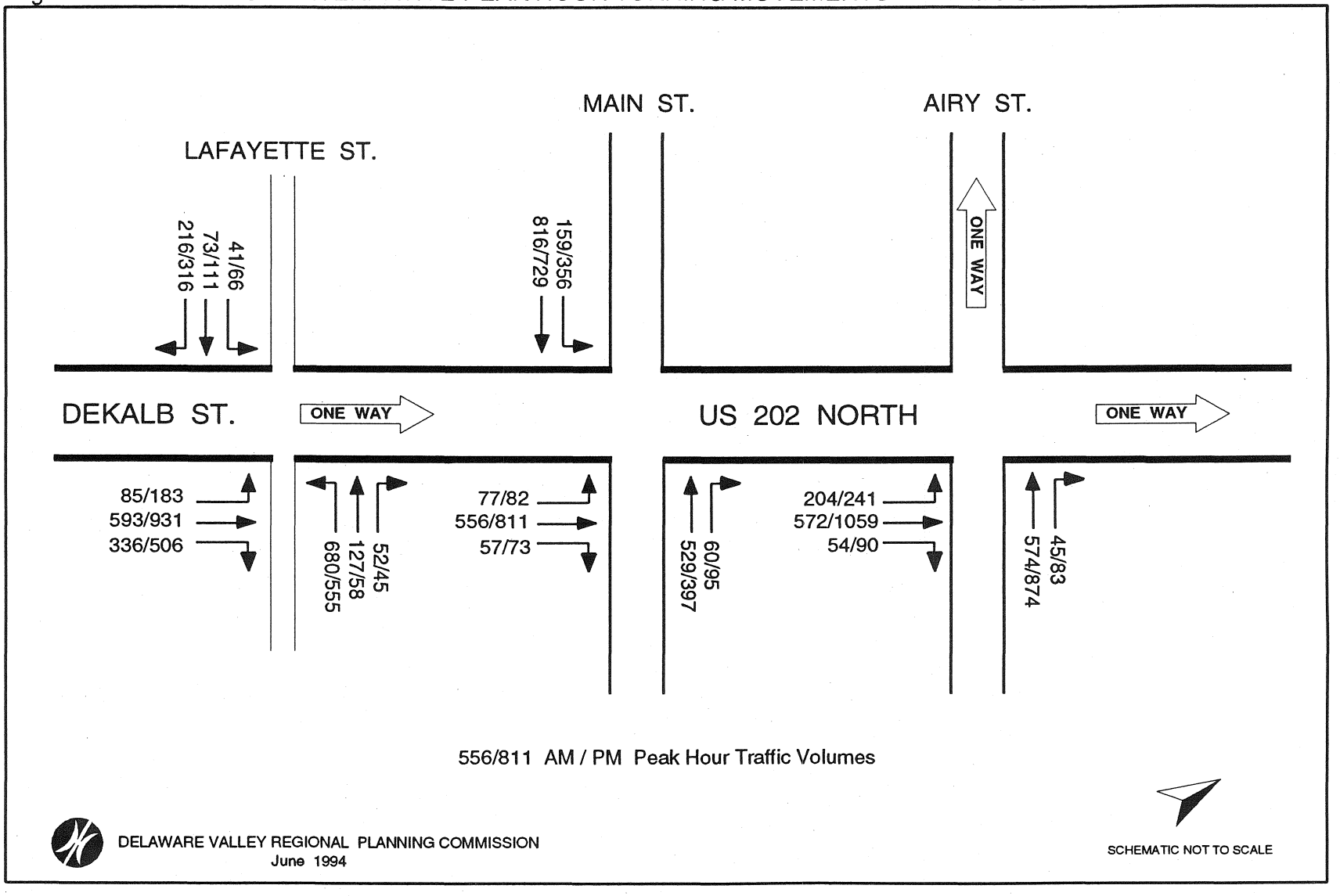
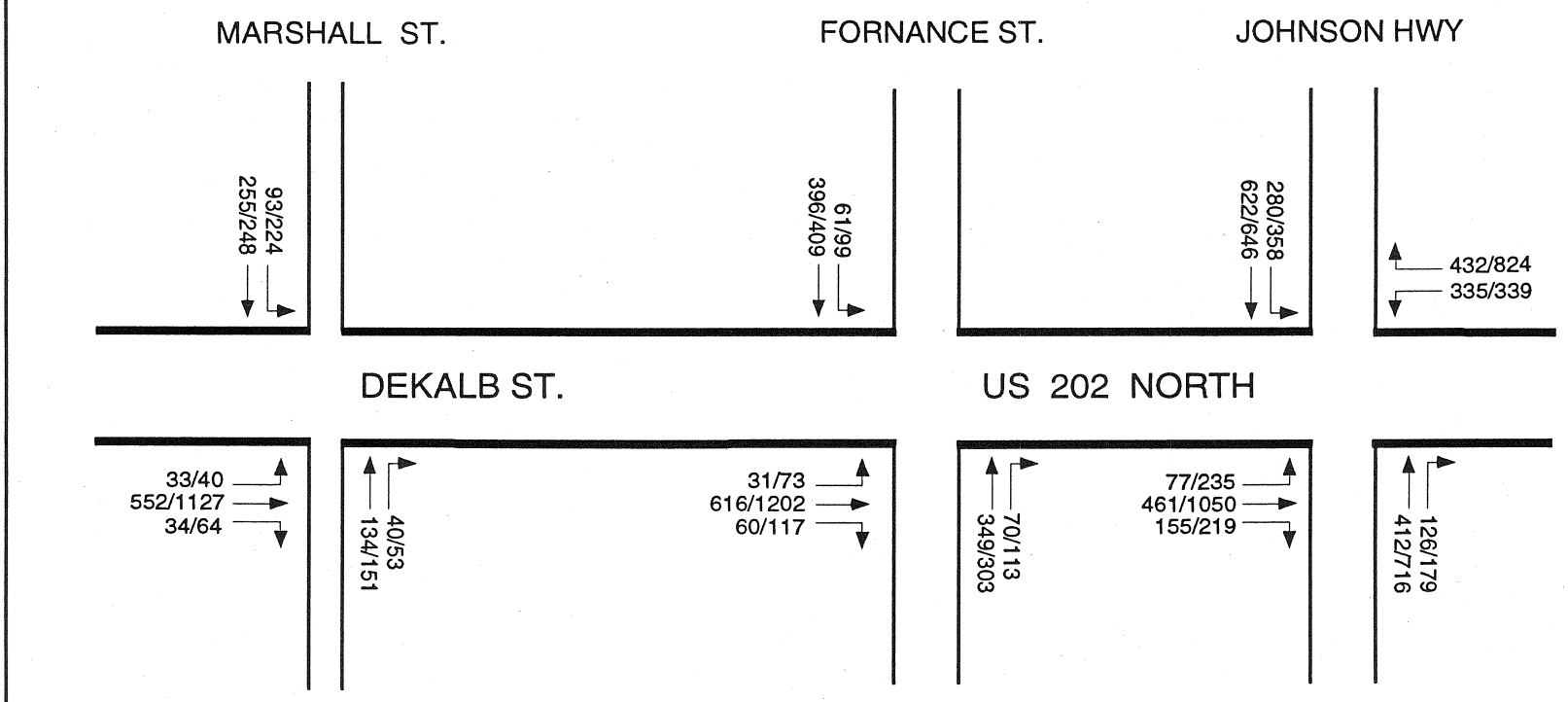


Figure A-7b : 2018 TSM ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Dekalb Street North



616/1202 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-8a : 2018 TSM ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Markley Street South

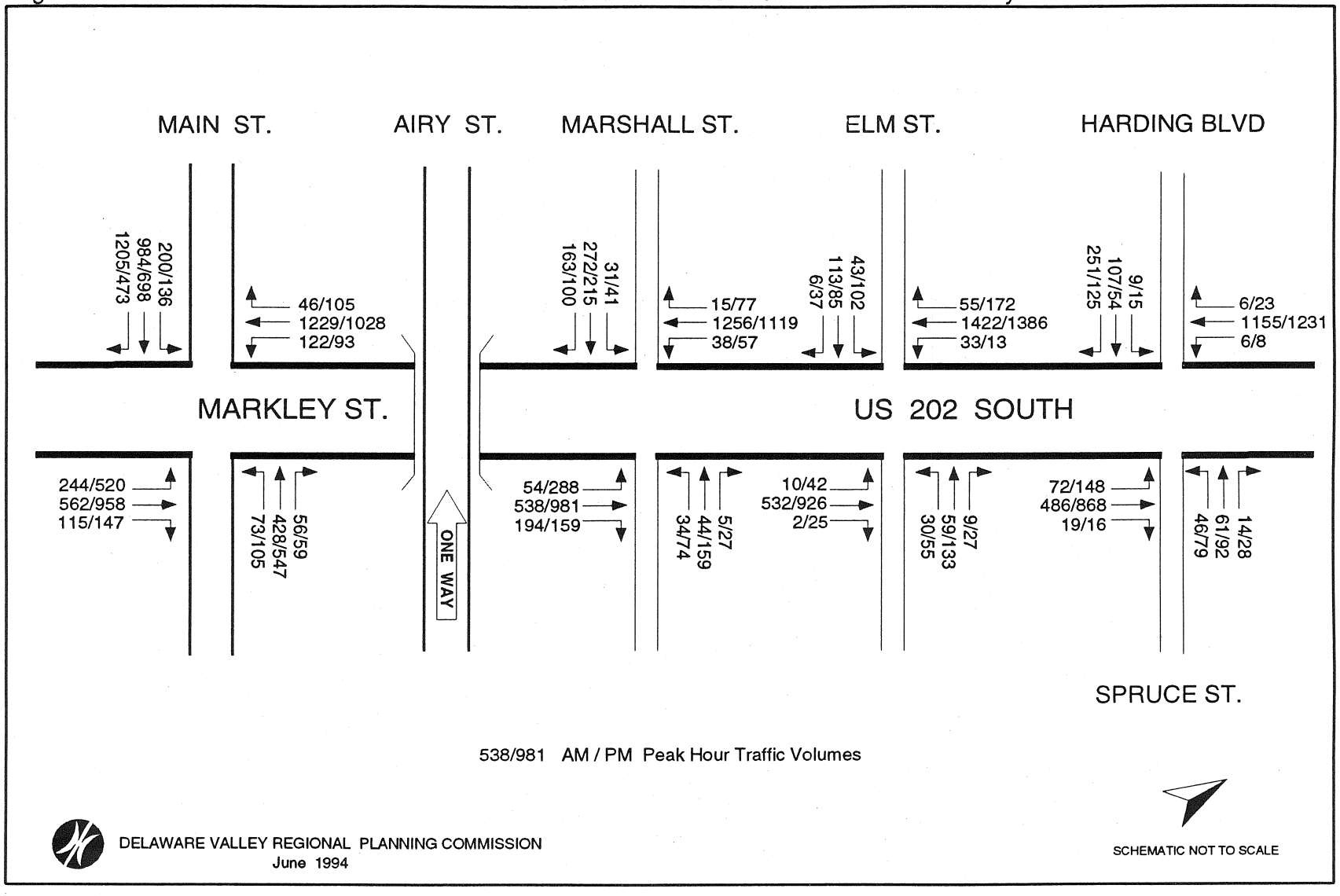


Figure A-8b : 2018 TSM ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Markley Street North

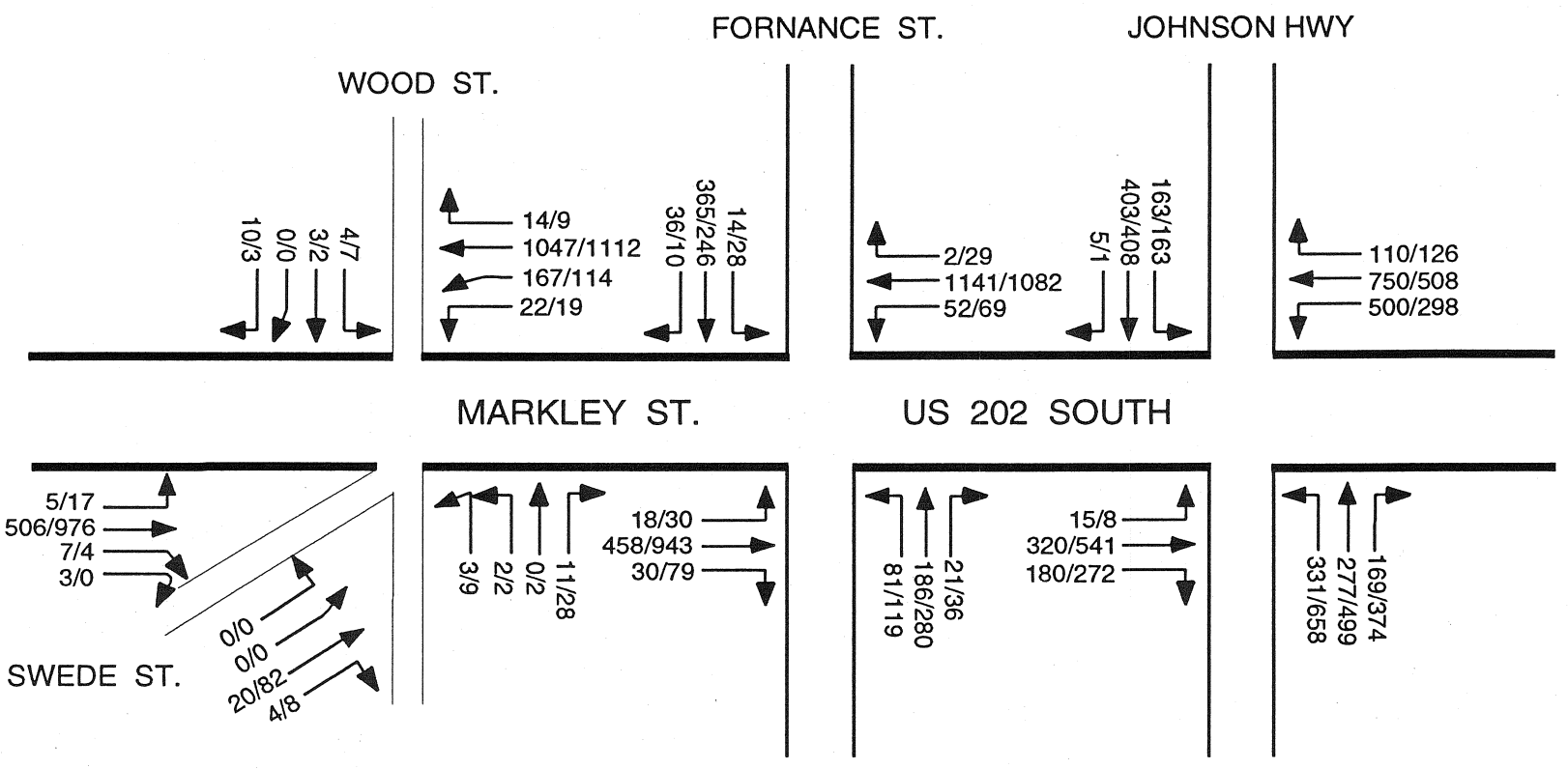


Figure A-9a : 2018 RAMP\ONE-WAY MARKLEY ALT. PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

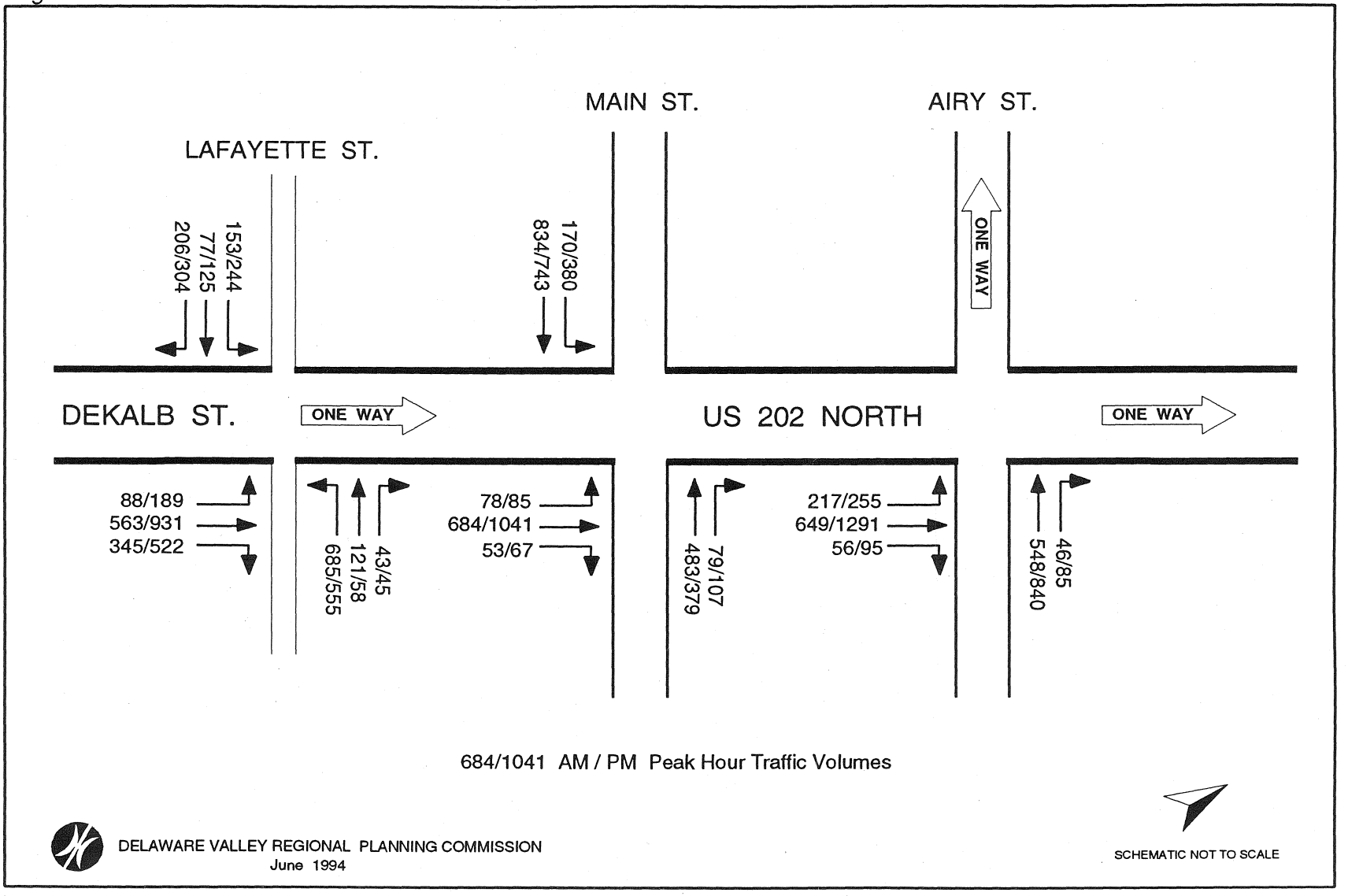
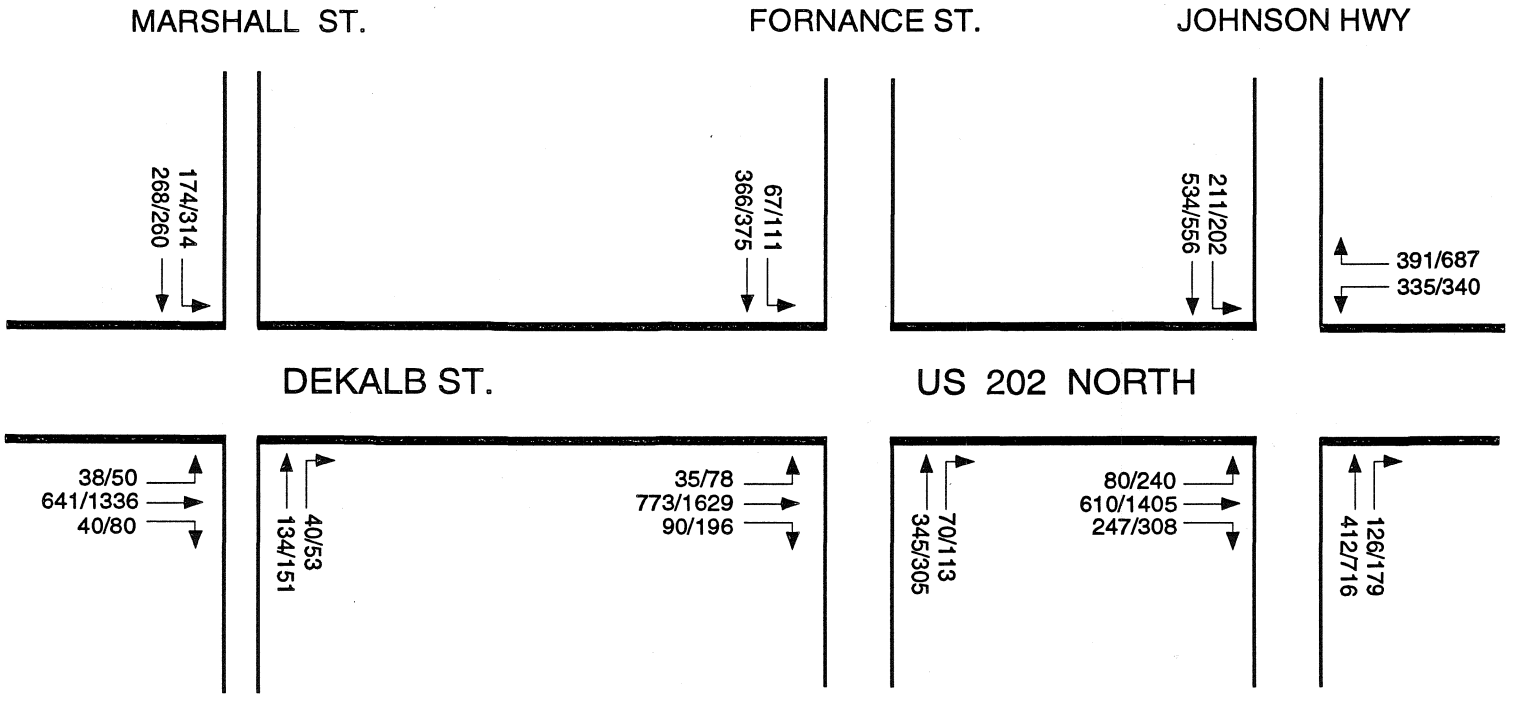


