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Traffic and Parking Analysis Study

NATIONAL PARK SERVICE

DEPARTMENT OF THE INTERIOR

WOLF TRAP FARM PARK

For The Performing Arts

Fairfax County, Virginia

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Traffic and Parking Analysis Study

Wolf Trap Farm Park
Fairfax County, Virginia

United States Department of the Interior
National Park Service
Denver Service Center

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WOLF TRAP FARM PARK FOR THE PERFORMING ARTS

Fairfax County, Virginia

TRAFFIC AND PARKING ANALYSIS STUDY

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CHAPTER 1. INTRODUCTION AND PURPOSE

Performances are held at Wolf Trap Farm Park from the end of May through September. Traffic congestion and parking problems occur as a result of these performances. This work effort is directed at identifying the extent of the traffic and parking impacts, and evaluating several possible improvements that would mitigate the impacts.

The National Park Service started a General Management Plan/Environmental Impact Statement (GMP/EIS) in 1993. It is intended that this analysis of the traffic and parking problems and the evaluation of several possible improvements be used as a starting point for the GMP/EIS planning effort.

Traffic data was collected and field observations made by the A/E during a variety of performances in June and July of 1992. These data have been used as baseline information for this analysis. The actual machine traffic volume data is contained in Appendix A of this report.
The specific purpose of this analysis is to;

1) document field observations made during 1992 and identify the current parking and traffic conditions associated with performances at the Park,

2) identify the current traffic volumes on the major approach routes leading to the Park,

3) evaluate the need for a parking garage at the Park,

4) identify the need for shuttle service,

5) evaluate the adequacy of the Trap Road bridge over the Toll Road,

6) determine if there is a need for a full diamond interchange at Trap Road and the Dulles Access Road,

7) evaluate safety and lighting issues, and

8) define the current signing system and evaluate the adequacy of the current signs.