Figure A-9b : 2018 RAMP\ONE-WAY MARKLEY ALT. PEAK HOUR TURNING MOVEMENTS - Dekalb Street North



773/1629 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-10a : 2018 RAMP\ONE-WAY MARKLEY ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street South

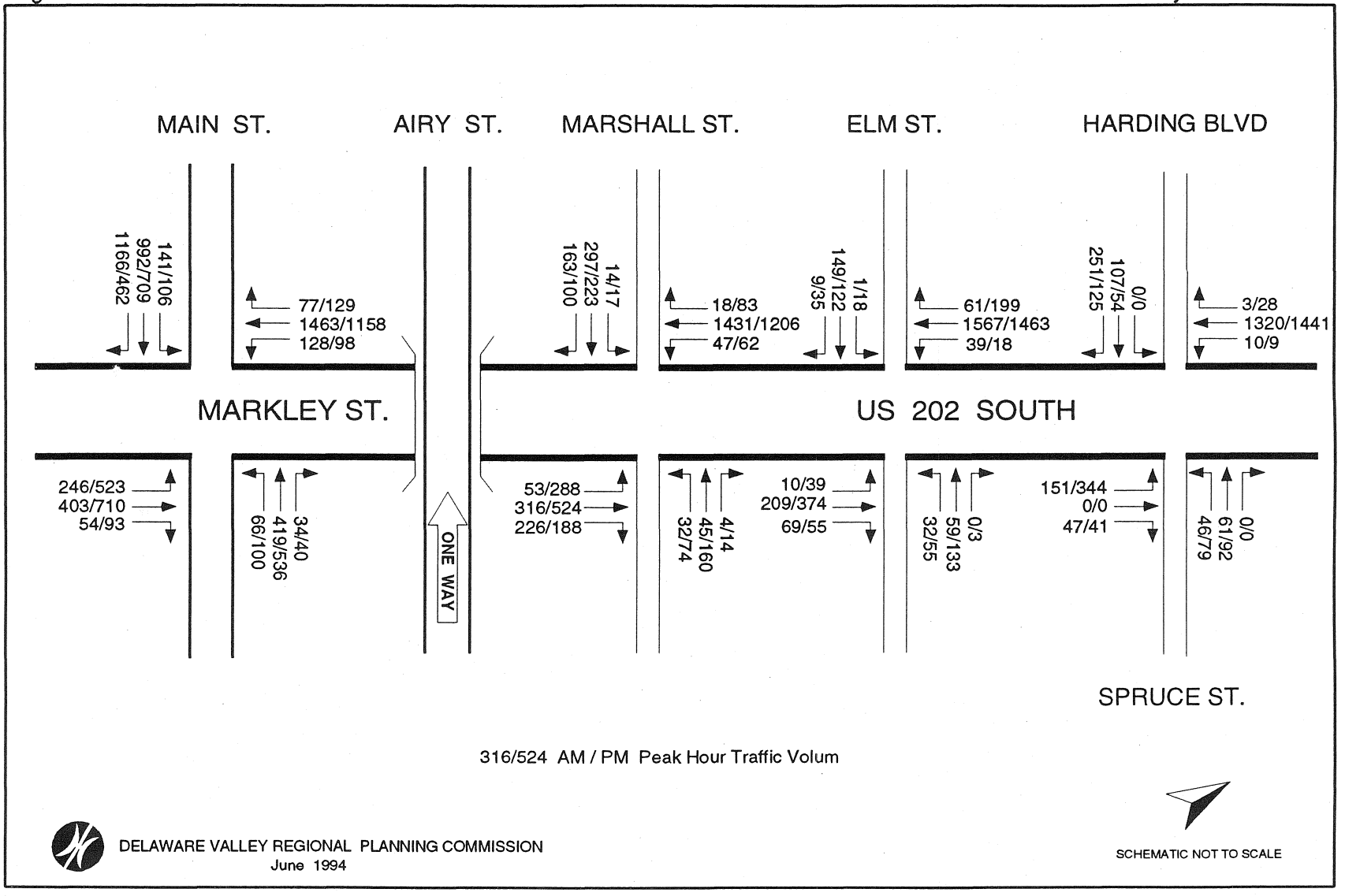


Figure A-10b : 2018 RAMP\ONE-WAY MARKLEY ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street North

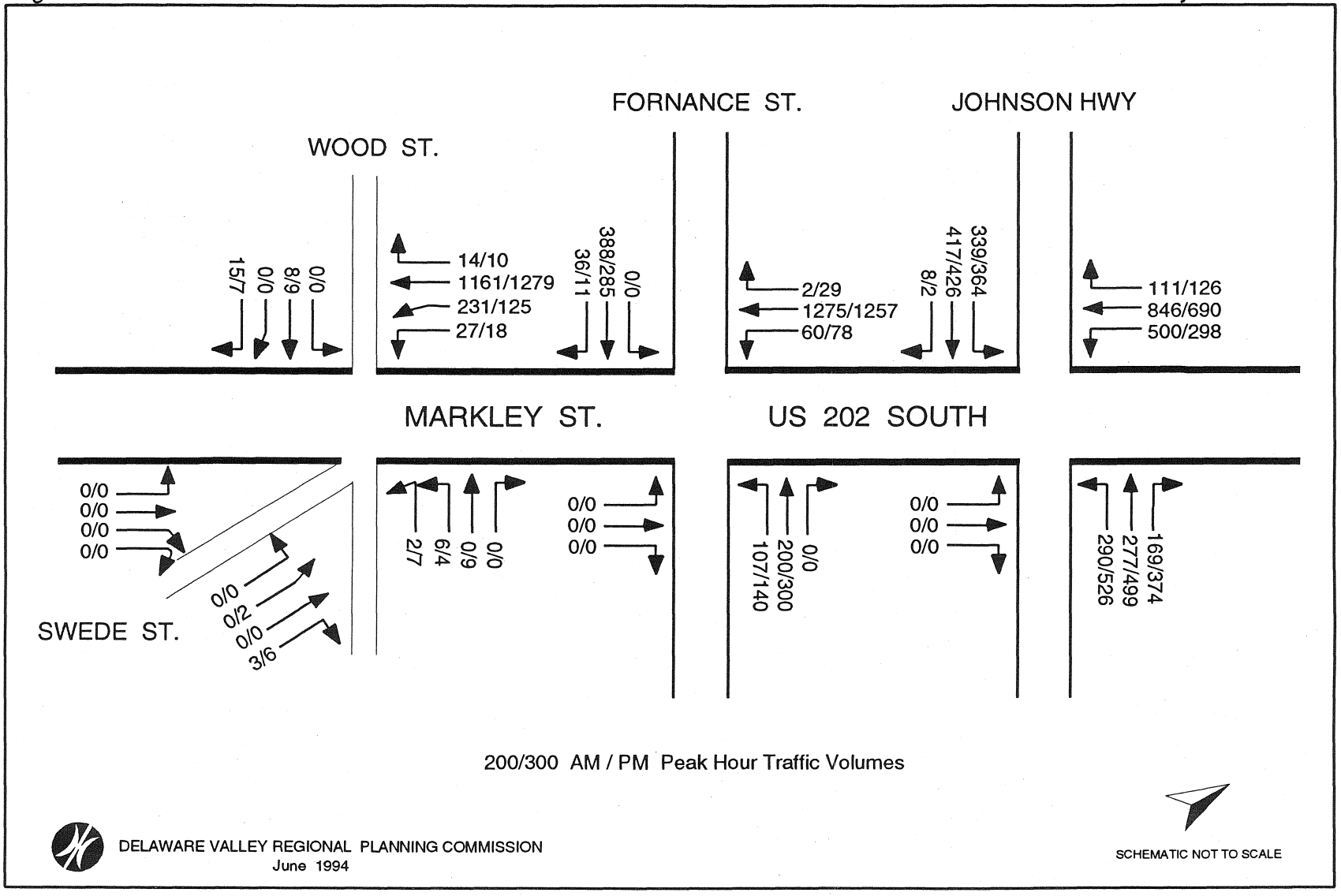


Figure A-11a : 2018 RAMP ONLY ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

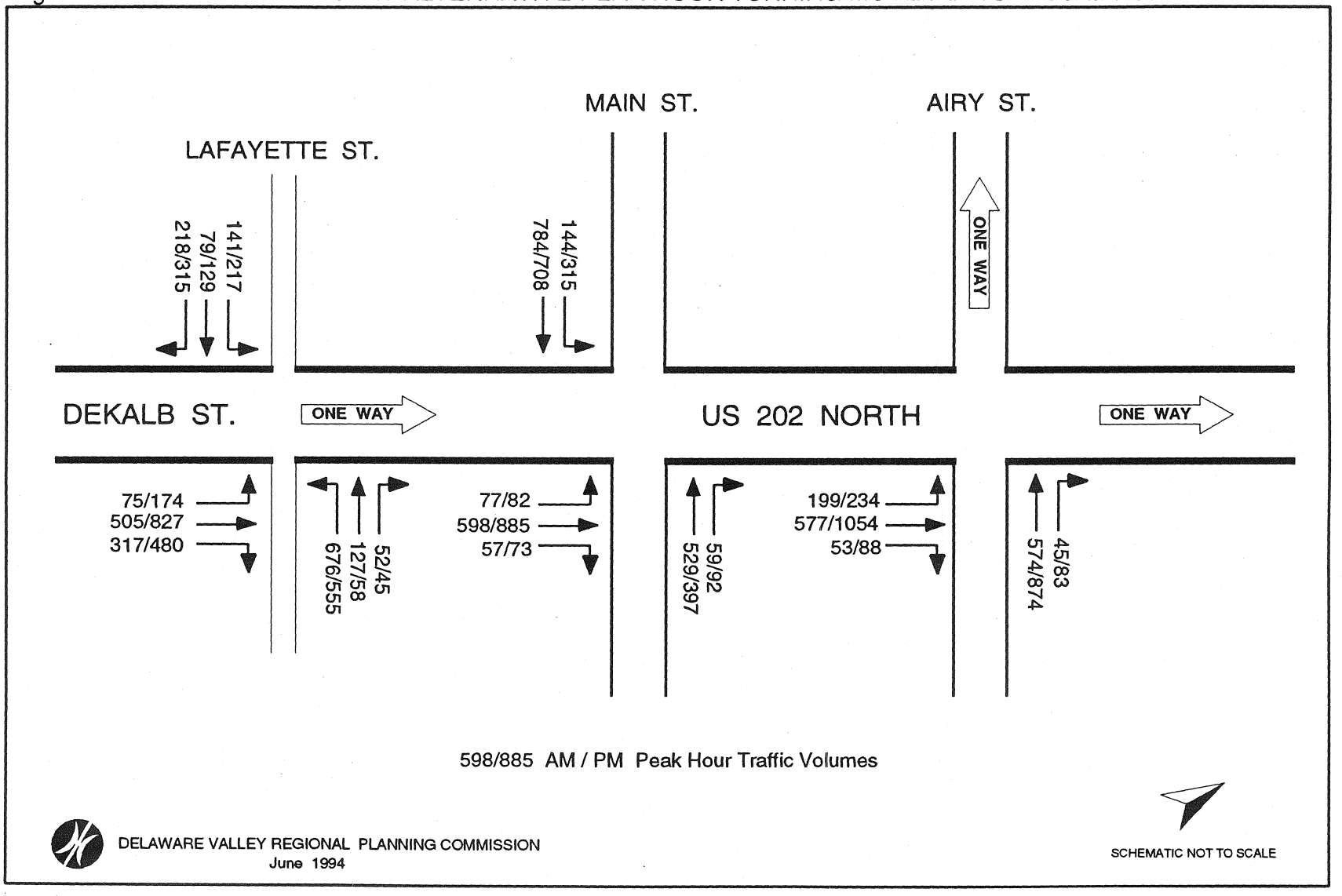
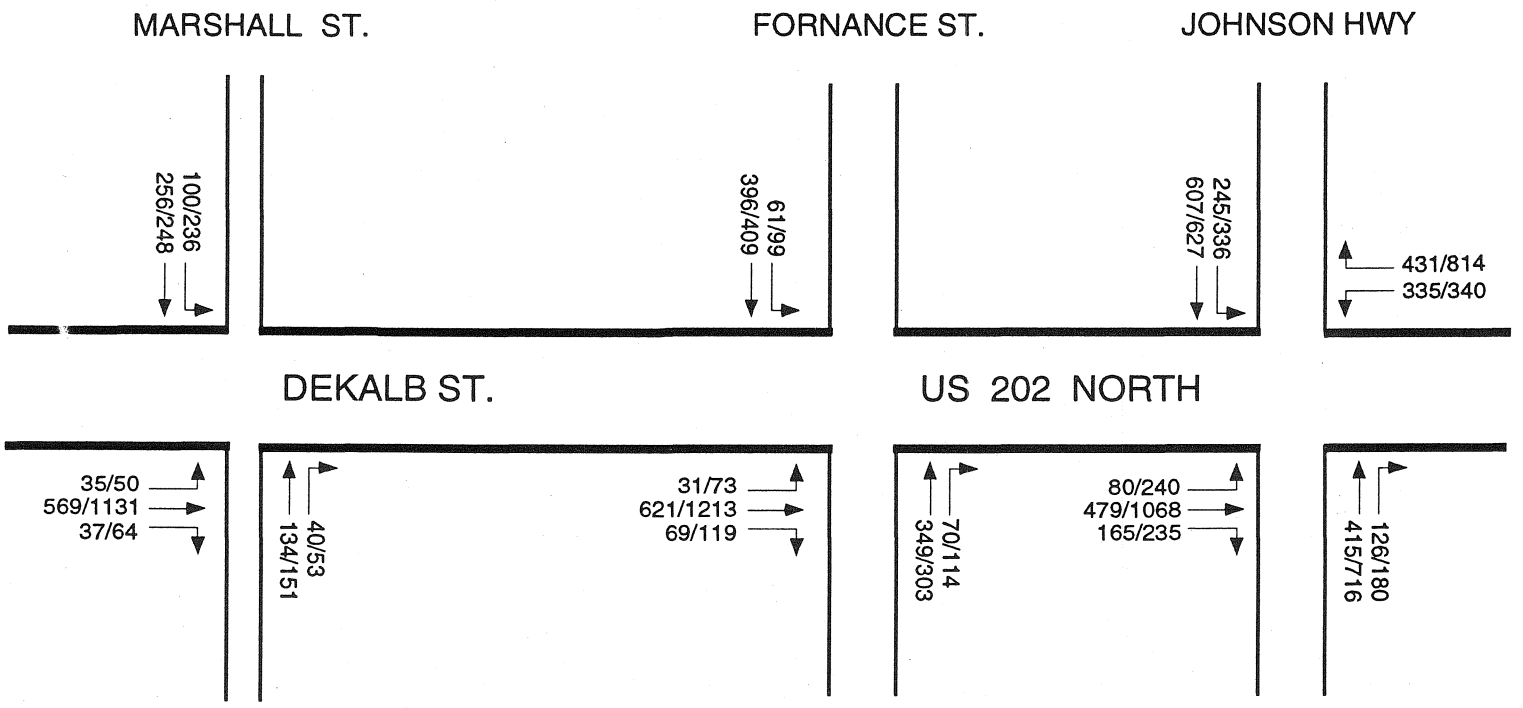


Figure A-11b : 2018 RAMP ONLY ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Dekalb Street North



621/1213 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-12a : 2018 RAMP ONLY ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Markley Street South

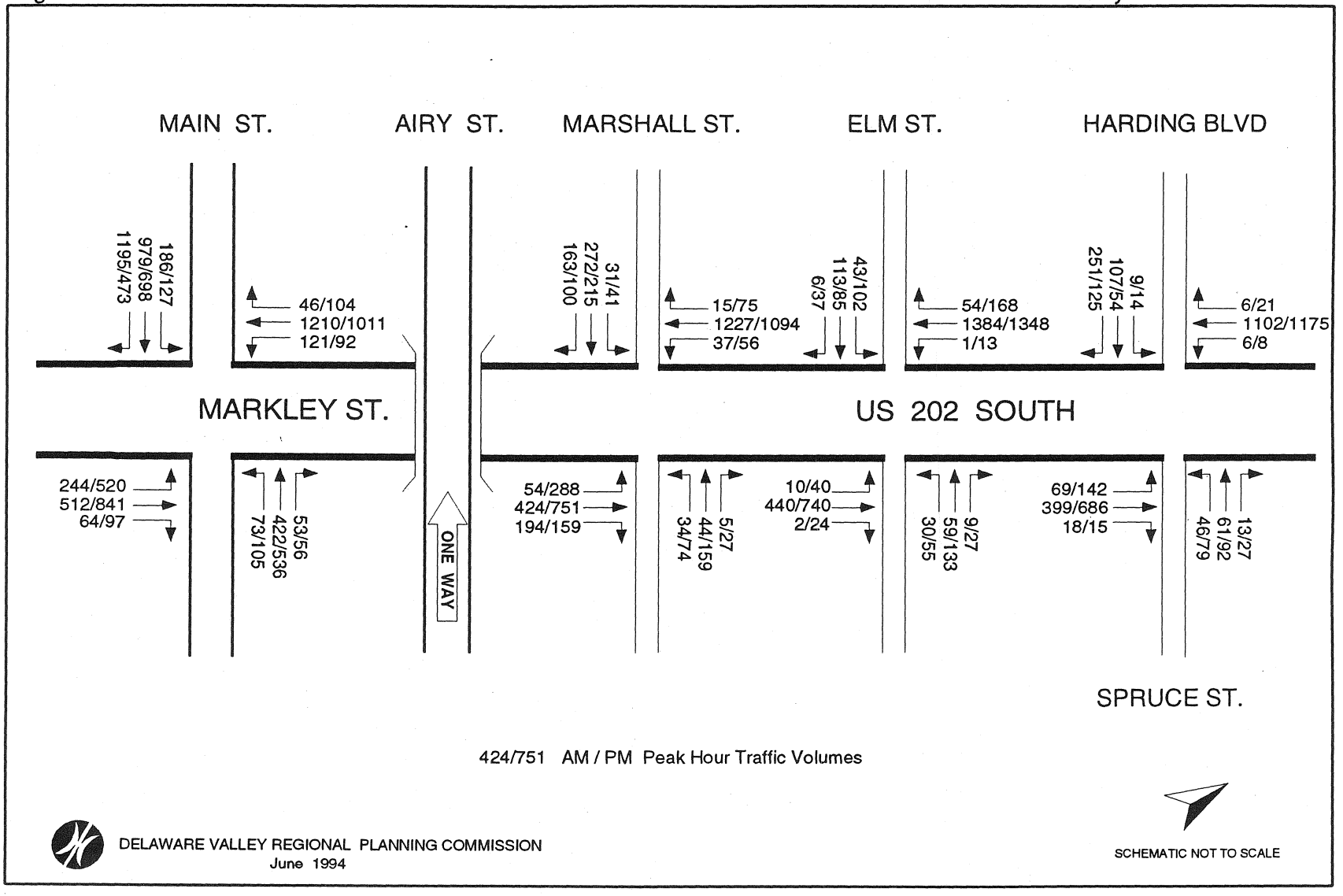


Figure A-12b : 2018 RAMP ONLY ALTERNATIVE PEAK HOUR TURNING MOVEMENTS - Markley Street North

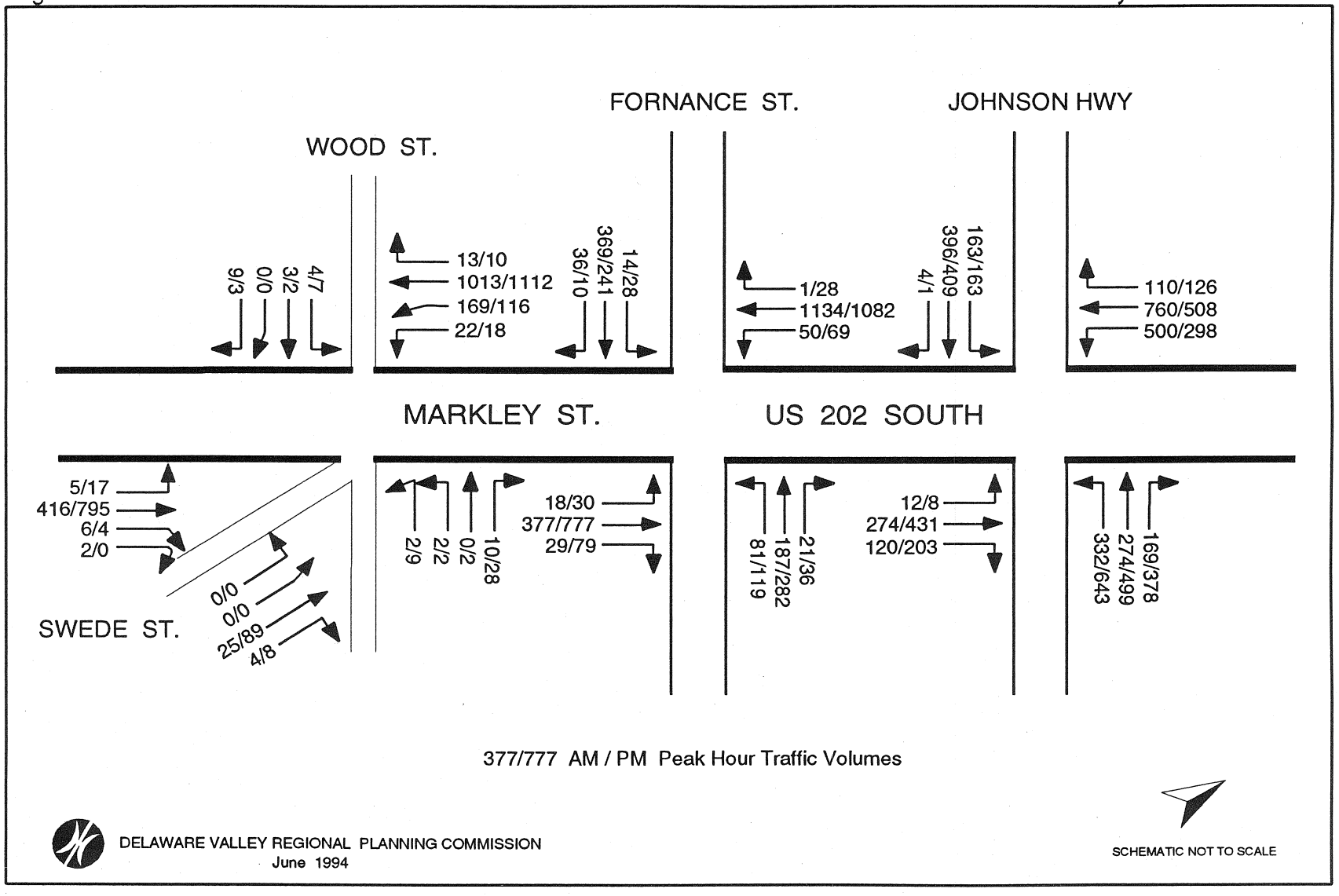


Figure A-13a : 2018 TWO-WAY AIRY STREET ALT. PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

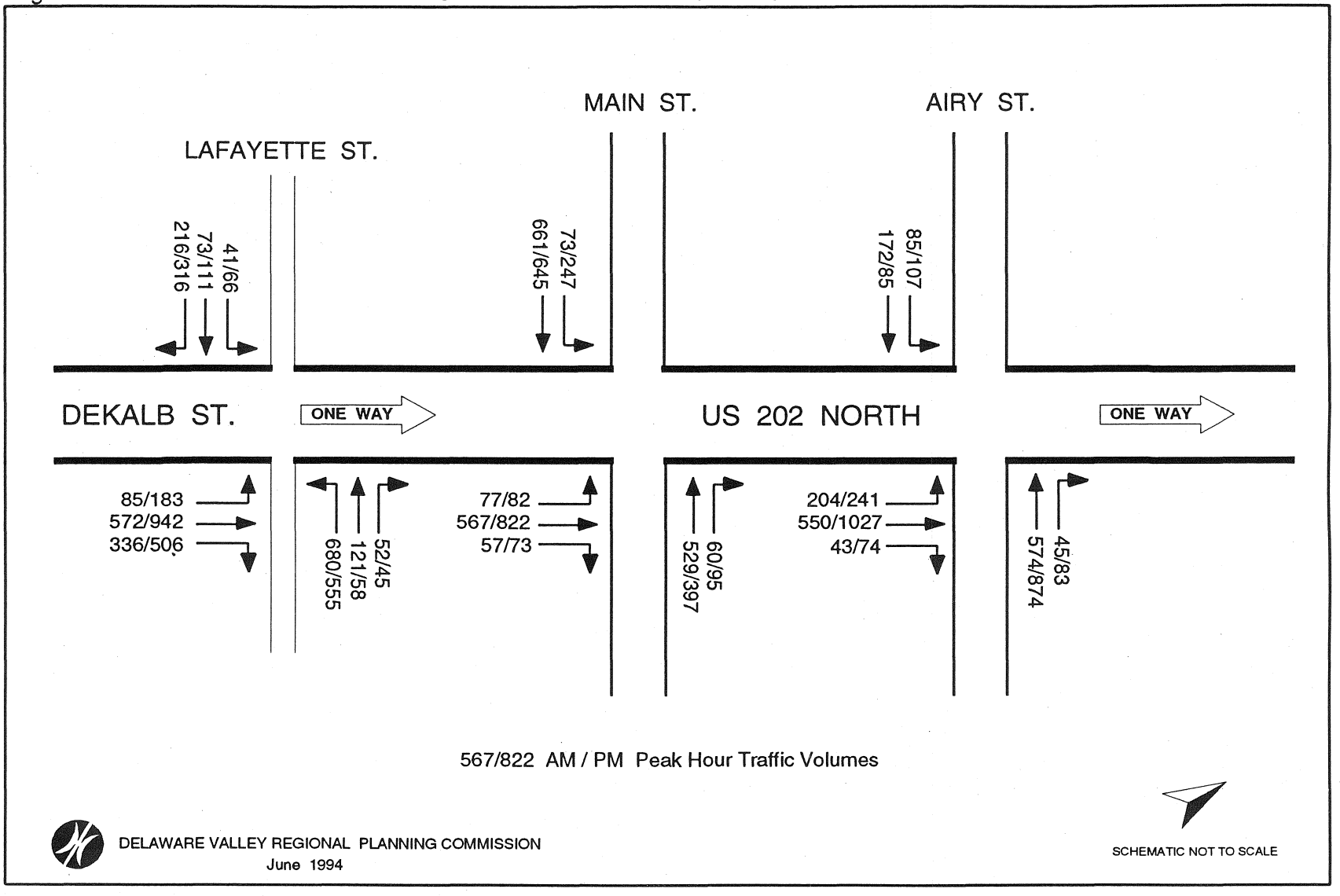


Figure A-13b : 2018 TWO-WAY AIRY STREET ALT. PEAK HOUR TURNING MOVEMENTS - Dekalb Street North

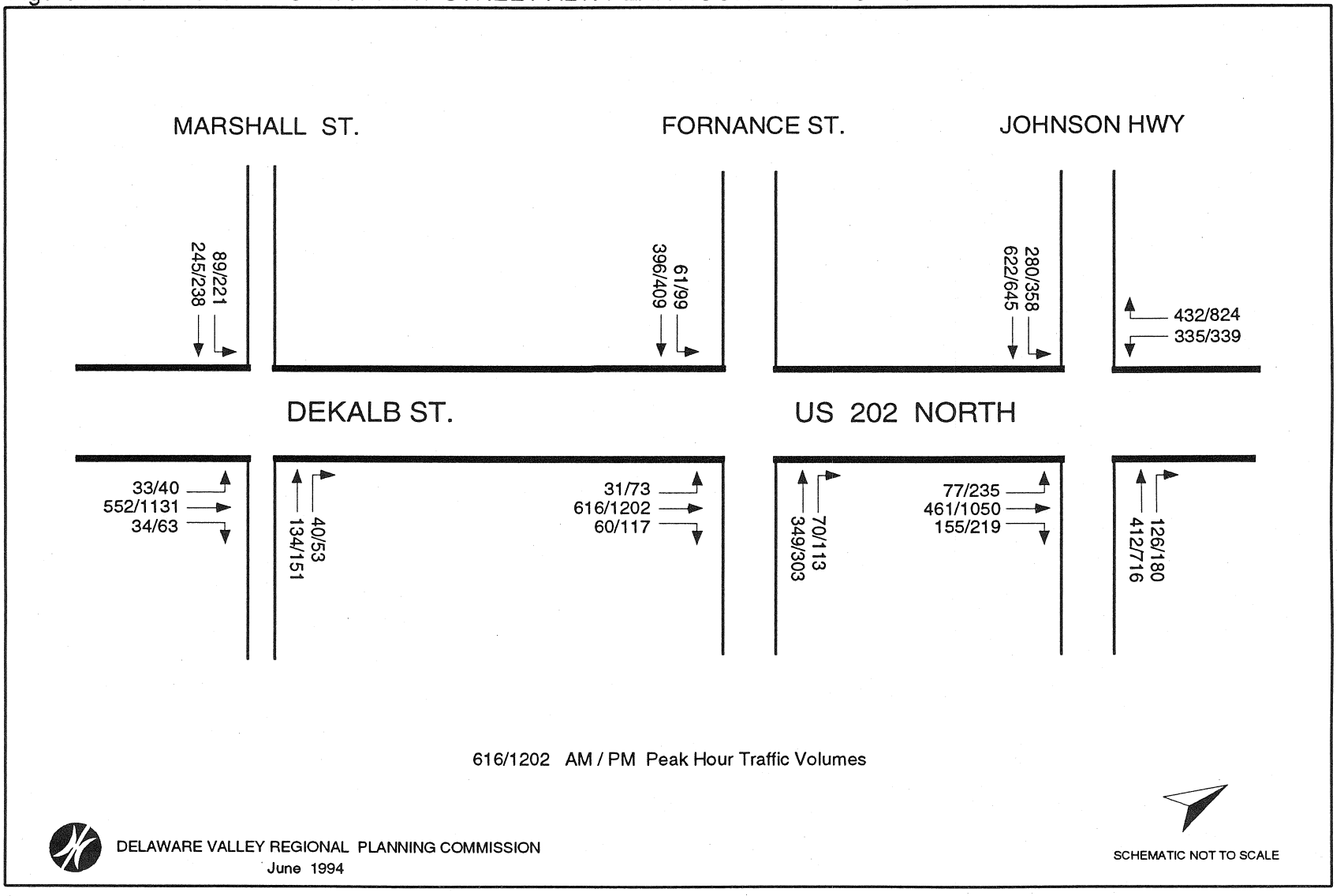


Figure A-14a : 2018 TWO-WAY AIRY STREETALT. PEAK HOUR TURNING MOVEMENTS - Markley Street South

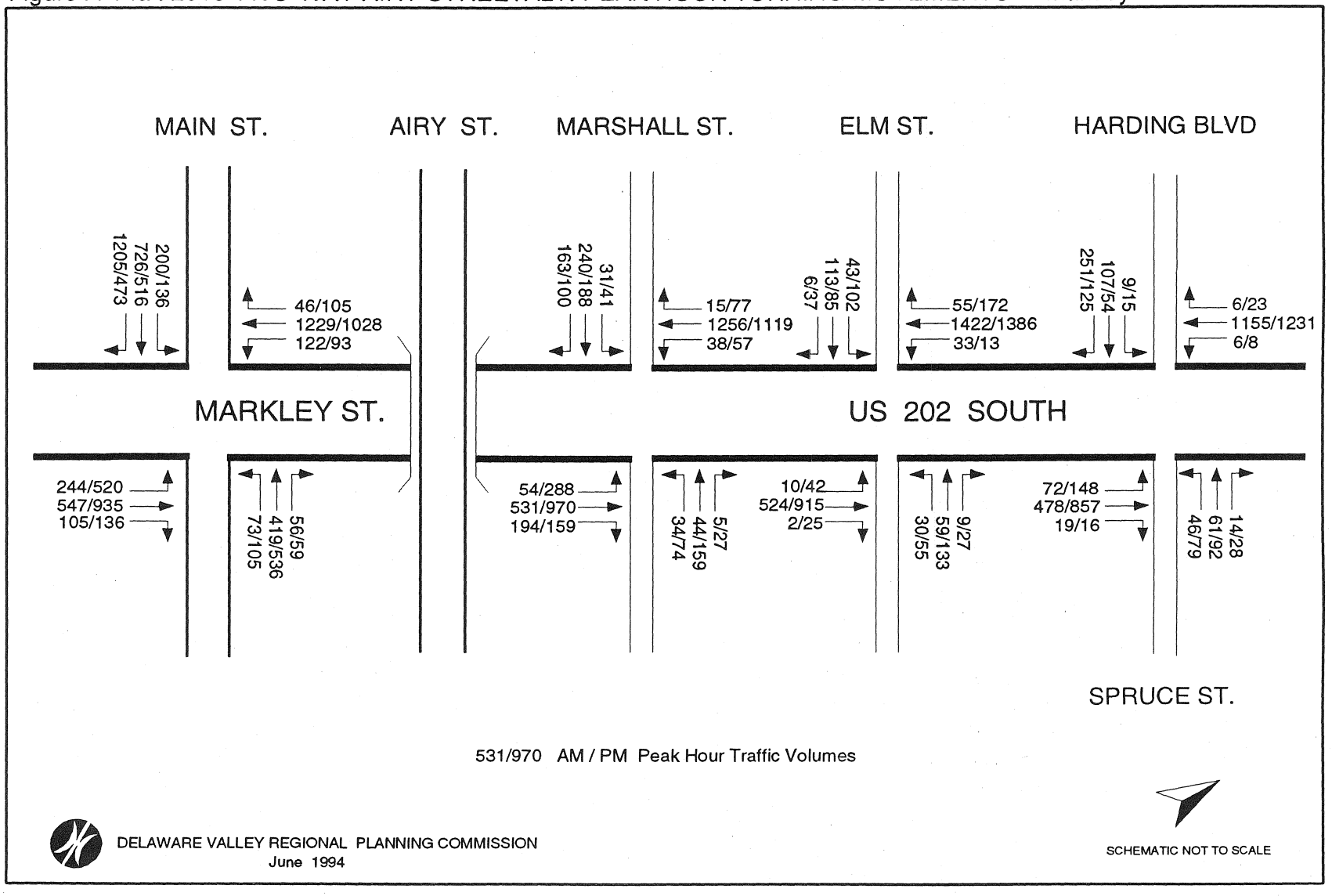


Figure A-14b : 2018 TWO-WAY AIRY STREET ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street North

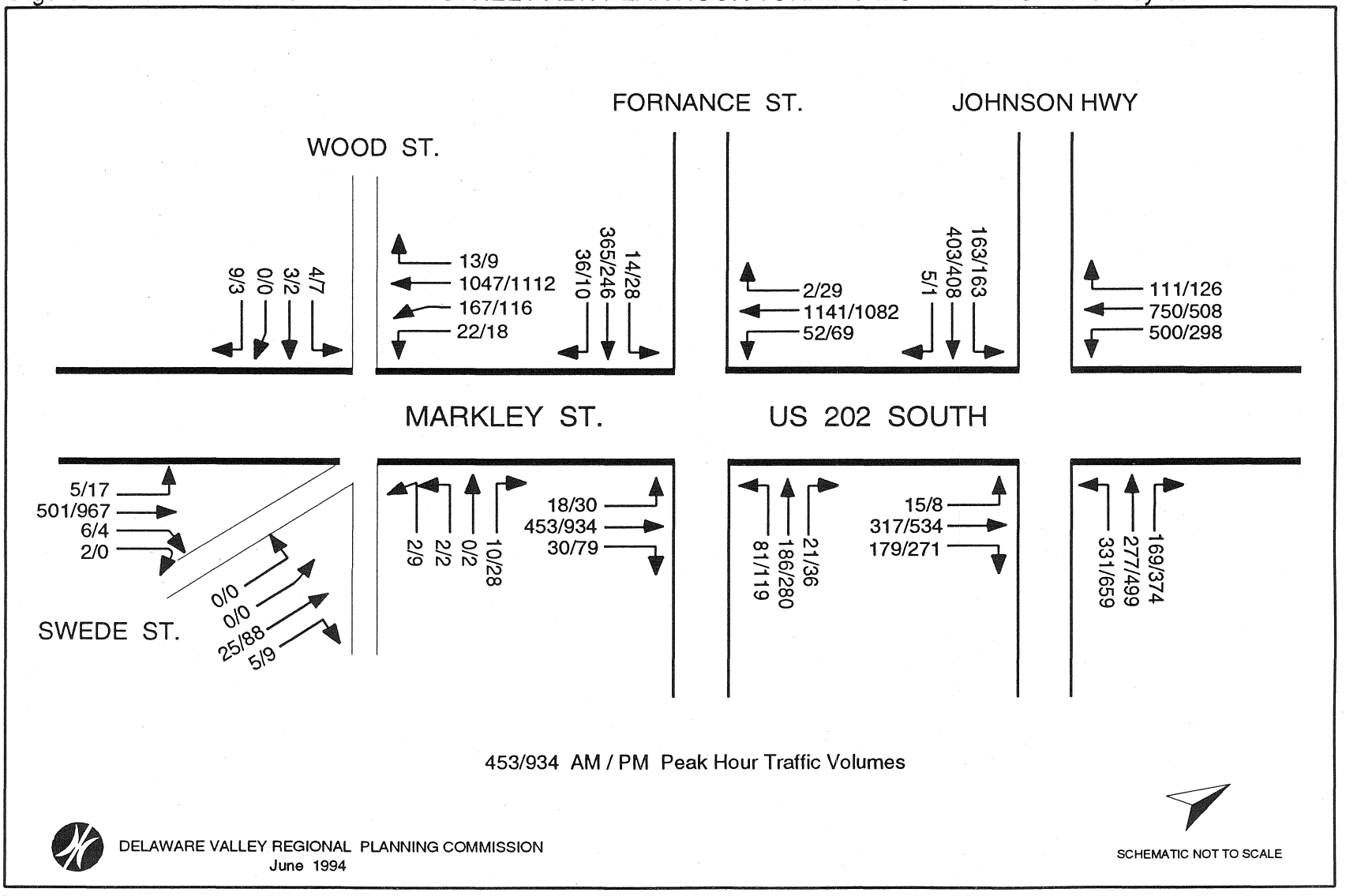
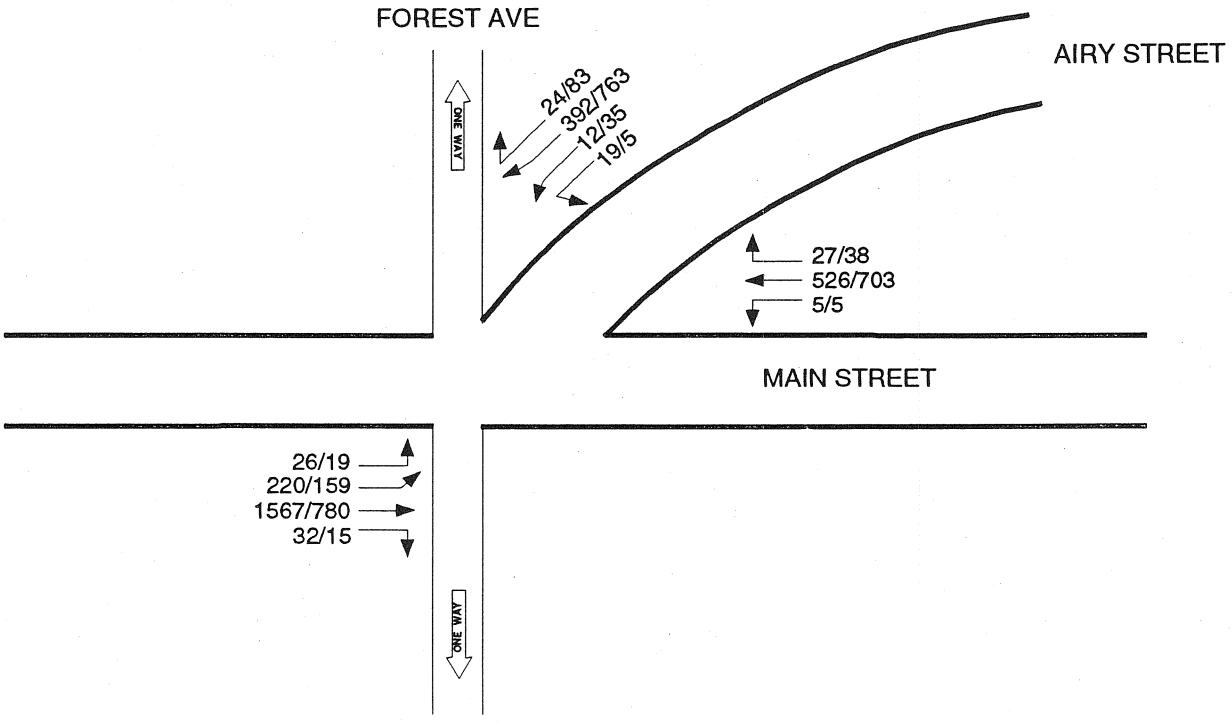


Figure A-15 : 2018 TWO-WAY AIRY STREET ALT. PEAK HOUR TURNING MOVEMENTS - Main and Airy Streets



32/15 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-16a : 2018 TWO-WAY DEKALB STREET ALT. PEAK HOUR TURNING MOVEMENTS - DeKalb Street South

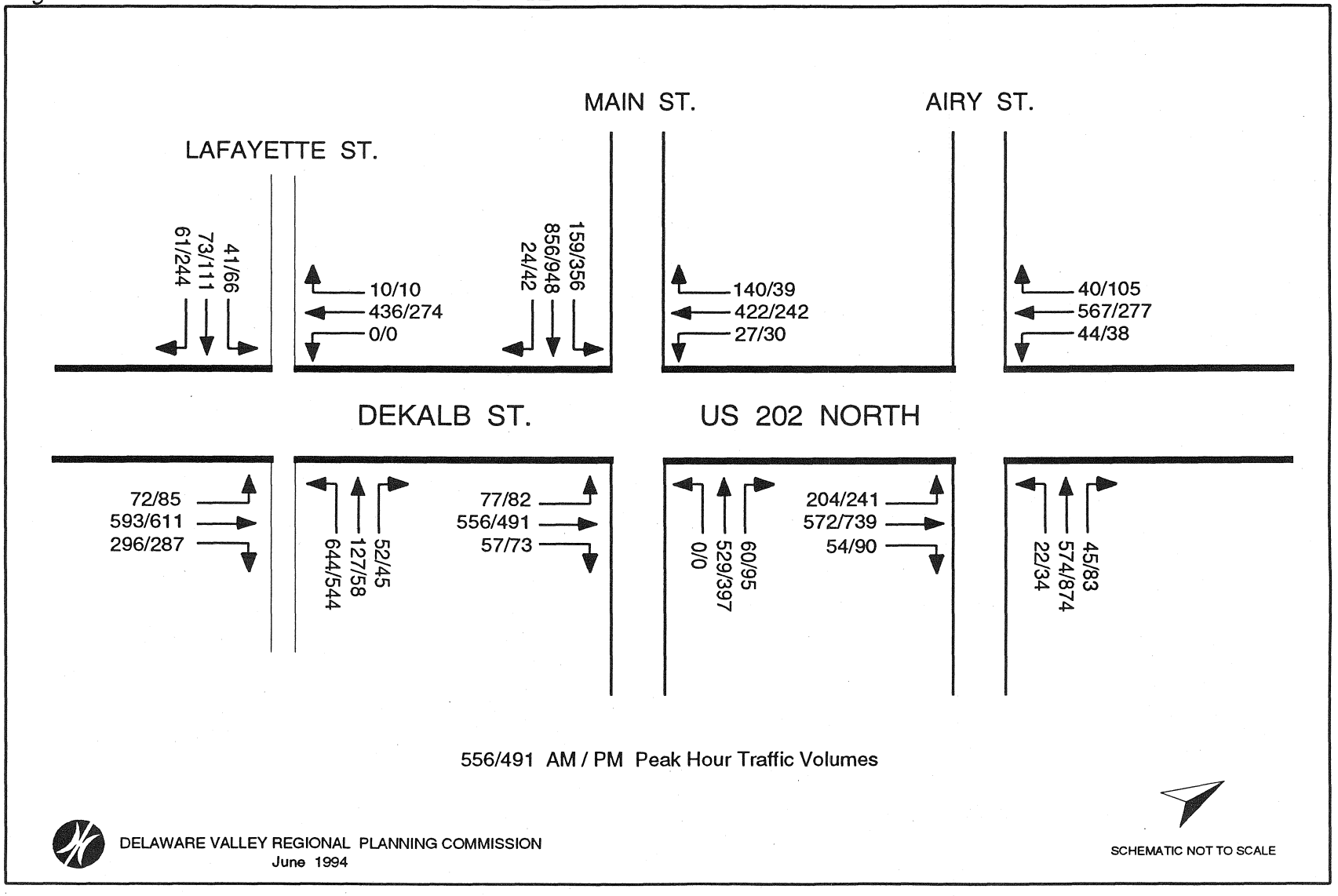


Figure A-16b : 2018 TWO-WAY DEKALB STREET ALT. PEAK HOUR TURNING MOVEMENTS - Dekalb Street North

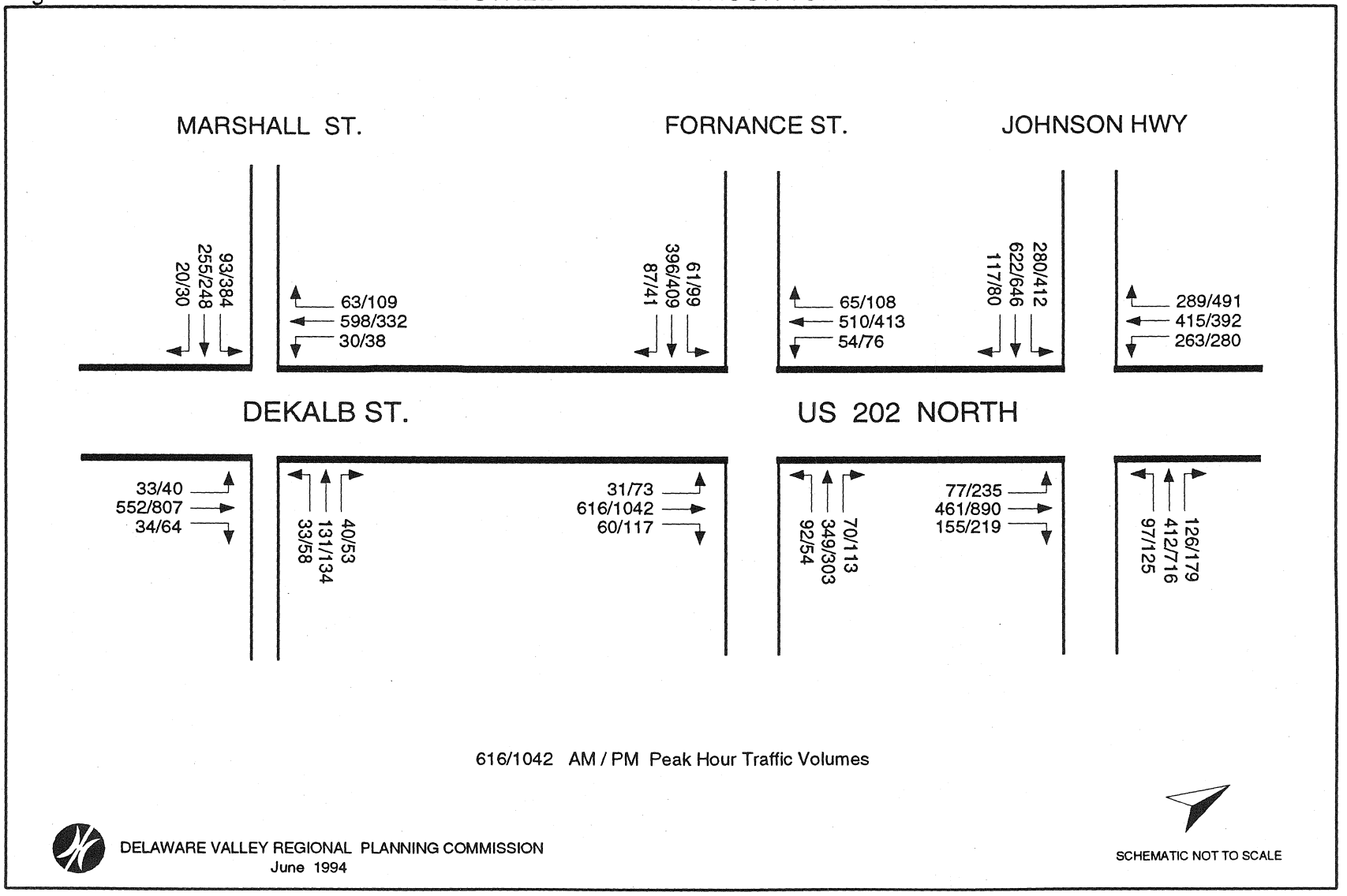


Figure A-17a : 2018 TWO-WAY DEKALB STREET ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street South

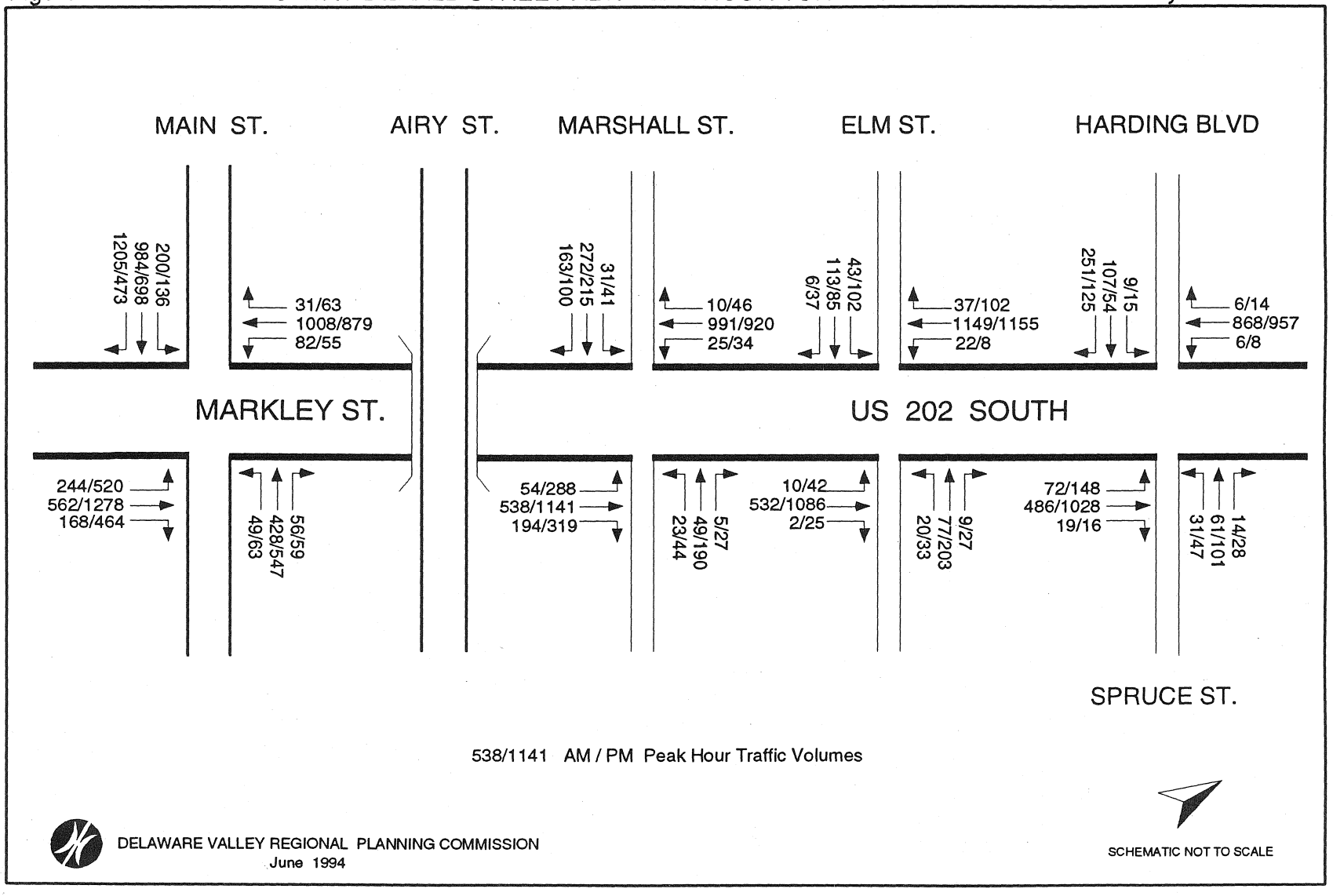


Figure A-17b : 2018 TWO-WAY DEKALB STREET ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street North

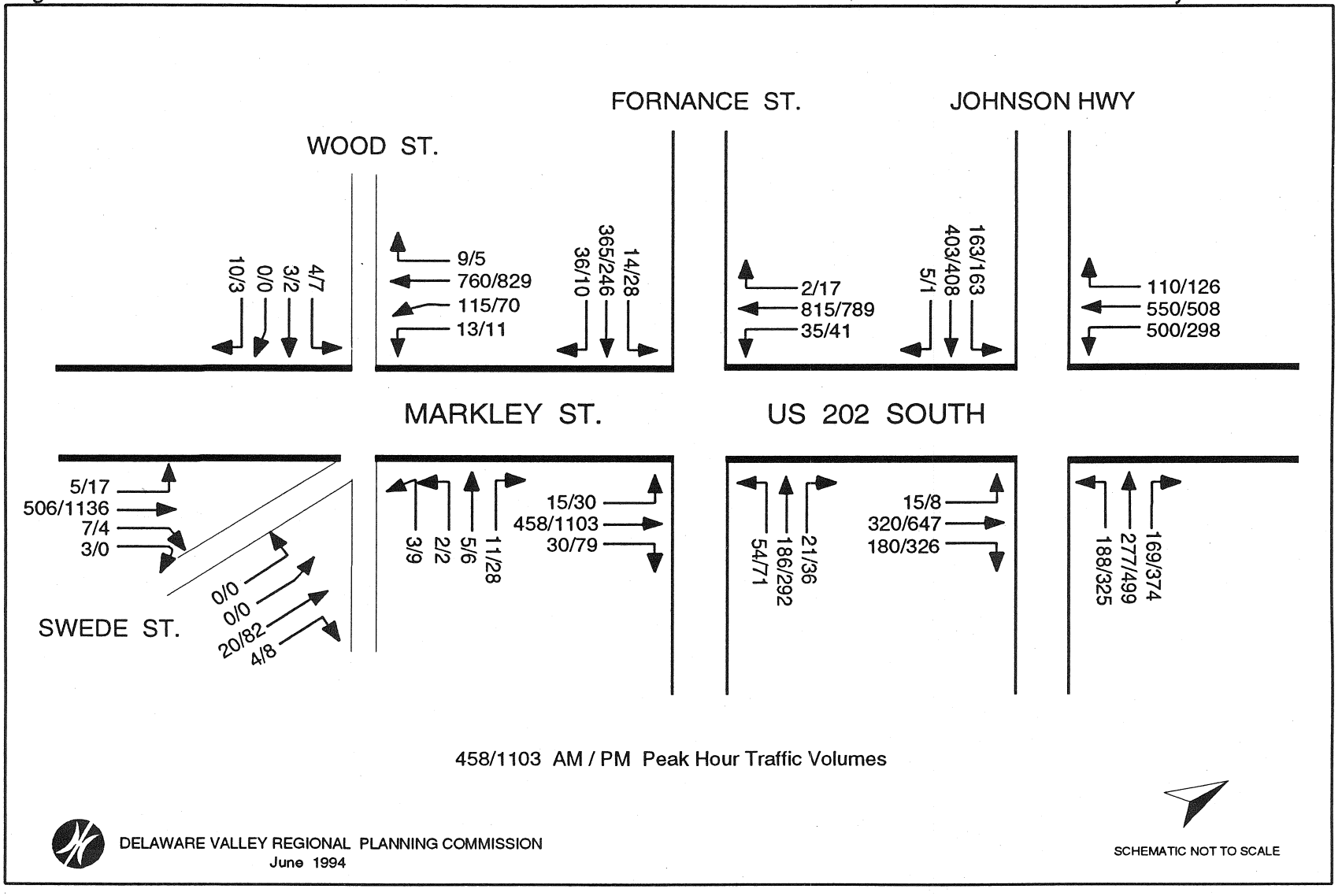
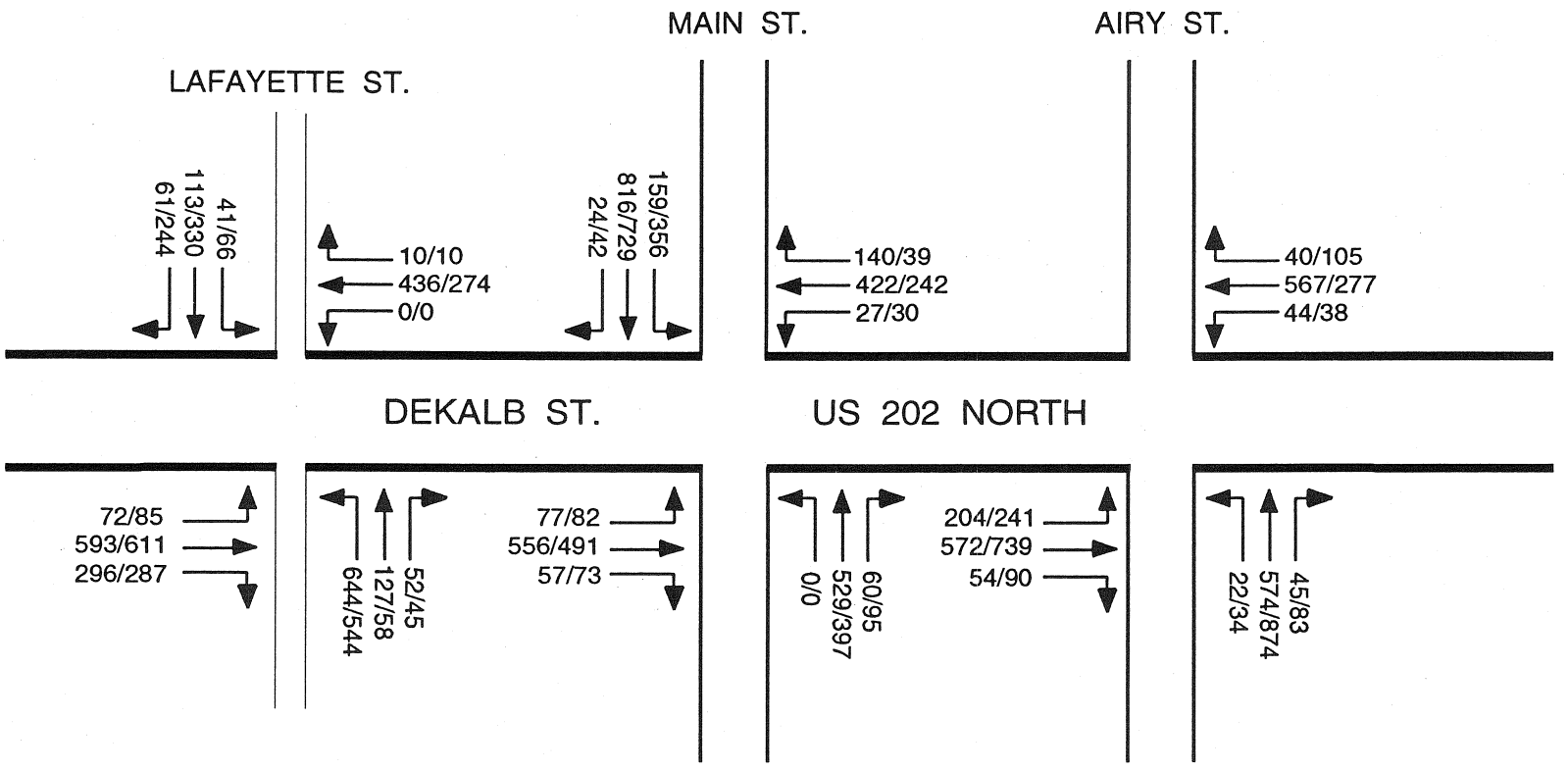


Figure A-18a : 2018 RAMP/TWO-WAY DEKALB ST. ALT. PEAK HOUR TURNING MOVEMENTS - DeKalb Street South



556/491 AM / PM Peak Hour Traffic Volumes

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
June 1994

SCHEMATIC NOT TO SCALE

Figure A-18b : 2018 RAMP/TWO-WAY DEKALB ST. ALT. PEAK HOUR TURNING MOVEMENTS - Dekalb Street North

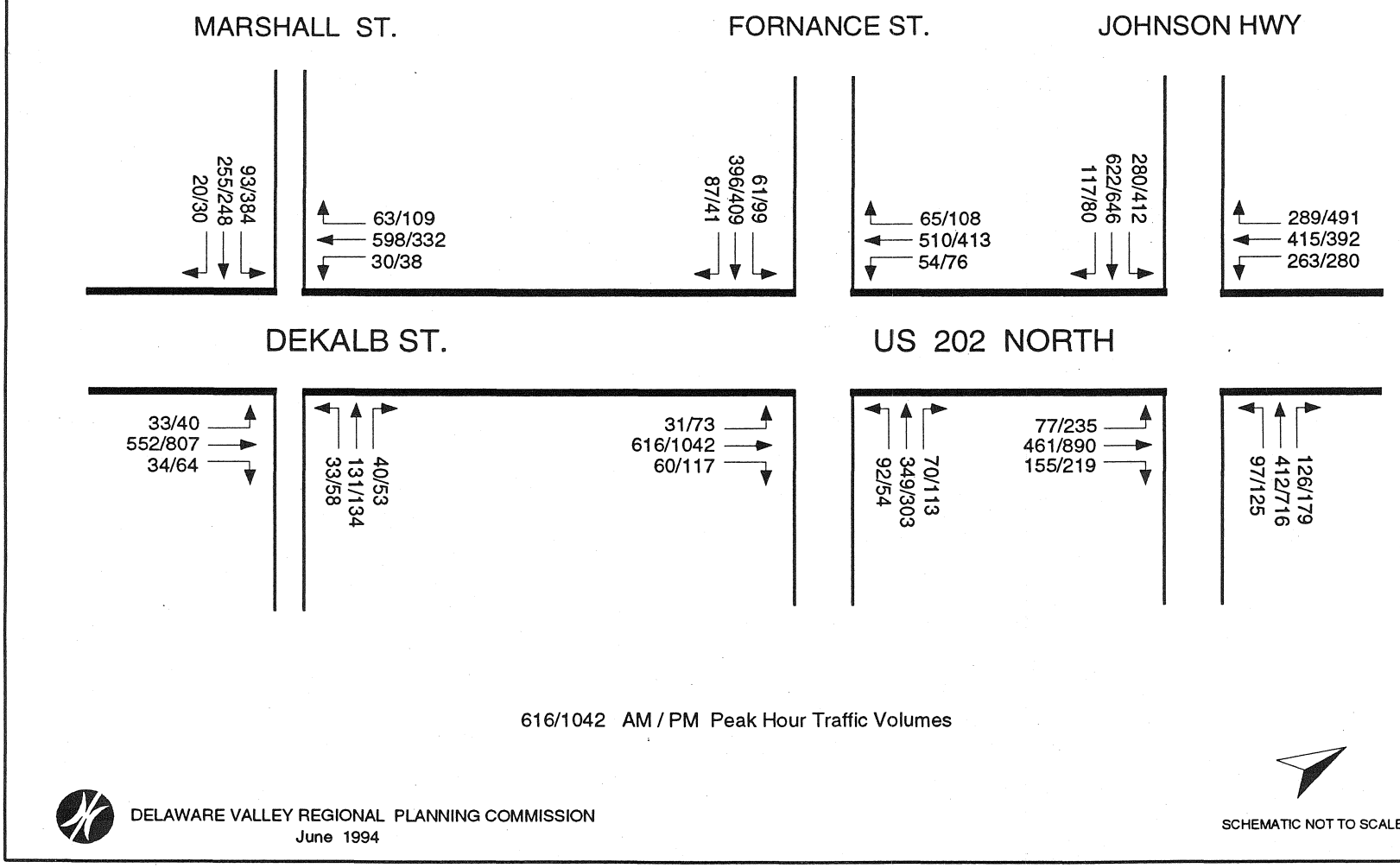


Figure A-19a :2018 RAMP/TWO-WAY DEKALB ST. ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street South

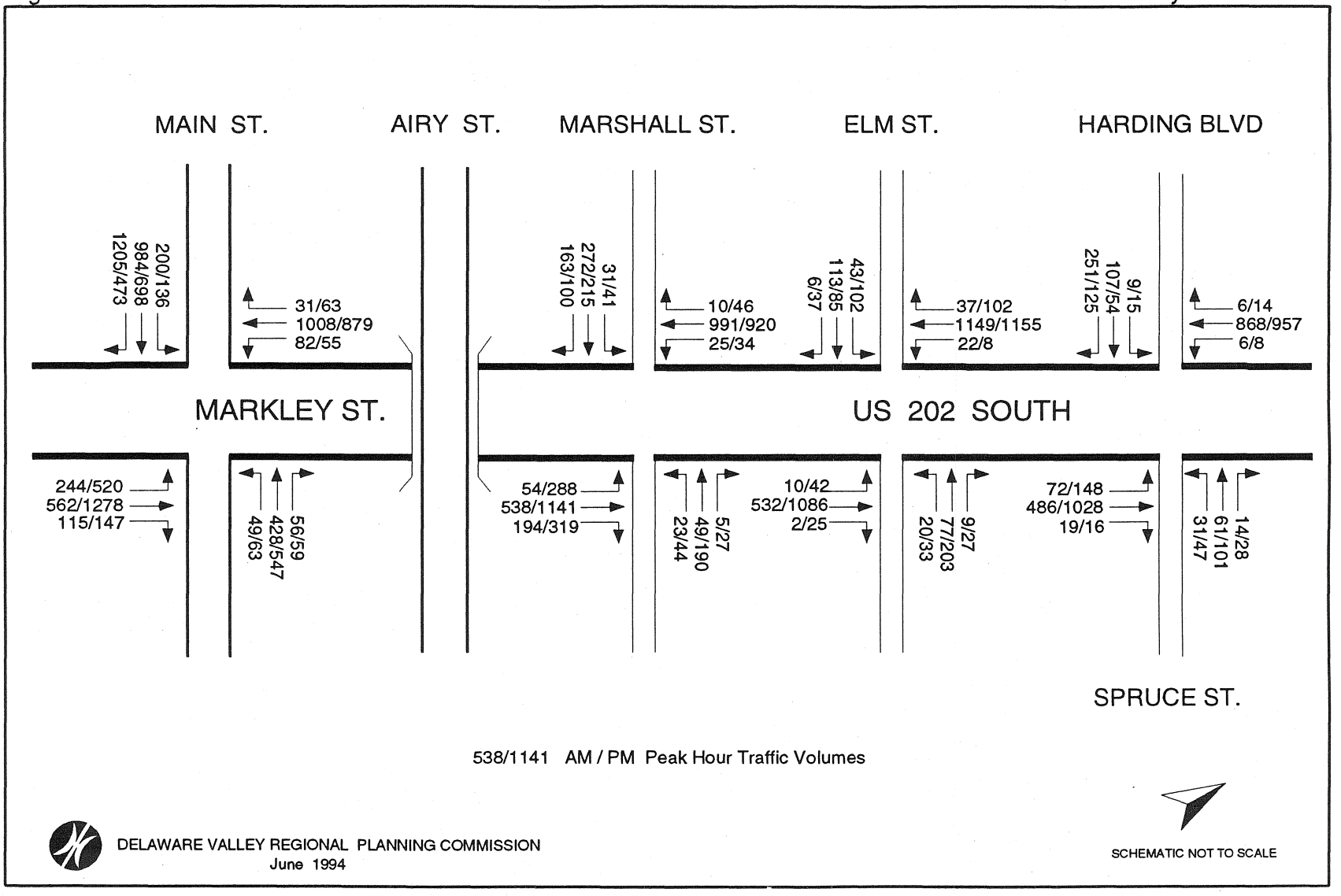
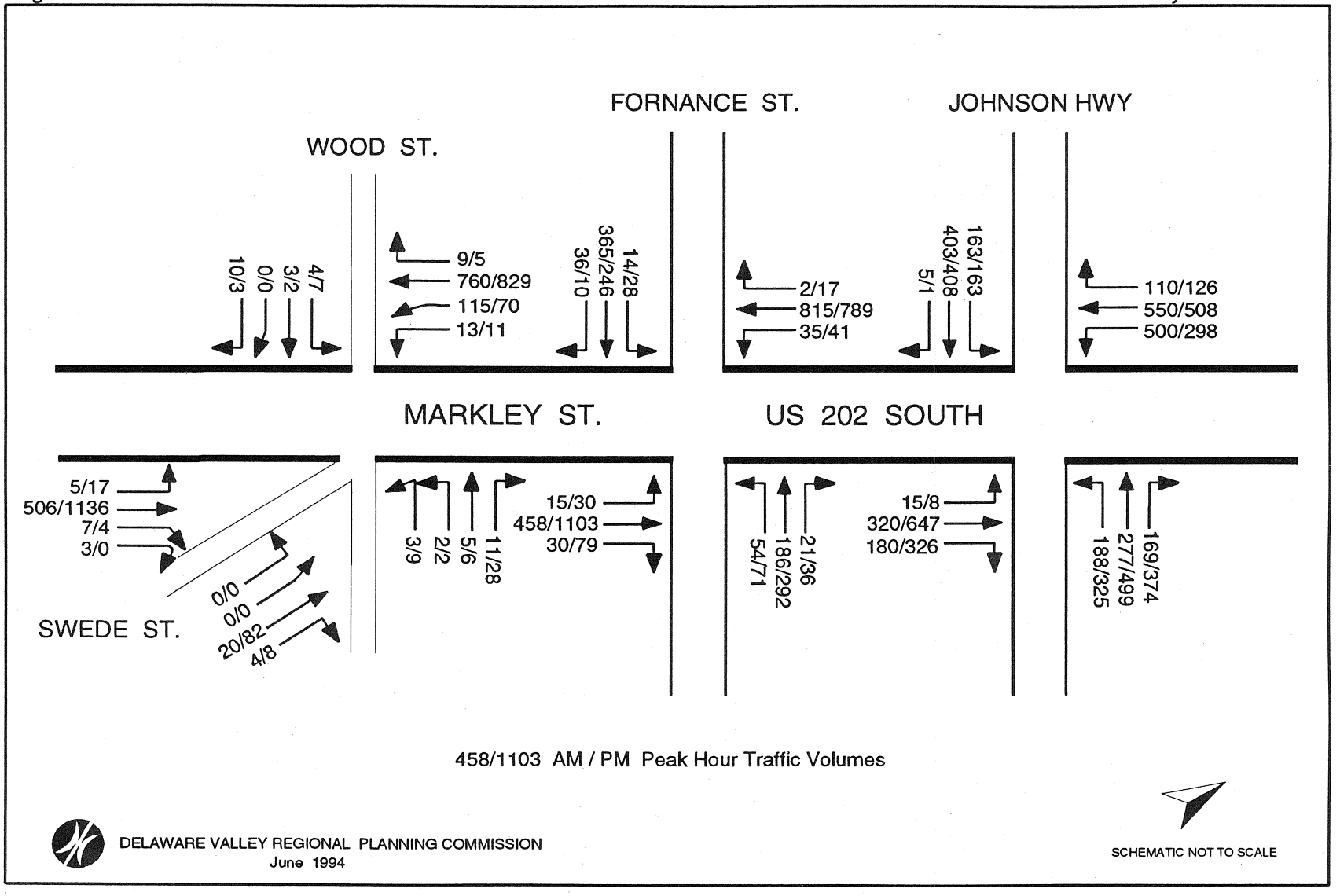


Figure A-19b :2018 RAMP/TWO-WAY DEKALB ST. ALT. PEAK HOUR TURNING MOVEMENTS - Markley Street North



APPENDIX B

CURRENT DAILY TRAFFIC VOLUMES

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DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: LAFAYETTE STREET
BETWEEN: SWEDE STREET AND DEKALB PIKE
DIRECTION: EAST

RECORDER NO: 5413
SET BY: AC
DATE: 08/17/92
DAY MACHINE SET: MON

COUNTS

DAY: / DATE:	MON. 08/17	TUES. 08/18	WED. 08/19	THURS.	FRI.
12:00- 1:00 AM	0	51	39	0	0
1:00- 2:00 AM	0	35	30	0	0
2:00- 3:00 AM	0	20	41	0	0
3:00- 4:00 AM	0	19	17	0	0
4:00- 5:00 AM	0	26	50	0	0
5:00- 6:00 AM	0	79	80	0	0
6:00- 7:00 AM	0	290	274	0	0
7:00- 8:00 AM	0	376	440	0	0
8:00- 9:00 AM	0	432	386	0	0
9:00-10:00 AM	0	265	0	0	0
10:00-11:00 AM	309	299	0	0	0
11:00-12:00 PM	367	356	0	0	0
12:00- 1:00 PM	409	371	0	0	0
1:00- 2:00 PM	363	343	0	0	0
2:00- 3:00 PM	365	337	0	0	0
3:00- 4:00 PM	403	440	0	0	0
4:00- 5:00 PM	550	500	0	0	0
5:00- 6:00 PM	356	364	0	0	0
6:00- 7:00 PM	209	261	0	0	0
7:00- 8:00 PM	175	203	0	0	0
8:00- 9:00 PM	153	171	0	0	0
9:00-10:00 PM	134	137	0	0	0
10:00-11:00 PM	87	105	0	0	0
11:00-12:00 AM	71	82	0	0	0
TOTALS	3951	5562	1357	0	0
WEATHER:	F	F	F	F	F

(F)air
(R)ain
(S)now
(H)oliday

REMARKS:

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: LAFAYETTE STREET
BETWEEN: SWEDE STREET AND DEKALB PIKE
DIRECTION: WEST

RECORDER NO: 6333
SET BY: AC
DATE: 08/17/92
DAY MACHINE SET: MON

COUNTS

DAY: / DATE:	MON. 08/17	TUES. 08/18	WED. 08/19	THURS.	FRI.
12:00- 1:00 AM	0	25	27	0	0
1:00- 2:00 AM	0	14	20	0	0
2:00- 3:00 AM	0	5	14	0	0
3:00- 4:00 AM	0	7	8	0	0
4:00- 5:00 AM	0	8	11	0	0
5:00- 6:00 AM	0	13	15	0	0
6:00- 7:00 AM	0	44	48	0	0
7:00- 8:00 AM	0	91	127	0	0
8:00- 9:00 AM	0	169	181	0	0
9:00-10:00 AM	0	119	0	0	0
10:00-11:00 AM	110	126	0	0	0
11:00-12:00 PM	134	150	0	0	0
12:00- 1:00 PM	158	128	0	0	0
1:00- 2:00 PM	149	140	0	0	0
2:00- 3:00 PM	117	119	0	0	0
3:00- 4:00 PM	162	163	0	0	0
4:00- 5:00 PM	179	172	0	0	0
5:00- 6:00 PM	165	177	0	0	0
6:00- 7:00 PM	98	104	0	0	0
7:00- 8:00 PM	58	76	0	0	0
8:00- 9:00 PM	54	78	0	0	0
9:00-10:00 PM	76	65	0	0	0
10:00-11:00 PM	46	58	0	0	0
11:00-12:00 AM	37	37	0	0	0
TOTALS	1543	2088	451	0	0
WEATHER:	F	F	F	F	F

(F)air
(R)ain
(S)now
(H)oliday

REMARKS:

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: LAFAYETTE STREET
BETWEEN: MILL STREET AND DEKALB PIKE
DIRECTION: EAST

RECORDER NO: 1367
SET BY: AC
DATE: 08/19/92
DAY MACHINE SET: WED

COUNTS

DAY: / DATE:	MON.	TUES.	WED. 08/19	THURS. 08/20	FRI. 08/21
12:00- 1:00 AM	0	0	0	40	47
1:00- 2:00 AM	0	0	0	18	29
2:00- 3:00 AM	0	0	0	18	18
3:00- 4:00 AM	0	0	0	11	20
4:00- 5:00 AM	0	0	0	20	25
5:00- 6:00 AM	0	0	0	60	69
6:00- 7:00 AM	0	0	0	227	199
7:00- 8:00 AM	0	0	0	376	364
8:00- 9:00 AM	0	0	0	393	367
9:00-10:00 AM	0	0	0	245	0
10:00-11:00 AM	0	0	279	292	0
11:00-12:00 PM	0	0	314	336	0
12:00- 1:00 PM	0	0	369	333	0
1:00- 2:00 PM	0	0	341	347	0
2:00- 3:00 PM	0	0	327	329	0
3:00- 4:00 PM	0	0	415	402	0
4:00- 5:00 PM	0	0	484	496	0
5:00- 6:00 PM	0	0	471	453	0
6:00- 7:00 PM	0	0	281	255	0
7:00- 8:00 PM	0	0	211	209	0
8:00- 9:00 PM	0	0	178	206	0
9:00-10:00 PM	0	0	166	168	0
10:00-11:00 PM	0	0	108	117	0
11:00-12:00 AM	0	0	65	80	0
TOTALS	0	0	4009	5431	1138
WEATHER:	F	F	F	F	F

(F)air
(R)ain
(S)now
(H)oliday

REMARKS:

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: LAFAYETTE STREET
BETWEEN: MILL STREET AND DEKALB PIKE
DIRECTION: WEST

RECORDER NO: 7298
SET BY: AC
DATE: 08/17/92
DAY MACHINE SET: MON

COUNTS

DAY: / DATE:	MON. 08/17	TUES. 08/18	WED. 08/19	THURS.	FRI.
12:00- 1:00 AM	0	48	55	0	0
1:00- 2:00 AM	0	16	22	0	0
2:00- 3:00 AM	0	23	22	0	0
3:00- 4:00 AM	0	12	20	0	0
4:00- 5:00 AM	0	33	18	0	0
5:00- 6:00 AM	0	70	74	0	0
6:00- 7:00 AM	0	263	277	0	0
7:00- 8:00 AM	0	560	563	0	0
8:00- 9:00 AM	0	539	542	0	0
9:00-10:00 AM	0	361	0	0	0
10:00-11:00 AM	0	342	0	0	0
11:00-12:00 PM	319	380	0	0	0
12:00- 1:00 PM	448	383	0	0	0
1:00- 2:00 PM	383	359	0	0	0
2:00- 3:00 PM	368	328	0	0	0
3:00- 4:00 PM	428	388	0	0	0
4:00- 5:00 PM	500	508	0	0	0
5:00- 6:00 PM	538	542	0	0	0
6:00- 7:00 PM	285	314	0	0	0
7:00- 8:00 PM	229	279	0	0	0
8:00- 9:00 PM	205	204	0	0	0
9:00-10:00 PM	135	176	0	0	0
10:00-11:00 PM	114	125	0	0	0
11:00-12:00 AM	88	77	0	0	0
TOTALS	4040	6330	1593	0	0
WEATHER:	F	F	F	F	F

(F)air
(R)ain
(S)now
(H)oliday

REMARKS:

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: SWEDE STREET
BETWEEN: SPRUCE STREET & BASIN STREET
DIRECTION: BOTH

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 03/28/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-1.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	22	22	0	0	0	0
1:00- 2:00 AM	0	16	23	0	0	0	0
2:00- 3:00 AM	0	7	8	0	0	0	0
3:00- 4:00 AM	0	4	12	0	0	0	0
4:00- 5:00 AM	0	13	13	0	0	0	0
5:00- 6:00 AM	0	28	30	0	0	0	0
6:00- 7:00 AM	0	116	100	0	0	0	0
7:00- 8:00 AM	0	279	252	0	0	0	0
8:00- 9:00 AM	0	340	339	0	0	0	0
9:00-10:00 AM	0	252	271	0	0	0	0
10:00-11:00 AM	0	232	243	0	0	0	0
11:00-12:00 PM	0	246	0	0	0	0	0
12:00- 1:00 PM	0	307	0	0	0	0	0
1:00- 2:00 PM	0	289	0	0	0	0	0
2:00- 3:00 PM	0	273	0	0	0	0	0
3:00- 4:00 PM	0	313	0	0	0	0	0
4:00- 5:00 PM	0	361	0	0	0	0	0
5:00- 6:00 PM	0	281	0	0	0	0	0
6:00- 7:00 PM	205	202	0	0	0	0	0
7:00- 8:00 PM	139	166	0	0	0	0	0
8:00- 9:00 PM	137	133	0	0	0	0	0
9:00-10:00 PM	67	91	0	0	0	0	0
10:00-11:00 PM	51	67	0	0	0	0	0
11:00-12:00 AM	52	57	0	0	0	0	0
TOTALS	651	4095	1313	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: FORNANCE STREET
BETWEEN: GREEN ST. & DEKALB ST.
DIRECTION: BOTH

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/07/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-3.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	84	50	0	0	0	0
1:00- 2:00 AM	0	22	34	0	0	0	0
2:00- 3:00 AM	0	31	28	0	0	0	0
3:00- 4:00 AM	0	23	40	0	0	0	0
4:00- 5:00 AM	0	22	23	0	0	0	0
5:00- 6:00 AM	0	85	73	0	0	0	0
6:00- 7:00 AM	0	363	376	0	0	0	0
7:00- 8:00 AM	0	702	0	0	0	0	0
8:00- 9:00 AM	628	613	0	0	0	0	0
9:00-10:00 AM	530	486	0	0	0	0	0
10:00-11:00 AM	545	495	0	0	0	0	0
11:00-12:00 PM	517	520	0	0	0	0	0
12:00- 1:00 PM	590	543	0	0	0	0	0
1:00- 2:00 PM	604	548	0	0	0	0	0
2:00- 3:00 PM	718	585	0	0	0	0	0
3:00- 4:00 PM	748	716	0	0	0	0	0
4:00- 5:00 PM	796	725	0	0	0	0	0
5:00- 6:00 PM	742	693	0	0	0	0	0
6:00- 7:00 PM	561	534	0	0	0	0	0
7:00- 8:00 PM	411	379	0	0	0	0	0
8:00- 9:00 PM	315	266	0	0	0	0	0
9:00-10:00 PM	226	226	0	0	0	0	0
10:00-11:00 PM	187	161	0	0	0	0	0
11:00-12:00 AM	159	155	0	0	0	0	0
TOTALS	8277	8977	624	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: FORNANCE STREET
BETWEEN: PINE ST. & LOCUST ST.
DIRECTION: BOTH

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/07/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-4.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	58	41	0	0	0	0
1:00- 2:00 AM	0	20	21	0	0	0	0
2:00- 3:00 AM	0	14	22	0	0	0	0
3:00- 4:00 AM	0	16	9	0	0	0	0
4:00- 5:00 AM	0	19	20	0	0	0	0
5:00- 6:00 AM	0	79	61	0	0	0	0
6:00- 7:00 AM	0	331	347	0	0	0	0
7:00- 8:00 AM	0	590	0	0	0	0	0
8:00- 9:00 AM	0	543	0	0	0	0	0
9:00-10:00 AM	454	402	0	0	0	0	0
10:00-11:00 AM	420	398	0	0	0	0	0
11:00-12:00 PM	443	394	0	0	0	0	0
12:00- 1:00 PM	499	437	0	0	0	0	0
1:00- 2:00 PM	501	428	0	0	0	0	0
2:00- 3:00 PM	586	501	0	0	0	0	0
3:00- 4:00 PM	636	627	0	0	0	0	0
4:00- 5:00 PM	527	598	0	0	0	0	0
5:00- 6:00 PM	589	519	0	0	0	0	0
6:00- 7:00 PM	454	408	0	0	0	0	0
7:00- 8:00 PM	354	336	0	0	0	0	0
8:00- 9:00 PM	262	215	0	0	0	0	0
9:00-10:00 PM	176	172	0	0	0	0	0
10:00-11:00 PM	151	156	0	0	0	0	0
11:00-12:00 AM	147	138	0	0	0	0	0
TOTALS	6199	7399	521	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: MARKLEY STREET SB
BETWEEN: FREEDLEY ST. & COOLIDGE BLVD.
DIRECTION: SOUTH

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/07/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-6.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	66	59	0	0	0	0
1:00- 2:00 AM	0	38	35	0	0	0	0
2:00- 3:00 AM	0	23	24	0	0	0	0
3:00- 4:00 AM	0	32	30	0	0	0	0
4:00- 5:00 AM	0	59	63	0	0	0	0
5:00- 6:00 AM	0	150	164	0	0	0	0
6:00- 7:00 AM	0	585	600	0	0	0	0
7:00- 8:00 AM	0	914	0	0	0	0	0
8:00- 9:00 AM	0	905	0	0	0	0	0
9:00-10:00 AM	0	742	0	0	0	0	0
10:00-11:00 AM	0	788	0	0	0	0	0
11:00-12:00 PM	0	825	0	0	0	0	0
12:00- 1:00 PM	934	954	0	0	0	0	0
1:00- 2:00 PM	810	825	0	0	0	0	0
2:00- 3:00 PM	814	841	0	0	0	0	0
3:00- 4:00 PM	902	890	0	0	0	0	0
4:00- 5:00 PM	855	878	0	0	0	0	0
5:00- 6:00 PM	817	791	0	0	0	0	0
6:00- 7:00 PM	701	710	0	0	0	0	0
7:00- 8:00 PM	601	613	0	0	0	0	0
8:00- 9:00 PM	435	453	0	0	0	0	0
9:00-10:00 PM	402	393	0	0	0	0	0
10:00-11:00 PM	230	234	0	0	0	0	0
11:00-12:00 AM	155	162	0	0	0	0	0
TOTALS	7656	12871	975	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: MARKLEY STREET NB
BETWEEN: FREEDLEY ST. & COOLIDGE BLVD.
DIRECTION: NORTH

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/07/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-7.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	61	53	0	0	0	0
1:00- 2:00 AM	0	34	50	0	0	0	0
2:00- 3:00 AM	0	26	61	0	0	0	0
3:00- 4:00 AM	0	34	26	0	0	0	0
4:00- 5:00 AM	0	44	35	0	0	0	0
5:00- 6:00 AM	0	48	59	0	0	0	0
6:00- 7:00 AM	0	226	206	0	0	0	0
7:00- 8:00 AM	0	375	0	0	0	0	0
8:00- 9:00 AM	0	466	0	0	0	0	0
9:00-10:00 AM	0	444	0	0	0	0	0
10:00-11:00 AM	555	564	0	0	0	0	0
11:00-12:00 PM	575	600	0	0	0	0	0
12:00- 1:00 PM	618	626	0	0	0	0	0
1:00- 2:00 PM	623	609	0	0	0	0	0
2:00- 3:00 PM	615	665	0	0	0	0	0
3:00- 4:00 PM	681	664	0	0	0	0	0
4:00- 5:00 PM	754	701	0	0	0	0	0
5:00- 6:00 PM	743	727	0	0	0	0	0
6:00- 7:00 PM	592	656	0	0	0	0	0
7:00- 8:00 PM	464	435	0	0	0	0	0
8:00- 9:00 PM	343	329	0	0	0	0	0
9:00-10:00 PM	294	257	0	0	0	0	0
10:00-11:00 PM	159	166	0	0	0	0	0
11:00-12:00 AM	111	119	0	0	0	0	0
TOTALS	7127	8876	490	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: JOHNSON HIGHWAY EB
BETWEEN: CHAIN ST. & MARKLEY ST.
DIRECTION: EAST

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/28/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-8.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	11	19	0	0	0	0
1:00- 2:00 AM	0	9	20	0	0	0	0
2:00- 3:00 AM	0	2	3	0	0	0	0
3:00- 4:00 AM	0	9	4	0	0	0	0
4:00- 5:00 AM	0	16	16	0	0	0	0
5:00- 6:00 AM	0	49	37	0	0	0	0
6:00- 7:00 AM	0	182	117	0	0	0	0
7:00- 8:00 AM	396	424	387	0	0	0	0
8:00- 9:00 AM	356	342	289	0	0	0	0
9:00-10:00 AM	282	300	0	0	0	0	0
10:00-11:00 AM	300	284	0	0	0	0	0
11:00-12:00 PM	291	368	0	0	0	0	0
12:00- 1:00 PM	296	301	0	0	0	0	0
1:00- 2:00 PM	268	242	0	0	0	0	0
2:00- 3:00 PM	308	304	0	0	0	0	0
3:00- 4:00 PM	373	372	0	0	0	0	0
4:00- 5:00 PM	359	384	0	0	0	0	0
5:00- 6:00 PM	405	312	0	0	0	0	0
6:00- 7:00 PM	288	261	0	0	0	0	0
7:00- 8:00 PM	191	184	0	0	0	0	0
8:00- 9:00 PM	95	156	0	0	0	0	0
9:00-10:00 PM	84	100	0	0	0	0	0
10:00-11:00 PM	51	50	0	0	0	0	0
11:00-12:00 AM	36	52	0	0	0	0	0
TOTALS	4379	4714	892	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
24-HOUR TRAFFIC COUNT RECORD

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

ROAD COUNTED ON: JOHNSON HIGHWAY WB
BETWEEN: CHAIN ST. & MARKLEY ST.
DIRECTION: WEST

S.R. AND SEG:

RECORDER NO:
SET BY: D.V.R.P.C.
DATE: 3/28/94
DAY MACHINE SET: MON.

.WK1 FILE NAME: NORR-9.WK3

COUNTS

DAY: / DATE:	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.
12:00- 1:00 AM	0	17	26	0	0	0	0
1:00- 2:00 AM	0	5	10	0	0	0	0
2:00- 3:00 AM	0	8	9	0	0	0	0
3:00- 4:00 AM	0	1	6	0	0	0	0
4:00- 5:00 AM	0	6	3	0	0	0	0
5:00- 6:00 AM	0	7	10	0	0	0	0
6:00- 7:00 AM	0	83	101	0	0	0	0
7:00- 8:00 AM	173	233	232	0	0	0	0
8:00- 9:00 AM	194	195	211	0	0	0	0
9:00-10:00 AM	151	149	161	0	0	0	0
10:00-11:00 AM	189	150	197	0	0	0	0
11:00-12:00 PM	225	186	0	0	0	0	0
12:00- 1:00 PM	256	227	0	0	0	0	0
1:00- 2:00 PM	232	199	0	0	0	0	0
2:00- 3:00 PM	264	282	0	0	0	0	0
3:00- 4:00 PM	298	279	0	0	0	0	0
4:00- 5:00 PM	361	370	0	0	0	0	0
5:00- 6:00 PM	331	372	0	0	0	0	0
6:00- 7:00 PM	225	237	0	0	0	0	0
7:00- 8:00 PM	151	202	0	0	0	0	0
8:00- 9:00 PM	147	173	0	0	0	0	0
9:00-10:00 PM	108	107	0	0	0	0	0
10:00-11:00 PM	65	84	0	0	0	0	0
11:00-12:00 AM	47	54	0	0	0	0	0
TOTALS	3417	3626	966	0	0	0	0
WEATHER:	F	F	F	F	F	F	F

APPENDIX C

CURRENT PEAK HOUR

TURNING MOVEMENT COUNTS

TABLE OF CONTENTS

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Dekalb St 202

EAST / WEST BOUND STREET ROUTE NO.

Lafayette St

DATE: 08.18.92
OBSERVER: CM and NK

	Dekalb St NORTHBOUND						Lafayette St WESTBOUND						Dekalb St SOUTHBOUND						Lafayette St EASTBOUND							
PM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT			
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2	TOTAL	
4:00 - 4:15	25	3	163	3	80	3	88	0	18	1	2	3	0	0	0	0	0	0	11	3	17	3	64	4	491	PEAK HOUR
4:15 - 4:30	24	1	151	6	81	4	96	4	13	2	6	1	0	0	0	0	0	0	17	1	48	1	78	3	537	4:30 - 5:30
4:30 - 4:45	28	2	170	3	102	0	93	3	6	2	6	0	0	0	0	0	0	0	10	0	28	1	76	1	531	
4:45 - 5:00	23	2	149	4	96	2	127	0	18	1	13	0	0	0	0	0	0	0	13	0	19	1	66	2	536	PEAK HOUR
5:00 - 5:15	41	0	164	2	101	0	110	2	9	2	6	0	0	0	0	0	0	0	14	4	19	2	63	2	541	VOLUME
5:15 - 5:30	46	1	201	2	123	1	143	0	6	1	6	1	0	0	0	0	0	0	6	0	14	3	61	1	616	2224
5:30 - 5:45	27	1	167	3	78	1	117	1	6	3	5	1	0	0	0	0	0	0	12	0	7	1	50	3	483	
5:45 - 6:00	12	2	148	3	91	1	90	3	7	2	6	0	0	0	0	0	0	0	7	1	17	0	49	1	440	

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
4:00 - 5:00	100	8	633	16	359	9	404	7	55	6	27	4	0	0	0	0	0	0	51	4	112	6	284	10	2095	70	3.3%	0.98
4:15 - 5:15	116	5	634	15	380	6	426	9	46	7	31	1	0	0	0	0	0	0	54	5	114	5	283	8	2145	61	2.8%	0.99
4:30 - 5:30	138	5	684	11	422	3	473	5	39	6	31	1	0	0	0	0	0	0	43	4	80	7	266	6	2224	48	2.2%	0.90
4:45 - 5:45	137	4	681	11	398	4	497	3	39	7	30	2	0	0	0	0	0	0	45	4	59	7	240	8	2176	50	2.3%	0.88
5:00 - 6:00	126	4	680	10	393	3	460	6	28	8	23	2	0	0	0	0	0	0	39	5	57	6	223	7	2080	51	2.5%	0.84

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Dekalb St 202

EAST / WEST BOUND STREET ROUTE NO.

Lafayette St

DATE: 08.21.92
OBSERVER: RS and JD

	Dekalb St NORTHBOUND						Lafayette St WESTBOUND						Dekalb St SOUTHBOUND						Lafayette St EASTBOUND							
AM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		TOTAL	
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2		
7:00 - 7:15	9	0	54	6	43	0	87	2	4	2	1	0	0	0	0	0	0	0	1	4	12	6	1	0	232	
7:15 - 7:30	12	1	55	5	49	2	107	5	6	3	5	3	0	0	0	0	0	0	0	0	12	6	32	1	304	PEAK HOUR 7:30 - 8:30
7:30 - 7:45	5	4	78	11	63	0	146	1	15	2	1	1	0	0	0	0	0	0	10	0	9	2	49	3	400	
7:45 - 8:00	9	2	104	5	73	1	144	4	19	1	1	4	0	0	0	0	0	0	6	1	13	3	60	1	451	PEAK HOUR VOLUME 1724
8:00 - 8:15	15	3	101	6	70	5	117	5	14	1	5	5	0	0	0	0	0	0	4	4	8	3	37	1	404	
8:15 - 8:30	28	0	111	7	68	4	152	6	23	3	5	2	0	0	0	0	0	0	2	2	14	5	35	2	469	
8:30 - 8:45	12	1	121	2	63	3	93	6	8	1	5	2	0	0	0	0	0	0	6	1	12	5	34	2	377	
8:45 - 9:00	15	3	129	3	59	2	87	11	7	2	7	3	0	0	0	0	0	0	8	2	13	2	32	3	388	

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
7:00 - 8:00	35	7	291	27	228	3	484	12	44	8	8	8	0	0	0	0	0	0	17	5	46	17	142	5	1387	92	6.6%	0.77
7:15 - 8:15	41	10	338	27	255	8	514	15	54	7	12	13	0	0	0	0	0	0	20	5	42	14	178	6	1559	105	6.7%	0.86
7:30 - 8:30	57	9	394	29	274	10	559	16	71	7	12	12	0	0	0	0	0	0	22	7	44	13	181	7	1724	110	6.4%	0.92
7:45 - 8:45	64	6	437	20	274	13	506	21	64	6	16	13	0	0	0	0	0	0	18	8	47	16	166	6	1701	109	6.4%	0.91
8:00 - 9:00	70	7	462	18	260	14	449	28	52	7	22	12	0	0	0	0	0	0	20	9	47	15	138	8	1638	118	7.2%	0.87

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET Dekalb St ROUTE NO. 202

EAST / WEST BOUND STREET Main St ROUTE NO.

DATE: 08.17.92
OBSERVER: TM and NK

	Dekalb St NORTHBOUND						Main St WESTBOUND						Dekalb St SOUTHBOUND						Main St EASTBOUND							
PM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		TOTAL	
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2		
4:00 - 4:15	17	1	147	4	16	1	0	0	105	3	29	0	0	0	0	0	0	0	77	0	152	0	0	0	552	PEAK HOUR
4:15 - 4:30	17	0	140	1	14	0	0	0	65	0	13	1	0	0	0	0	0	0	66	0	158	1	0	0	476	4:00 - 5:00
4:30 - 4:45	14	0	144	1	17	1	0	0	75	0	18	0	0	0	0	0	0	0	73	0	160	6	0	0	509	
4:45 - 5:00	10	0	134	5	6	0	0	0	89	2	19	0	0	0	0	0	0	0	68	0	141	1	0	0	475	PEAK HOUR
5:00 - 5:15	13	0	183	0	16	0	0	0	97	2	11	0	0	0	0	0	0	0	49	0	175	1	0	0	547	VOLUME
5:15 - 5:30	21	0	158	2	8	0	0	0	93	0	15	0	0	0	0	0	0	0	50	2	127	1	0	0	477	2012
5:30 - 5:45	17	0	129	4	14	1	0	0	85	1	15	0	0	0	0	0	0	0	40	0	135	1	0	0	442	
5:45 - 6:00	17	1	125	0	17	0	0	0	74	0	14	1	0	0	0	0	0	0	28	2	124	2	0	0	405	

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
4:00 - 5:00	58	1	565	11	53	2	0	0	334	5	79	1	0	0	0	0	0	0	284	0	611	8	0	0	2012	28	1.4%	0.91
4:15 - 5:15	54	0	601	7	53	1	0	0	326	4	61	1	0	0	0	0	0	0	256	0	634	9	0	0	2007	22	1.1%	0.92
4:30 - 5:30	58	0	619	8	47	1	0	0	354	4	63	0	0	0	0	0	0	0	240	2	603	9	0	0	2008	24	1.2%	0.92
4:45 - 5:45	61	0	604	11	44	1	0	0	364	5	60	0	0	0	0	0	0	0	207	2	578	4	0	0	1941	23	1.2%	0.89
5:00 - 6:00	68	1	595	6	55	1	0	0	349	3	55	1	0	0	0	0	0	0	167	4	561	5	0	0	1871	21	1.1%	0.86

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.
Dekalb St 202

EAST / WEST BOUND STREET ROUTE NO.
Main St

DATE: 08.19.92
OBSERVER: JD

	Dekalb St NORTHBOUND						Main St WESTBOUND						Dekalb St SOUTHBOUND						Main St EASTBOUND							
AM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		TOTAL	
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2		
7:00 - 7:15	10	1	50	3	6	2	0	0	53	4	15	1	0	0	0	0	0	0	17	1	134	1	0	0	298	PEAK HOUR
7:15 - 7:30	4	0	74	4	6	2	0	0	79	5	17	0	0	0	0	0	0	0	21	0	183	2	0	0	397	7:30 - 8:30
7:30 - 7:45	13	0	90	7	8	2	0	0	119	6	10	0	0	0	0	0	0	0	20	0	171	4	0	0	450	
7:45 - 8:00	12	3	102	5	8	0	0	0	78	7	10	1	0	0	0	0	0	0	24	2	189	7	0	0	448	PEAK HOUR
8:00 - 8:15	11	0	78	5	8	3	0	0	104	8	19	0	0	0	0	0	0	0	28	0	139	12	0	0	415	VOLUME
8:15 - 8:30	14	0	102	10	14	1	0	0	121	7	14	0	0	0	0	0	0	0	51	0	166	2	0	0	502	1815
8:30 - 8:45	16	1	92	5	13	2	0	0	104	0	24	0	0	0	0	0	0	0	48	1	133	7	0	0	446	
8:45 - 9:00	14	0	89	10	6	0	0	0	86	1	22	1	0	0	0	0	0	0	42	0	144	5	0	0	420	

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
7:00 - 8:00	39	4	316	19	28	6	0	0	329	22	52	2	0	0	0	0	0	0	82	3	677	14	0	0	1593	70	4.4%	0.89
7:15 - 8:15	40	3	344	21	30	7	0	0	380	26	56	1	0	0	0	0	0	0	93	2	682	25	0	0	1710	85	5.0%	0.95
7:30 - 8:30	50	3	372	27	38	6	0	0	422	28	53	1	0	0	0	0	0	0	123	2	665	25	0	0	1815	92	5.1%	0.90
7:45 - 8:45	53	4	374	25	43	6	0	0	407	22	67	1	0	0	0	0	0	0	151	3	627	28	0	0	1811	89	4.9%	0.90
8:00 - 9:00	55	1	361	30	41	6	0	0	415	16	79	1	0	0	0	0	0	0	169	1	582	26	0	0	1783	81	4.5%	0.89

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Markley St

EAST / WEST BOUND STREET ROUTE NO.

Main St

DATE: 08.19.92
OBSERVER: MR and CM

PM PEAK	Markley St NORTHBOUND LEFT				THRU				Main St WESTBOUND RIGHT		THRU				RIGHT		Markley St SOUTHBOUND LEFT				THRU				Main St EASTBOUND RIGHT		THRU				RIGHT		TOTAL
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2								
4:00 - 4:15	68	2	132	4	31	2	16	0	113	6	16	1	18	2	158	4	21	0	32	2	151	7	80	6								872
4:15 - 4:30	113	1	164	2	29	1	22	0	119	8	15	0	24	1	191	7	26	0	17	1	138	6	83	3								971
4:30 - 4:45	122	3	204	1	22	0	23	0	102	5	12	0	16	0	203	5	20	1	18	0	144	2	111	2								1016
4:45 - 5:00	113	0	179	5	29	2	19	0	120	2	9	0	12	1	164	2	23	0	17	3	115	0	104	0								919
5:00 - 5:15	115	0	178	2	39	1	21	0	109	4	4	0	13	2	205	3	14	0	37	3	178	2	115	0								1045
5:15 - 5:30	101	1	181	0	32	0	18	0	112	9	7	0	16	2	209	5	12	0	20	0	115	4	72	2								918
5:30 - 5:45	117	0	196	0	44	0	24	0	113	5	9	0	19	3	216	1	22	0	27	0	128	3	108	0								1035
5:45 - 6:00	90	5	188	1	22	0	12	0	104	3	10	0	25	0	190	2	14	1	22	0	118	8	119	0								934

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
4:00 - 5:00	416	6	679	12	111	5	80	0	454	21	52	1	70	4	716	18	90	1	84	6	548	15	378	11	3778	100	2.6%	0.93
4:15 - 5:15	463	4	725	10	119	4	85	0	450	19	40	0	65	4	763	17	83	1	89	7	575	10	413	5	3951	81	2.1%	0.95
4:30 - 5:30	451	4	742	8	122	3	81	0	443	20	32	0	57	5	781	15	69	1	92	6	552	8	402	4	3898	74	1.9%	0.93
4:45 - 5:45	446	1	734	7	144	3	82	0	454	20	29	0	60	8	794	11	71	0	101	6	536	9	399	2	3917	67	1.7%	0.94
5:00 - 6:00	423	6	743	3	137	1	75	0	438	21	30	0	73	7	820	11	62	1	106	3	539	17	414	2	3932	72	1.8%	0.94

PEAK HOUR
4:15 - 5:15

PEAK HOUR
VOLUME
3951

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Markley St.

EAST / WEST BOUND STREET ROUTE NO.

Main St.

DATE: 08.19.92
OBSERVER: AC and MT

	Markley St. NORTHBOUND						Main St. WESTBOUND						Markley St. SOUTHBOUND						Main St. EASTBOUND							
AM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		TOTAL	
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2		
7:00 - 7:15	40	1	60	1	14	1	5	1	76	2	5	4	10	2	220	13	14	1	15	1	168	2	179	4	839	PEAK HOUR
7:15 - 7:30	53	3	88	4	14	1	8	2	103	7	7	0	10	1	275	4	6	5	18	1	201	8	217	4	1040	7:30 - 8:30
7:30 - 7:45	50	0	120	2	14	2	8	1	80	10	8	0	10	0	341	4	10	3	22	2	216	4	284	8	1199	
7:45 - 8:00	52	2	118	8	17	2	17	1	87	7	12	1	21	1	284	7	7	0	36	0	189	9	242	3	1123	PEAK HOUR
8:00 - 8:15	56	2	119	4	17	5	14	2	86	10	9	0	34	1	248	1	7	2	35	1	192	8	256	6	1115	VOLUME
8:15 - 8:30	55	2	109	4	39	0	14	1	78	7	7	1	25	2	252	12	8	2	47	2	201	13	218	8	1107	4544
8:30 - 8:45	47	4	114	2	14	1	17	0	94	4	7	0	22	2	227	3	12	1	44	0	180	7	179	11	992	
8:45 - 9:00	61	3	102	5	25	2	14	0	83	3	7	0	19	0	236	9	6	1	46	1	161	8	121	2	915	

HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
7:00 - 8:00	195	6	386	15	59	6	38	5	346	26	32	5	51	4	****	28	37	9	91	4	774	23	922	19	4201	150	3.6%	0.88
7:15 - 8:15	211	7	445	18	62	10	47	6	356	34	36	1	75	3	****	16	30	10	111	4	798	29	999	21	4477	159	3.6%	0.93
7:30 - 8:30	213	6	466	18	87	9	53	5	331	34	36	2	90	4	****	24	32	7	140	5	798	34	****	25	4544	173	3.8%	0.95
7:45 - 8:45	210	10	460	18	87	8	62	4	345	28	35	2	102	6	****	23	34	5	162	3	762	37	895	28	4337	172	4.0%	0.97
8:00 - 9:00	219	11	444	15	95	8	59	3	341	24	30	1	100	5	963	25	33	6	172	4	734	36	774	27	4129	165	4.0%	0.93

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Markley St

EAST / WEST BOUND STREET ROUTE NO.

Marshall St

DATE: 08.19.92
OBSERVER: TM and NK

	Markley St NORTHBOUND						Marshall St WESTBOUND						Markley St SOUTHBOUND						Marshall St EASTBOUND									
PM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT					
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2	TOTAL			
4:00 - 4:15	45	0	164	0	22	4	14	0	34	0	7	1	2	0	189	7	13	0	4	0	37	0	19	0	562			PEAK HOUR
4:15 - 4:30	49	2	168	4	25	1	16	1	38	0	10	0	10	2	179	6	17	0	10	0	25	0	21	1	585			4:45 - 5:45
4:30 - 4:45	62	1	170	0	23	2	11	1	36	0	7	1	5	0	181	4	6	0	8	0	37	0	22	0	577			
4:45 - 5:00	46	0	178	1	18	0	10	1	30	0	6	0	11	2	191	3	15	0	6	0	43	1	15	0	577			PEAK HOUR
5:00 - 5:15	58	2	175	3	31	1	11	0	39	1	4	0	8	0	194	8	15	1	12	0	43	0	14	0	620			VOLUME
5:15 - 5:30	50	1	201	1	27	1	23	0	29	2	7	0	13	0	202	2	15	0	6	0	47	0	21	0	648			2453
5:30 - 5:45	48	1	191	1	24	0	8	0	30	0	3	0	9	0	214	3	14	0	6	0	37	1	18	0	608			
5:45 - 6:00	49	0	152	2	17	0	10	0	31	1	4	0	11	0	166	1	17	0	14	0	44	1	27	0	547			
HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
4:00 - 5:00	202	3	680	5	88	7	51	3	138	0	30	2	28	4	740	20	51	0	28	0	142	1	77	1	2301	46	2.0%	0.98
4:15 - 5:15	215	5	691	8	97	4	48	3	143	1	27	1	34	4	745	21	53	1	36	0	148	1	72	1	2359	50	2.1%	0.95
4:30 - 5:30	216	4	724	5	99	4	55	2	134	3	24	1	37	2	768	17	51	1	32	0	170	1	72	0	2422	40	1.7%	0.93
4:45 - 5:45	202	4	745	6	100	2	52	1	128	3	20	0	41	2	801	16	59	1	30	0	170	2	68	0	2453	37	1.5%	0.95
5:00 - 6:00	205	4	719	7	99	2	52	0	129	4	18	0	41	0	776	14	61	1	38	0	171	2	80	0	2423	34	1.4%	0.93

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TURNING MOVEMENT COUNT FORM WITH TRUCK %

COUNTY: Montgomery MON
MUNICIPALITY: Norristown 207

INTERSECTION: NORTH / SOUTH BOUND STREET ROUTE NO.

Markley St

EAST / WEST BOUND STREET ROUTE NO.

Marshall St

DATE: 08.19.92
OBSERVER: RS and BM

	Markley St NORTHBOUND						Marshall St WESTBOUND						Markley St SOUTHBOUND						Marshall St EASTBOUND									
AM PEAK	LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT		LEFT		THRU		RIGHT					
	A1	A2	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	G1	G2	H1	H2	I1	I2	J1	J2	K1	K2	L1	L2	TOTAL			
7:00 - 7:15	3	0	70	2	8	0	2	0	4	0	0	0	3	0	194	4	1	0	0	0	25	0	19	0	335			PEAK HOUR
7:15 - 7:30	7	1	76	2	11	0	3	0	5	0	1	0	6	1	201	8	2	0	0	0	34	0	24	0	382			7:45 - 8:45
7:30 - 7:45	11	0	85	1	13	3	7	0	8	0	1	0	2	0	232	2	3	0	0	0	46	0	40	1	455			
7:45 - 8:00	6	0	109	2	21	1	3	0	7	0	0	0	4	0	237	6	2	0	7	0	53	0	29	0	487			PEAK HOUR
8:00 - 8:15	7	0	91	5	34	1	9	0	4	0	3	0	7	0	223	3	3	0	5	0	59	0	27	2	483			VOLUME
8:15 - 8:30	9	1	98	4	31	2	5	0	11	0	1	0	12	0	224	9	3	0	4	0	61	1	33	0	509			1955
8:30 - 8:45	14	0	92	3	34	1	5	0	14	0	1	0	10	0	206	5	6	0	6	1	47	0	31	0	476			
8:45 - 9:00	13	2	114	3	29	2	5	0	16	0	0	1	17	0	167	10	6	1	5	0	37	4	16	1	449			
HOURLY TOTAL																									PEAK HOUR VEHICLES	PEAK HOUR TRUCKS	TRUCK PERCENT	PEAK HOUR FACTOR
7:00 - 8:00	27	1	340	7	53	4	15	0	24	0	2	0	15	1	864	20	8	0	7	0	158	0	112	1	1659	34	2.0%	0.85
7:15 - 8:15	31	1	361	10	79	5	22	0	24	0	5	0	19	1	893	19	10	0	12	0	192	0	120	3	1807	39	2.2%	0.93
7:30 - 8:30	33	1	383	12	99	7	24	0	30	0	5	0	25	0	916	20	11	0	16	0	219	1	129	3	1934	44	2.3%	0.95
7:45 - 8:45	36	1	390	14	120	5	22	0	36	0	5	0	33	0	890	23	14	0	22	1	220	1	120	2	1955	47	2.4%	0.96
8:00 - 9:00	43	3	395	15	128	6	24	0	45	0	5	1	46	0	820	27	18	1	20	1	204	5	107	3	1917	62	3.2%	0.94

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: DEKALB STREET & MARSHALL STREET

DATE: 08/18/94
DAY: TUE
WEATHER: FAIR

FILE NUMBER: DEKMARPM.WK3

PM INTERVAL COUNTS

STARTING TIME		DEKALB STREET 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	MARSHALL STREET 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W 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	9	205	12	226	0	0	0	0	42	58	0	100	0	32	13	45	226	145	371
4:15	4:30	7	199	17	223	0	0	0	0	42	68	0	110	0	26	13	39	223	149	372
4:30	4:45	10	220	13	243	0	0	0	0	47	51	0	98	0	24	14	38	243	136	379
4:45	5:00	7	173	14	194	0	0	0	0	34	35	0	69	0	26	8	34	194	103	297
5:00	5:15	5	217	8	230	0	0	0	0	47	51	0	98	0	29	19	48	230	146	376
5:15	5:30	12	173	5	190	0	0	0	0	38	43	0	81	0	29	18	47	190	128	318
5:30	5:45	5	202	7	214	0	0	0	0	32	51	0	83	0	20	12	32	214	115	329
5:45	6:00	8	165	7	180	0	0	0	0	28	32	0	60	0	25	7	32	180	92	272
TOTALS		63	1554	83	1700	0	0	0	0	310	389	0	699	0	211	104	315	1700	1014	2714
P.H. am																				
P.H. pm																				
Off-P.H.																				

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: DEKALB STREET & MARSHALL STREET

DATE: 08/19/92
DAY: WED
WEATHER: FAIR

FILE NUMBER: DEKMARAM.WK3

AM INTERVAL COUNTS

STARTING TIME		DEKALB STREET 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	MARSHALL STREET 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
7:00	7:15	2	59	6	67	0	0	0	0	18	32	0	50	0	14	6	20	67	70	137
7:15	7:30	8	81	6	95	0	0	0	0	16	41	0	57	0	11	7	18	95	75	170
7:30	7:45	4	91	5	100	0	0	0	0	21	46	0	67	0	17	9	26	100	93	193
7:45	8:00	3	110	3	116	0	0	0	0	20	53	0	73	0	25	3	28	116	101	217
8:00	8:15	6	92	1	99	0	0	0	0	9	38	0	47	0	24	6	30	99	77	176
8:15	8:30	5	107	11	123	0	0	0	0	21	55	0	76	0	30	9	39	123	115	238
8:30	8:45	6	106	8	120	0	0	0	0	18	48	0	66	0	21	7	28	120	94	214
8:45	9:00	10	109	10	129	0	0	0	0	28	32	0	60	0	21	7	28	129	88	217
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		44	755	50	849	0	0	0	0	151	345	0	496	0	163	54	217	849	713	1562
P.H. am																				
P.H. pm																				
Off-P.H.																				

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

DATE: 03/01/94
DAY: TUESDAY
WEATHER: FAIR

INTERVAL COUNTS

STARTING TIME	1- MARKLEY					2- MARKLEY					3- WOOD					4- SWEDE					5- WOOD					INTSTN
	3	2	5	4	TOTAL	5	4	1	3	TOTAL	2	5	4	1	TOTAL	1	3	2	5	TOTAL	4	1	3	2	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	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	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	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	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	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	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	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	0	0	0	0	0	0
4:00 4:15	1	157	0	0	158	0	20	194	2	216	0	0	0	2	2	0	0	13	0	13	2	1	0	9	12	401
4:15 4:30	2	197	3	0	202	3	26	185	0	214	1	0	0	0	1	0	0	23	1	24	0	0	0	5	5	446
4:30 4:45	2	160	1	0	163	3	25	183	2	213	3	2	0	0	5	0	0	12	0	12	1	1	0	15	17	410
4:45 5:00	1	180	1	0	182	5	16	169	2	192	0	0	0	1	1	0	0	13	2	15	0	0	1	6	7	397
5:00 5:15	5	173	0	0	178	2	24	183	2	211	0	0	0	1	1	0	0	24	0	24	1	0	0	3	4	418
5:15 5:30	3	209	1	0	213	3	25	175	1	204	2	0	0	1	3	0	0	11	2	13	1	0	0	5	6	439
5:30 5:45	3	169	2	0	174	3	16	188	2	209	1	0	0	0	1	0	0	12	1	13	1	1	0	7	9	406
5:45 6:00	2	207	0	0	209	6	24	157	2	189	2	1	0	0	3	0	0	16	3	19	4	0	1	7	12	432
TOTALS	19	1452	8	0	1479	25	176	1434	13	1648	9	3	0	5	17	0	0	124	9	133	10	3	2	57	72	3349
P.H. am																										
P.H. pm																										
Off-P.H.																										

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

DATE: 03/01/94
DAY: TUESDAY
WEATHER: FAIR

INTERVAL COUNTS

STARTING TIME	1- MARKLEY					2- MARKLEY					3- WOOD					4- SWEDE					5- WOOD					INTSTN
	3	2	5	4	TOTAL	5	4	1	3	TOTAL	2	5	4	1	TOTAL	1	3	2	5	TOTAL	4	1	3	2	TOTAL	TOTAL
7:00 7:15	0	79	0	0	79	3	16	188	0	207	1	0	0	0	1	0	5	0	0	5	2	0	0	3	5	297
7:15 7:30	0	88	1	1	90	5	30	223	2	260	0	1	0	3	4	0	6	0	2	8	0	0	0	1	1	363
7:30 7:45	1	106	3	1	111	1	27	198	2	228	0	0	0	1	1	0	1	0	1	2	0	0	0	2	2	344
7:45 8:00	2	103	1	0	106	8	49	154	5	216	2	0	0	0	2	0	2	0	0	2	1	1	0	1	3	329
8:00 8:15	1	96	0	0	97	5	39	174	1	219	1	1	0	3	5	0	5	0	0	5	1	0	0	4	5	331
8:15 8:30	0	102	0	0	102	10	27	183	0	220	0	0	0	1	1	0	8	0	0	8	0	0	0	3	3	334
8:30 8:45	0	108	1	0	109	7	31	145	2	185	2	0	0	2	4	0	8	0	1	9	0	0	0	2	2	309
8:45 9:00	0	124	0	0	124	5	41	148	2	196	0	0	0	0	0	0	13	0	1	14	2	0	0	4	6	340
9:00 9:30	0	0	0	0	0	0	0	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	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	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	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	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	0	0	0	0	0	0	0
TOTALS	4	806	6	2	818	44	260	1413	14	1731	6	2	0	10	18	0	48	0	5	53	6	1	0	20	27	2647
P.H. am																										
P.H. pm																										
Off-P.H.																										

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: DEKALB PIKE & JOHNSON HIGHWAY

DATE: 02/22/94
DAY: TUE
WEATHER: FAIR

FILE NUMBER: 76-PM

PM INTERVAL COUNTS

STARTING TIME	DEKALB PIKE 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	JOHNSON HIGHWAY 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
12:00 12:30	25	238	50	313	93	0	281	374	164	196	0	360	0	180	45	225	687	585	1272
12:30 1:00	37	220	38	295	118	0	293	411	172	211	0	383	0	162	59	221	706	604	1310
1:00 1:30	35	237	44	316	129	0	289	418	168	204	0	372	0	188	67	255	734	627	1361
1:30 2:00	32	254	40	326	140	0	274	414	160	190	0	350	0	214	78	292	740	642	1382
2:00 2:30	42	257	62	361	116	0	280	396	140	184	0	324	0	190	71	261	757	585	1342
2:30 3:00	36	226	49	311	115	0	264	379	133	208	0	341	0	198	85	283	690	624	1314
3:00 3:30	40	253	64	357	130	0	261	391	117	202	0	319	0	189	46	235	748	554	1302
3:30 4:00	33	234	43	310	131	0	234	365	125	190	0	315	0	199	47	246	675	561	1236
4:00 4:15	30	122	22	174	60	0	122	182	63	98	0	161	0	105	38	143	356	304	660
4:15 4:30	32	163	27	222	57	0	128	185	70	112	0	182	0	141	46	187	407	369	776
4:30 4:45	35	176	48	259	61	0	134	195	62	106	0	168	0	135	25	160	454	328	782
4:45 5:00	35	199	49	283	60	0	138	198	58	114	0	172	0	119	30	149	481	321	802
5:00 5:15	45	187	42	274	69	0	140	209	52	118	0	170	0	157	27	184	483	354	837
5:15 5:30	61	196	56	313	73	0	145	218	55	125	0	180	0	158	56	214	531	394	925
5:30 5:45	52	184	40	276	71	0	131	202	61	111	0	172	0	144	40	184	478	356	834
5:45 6:00	39	160	29	228	65	0	119	184	49	89	0	138	0	122	29	151	412	289	701
TOTALS	609	3306	703	4618	1488	0	3233	4721	1649	2458	0	4107	0	2601	789	3390	9339	7497	16836
P.H. am																			
P.H. pm																			
Off-P.H.																			

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: DEKALB STREET & JOHNSON HIGHWAY

DATE: 02/08/94
DAY: TUE
WEATHER: FAIR

FILE NUMBER: 76AM.WK3

AM INTERVAL COUNTS

STARTING TIME		DEKALB STREET 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	JOHNSON HIGHWAY 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
7:00	7:15	9	67	22	98	48	0	45	93	21	58	0	79	0	65	14	79	191	158	349
7:15	7:30	14	82	27	123	59	0	57	116	26	79	0	105	0	70	21	91	239	196	435
7:30	7:45	10	76	39	125	67	0	70	137	35	99	0	134	0	76	20	96	262	230	492
7:45	8:00	17	72	42	131	67	0	83	150	33	147	0	180	0	104	29	133	281	313	594
8:00	8:15	11	80	26	117	75	0	73	148	43	117	0	160	0	75	24	99	265	259	524
8:15	8:30	12	72	24	108	60	0	65	125	40	90	0	130	0	72	27	99	233	229	462
8:30	8:45	15	73	27	115	51	0	64	115	35	85	0	120	0	77	22	99	230	219	449
8:45	9:00	20	82	20	122	40	0	72	112	42	65	0	107	0	101	33	134	234	241	475
9:00	9:30	27	147	36	210	71	0	136	207	85	113	0	198	0	163	69	232	417	430	847
9:30	10:00	29	169	30	228	92	0	185	277	98	104	0	202	0	178	51	229	505	431	936
10:00	10:30	25	188	38	251	72	0	172	244	102	124	0	226	0	168	49	217	495	443	938
10:30	11:00	20	230	44	294	84	0	225	309	104	141	0	245	0	165	39	204	603	449	1052
11:00	11:30	26	240	46	312	91	0	234	325	116	132	0	248	0	153	45	198	637	446	1083
11:30	12:00	30	217	35	282	81	0	260	341	121	168	0	289	0	172	58	230	623	519	1142
TOTALS		265	1795	456	2516	958	0	1741	2699	901	1522	0	2423	0	1639	501	2140	5215	4563	9778
P.H. am																				
P.H. pm																				
Off-P.H.																				

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: EAST NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: MARKLEY ST & JOHNSON HIGHWAY

DATE: 12/22/93
DAY: WED
WEATHER: FAIR

FILE NUMBER: 75-PM

PM INTERVAL COUNTS

STARTING TIME		MARKLEY ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	JOHNSON HIGHWAY 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
12:00	12:30	2	183	100	285	128	278	49	455	81	148	6	235	234	126	86	446	740	681	1421
12:30	1:00	6	186	108	300	110	259	42	411	72	129	8	209	220	112	80	412	711	621	1332
1:00	1:30	3	194	94	291	92	249	33	374	61	118	5	184	226	109	74	409	665	593	1258
1:30	2:00	5	198	96	299	103	256	35	394	63	120	4	187	230	112	78	420	693	607	1300
2:00	2:30	4	188	88	280	122	248	38	408	68	118	6	192	220	120	82	422	688	614	1302
2:30	3:00	2	189	85	276	132	241	40	413	72	118	4	194	192	123	86	401	689	595	1284
3:00	3:30	4	185	81	270	140	238	43	421	75	117	3	195	175	126	95	396	691	591	1282
3:30	4:00	2	178	78	258	142	248	56	446	69	132	2	203	168	144	105	417	704	620	1324
4:00	4:15	2	88	34	124	62	125	29	216	35	72	1	108	98	90	58	246	340	354	694
4:15	4:30	1	104	48	153	58	106	29	193	33	82	1	116	117	115	66	298	346	414	760
4:30	4:45	2	107	33	142	49	99	23	171	32	79	0	111	103	85	74	262	313	373	686
4:45	5:00	1	109	39	149	54	102	25	181	30	80	0	110	108	89	70	267	330	377	707
5:00	5:15	3	106	42	151	52	100	23	175	33	82	0	115	104	86	72	262	326	377	703
5:15	5:30	3	110	43	156	51	98	21	170	35	80	2	117	105	84	69	258	326	375	701
5:30	5:45	2	105	45	152	48	93	19	160	30	75	3	108	99	80	65	244	312	352	664
5:45	6:00	3	99	31	133	40	90	17	147	28	68	1	97	91	76	52	219	280	316	596
TOTALS		45	2329	1045	3419	1383	2830	522	4735	817	1618	46	2481	2490	1677	1212	5379	8154	7860	16014
P.H. am																				
P.H. pm																				
Off-P.H.																				

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
TRAFFIC COUNTING

COUNTY: MONTGOMERY
MUNICIPALITY: EAST NORRISTOWN

INTERSECTION: North-South Street East-West Street
STREETS: MARKLEY ST & JOHNSON HIGHWAY

DATE: 12/22/93
DAY: WED
WEATHER: FAIR

FILE NUMBER: 75-AM

AM INTERVAL COUNTS

STARTING TIME		MARKLEY ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	JOHNSON HIGHWAY 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
7:00	7:15	0	44	14	58	26	124	9	159	19	37	1	57	41	29	19	89	217	146	363
7:15	7:30	1	33	18	52	43	133	7	183	24	55	2	81	58	48	20	126	235	207	442
7:30	7:45	2	48	26	76	94	205	12	311	30	65	1	96	49	34	18	101	387	197	584
7:45	8:00	3	63	24	90	103	105	20	228	29	80	2	111	47	57	26	130	318	241	559
8:00	8:15	5	63	28	96	83	155	22	260	34	73	0	107	43	48	26	117	356	224	580
8:15	8:30	2	55	19	76	102	152	26	280	35	93	2	130	48	52	34	134	356	264	620
8:30	8:45	2	83	30	115	80	154	19	253	28	74	0	102	56	45	39	140	368	242	610
8:45	9:00	3	55	22	80	59	134	15	208	36	69	0	105	70	50	39	159	288	264	552
9:00	9:30	10	141	66	217	85	251	35	371	54	137	5	196	143	79	69	291	588	487	1075
9:30	10:00	6	158	76	240	82	228	44	354	58	120	6	184	148	76	70	294	594	478	1072
10:00	10:30	3	132	82	217	76	234	33	343	60	110	5	175	169	90	68	327	560	502	1062
10:30	11:00	0	148	98	246	78	222	30	330	70	103	4	177	185	101	69	355	576	532	1108
11:00	11:30	3	162	87	252	98	257	32	387	63	107	5	175	214	111	80	405	639	580	1219
11:30	12:00	2	170	86	258	103	269	31	403	68	115	3	186	220	118	78	416	661	602	1263
TOTALS		42	1355	676	2073	1112	2623	335	4070	608	1238	36	1882	1491	938	655	3084	6143	4966	11109
P.H. am																				
P.H. pm																				
Off-P.H.																				