CHAPTER 2. EXISTING CONDITIONS

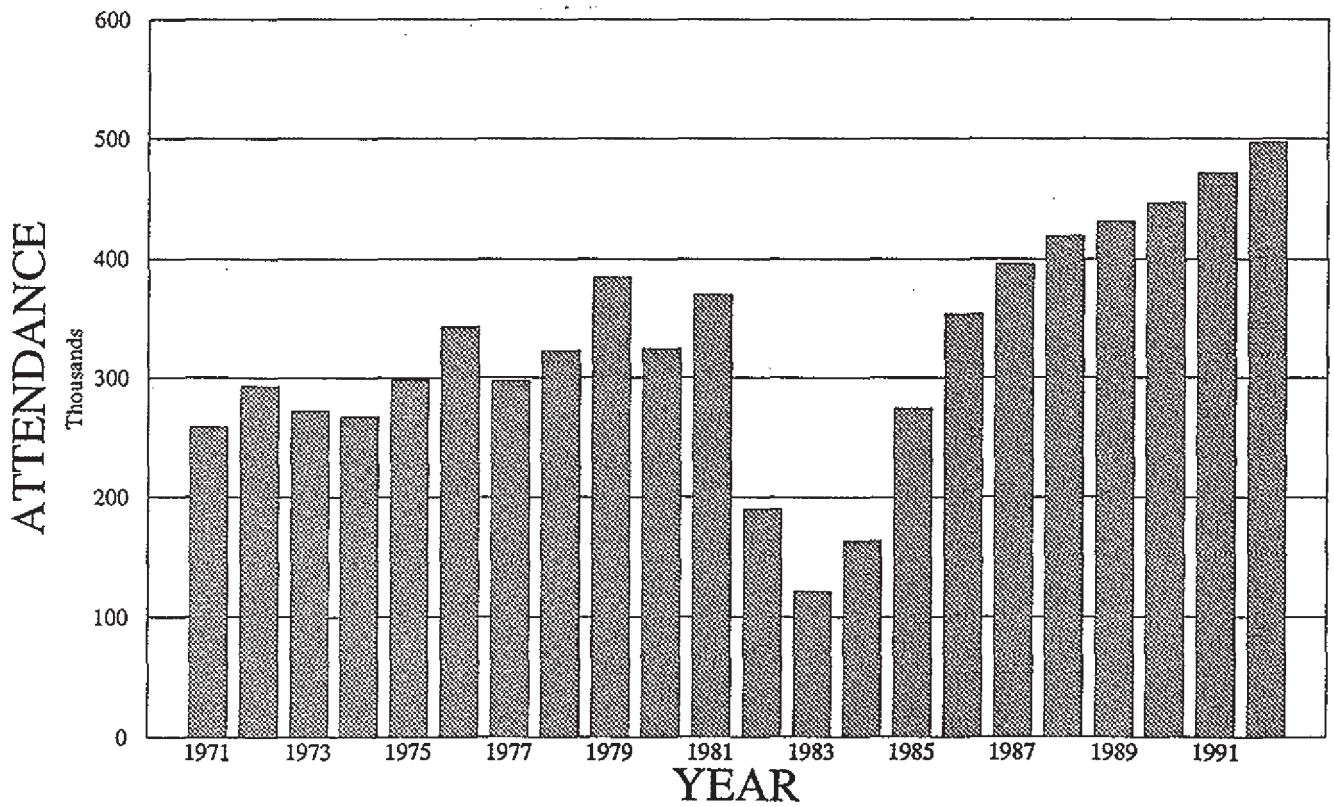
A. Park Activities and Visitation

The typical season at Wolf Trap Farm Park runs from May 25th to September 20th. According to Park staff there are between 95 and 110 evening performances each season. Usually between 25 and 30 performances are sold out. The average performance in 1991 had an attendance equal to 71% of capacity. In 1992 this figure increased to 72%. The largest recorded performance attendance at Wolf Trap Farm Park occurred in 1986 when 7420 people watched a Stephen Stills concert. It was estimated that there were an additional 300-500 people in the Park that were related to the production of the concert.

Performance attendance has continued to grow at the Park since its beginning in 1971. A significant increase in attendance occurred in 1986 when the schedule of

Figure 1 - Historical Performance Attendance at the Filene Center

Wolf Trap Farm Park



performances was broadened to include a wider variety of popular acts. Annual attendance grew to over 497,000 in the 1992 season.

Historical attendance data is collected by the NPS staff. This attendance information has been summarized in FIGURE 1. The data reflects a drop in attendance during 1982 through 1984. This is due to the Filene Center fire that occurred in the spring of 1982. During these years the performances were held under a tent in the meadow which had a capacity of less than 2000 people.

Wolf Trap Farm Park also schedules afternoon matinee performances and special children's performances. Matinees generally have a lower attendance than evening performances. The Park typically has at least one large attendance weekend event, such as the International Children's Festival (ICF) or the Jazz and Blues Festival. The ICF has historically had very large attendances with as many as 13,000 spectators. It should be noted that the ICF is family oriented and therefore has a high vehicle occupancy rate. This fact results in fewer vehicles that need to be parked. Typically the festival parking does not exceed what normally occurs on a sellout evening performance. The other non-family type festivals, however, have the potential to exceed the available parking.

B. Typical Performance Attendance

Traffic and parking conditions were observed during the Crosby, Stills, and Nash (CSN) concerts held on June 1st and 2nd, 1992. Both concerts were considered sellouts and the on-site parking filled to capacity on both nights. The performance attendance for each night was determined from ticket receipts, while the number of employees on-site was calculated by Park personnel using daily staff assignment sheets and information provided by the Stage Manager. Field observations indicate that some people enter illegally by jumping the perimeter fence. There is no way to determine the actual number of individuals that jumped the fence, therefore rough estimates have been provided. A summary of the attendance data for these concerts is provided in TABLE 1.

TABLE 1
ATTENDANCE DATA

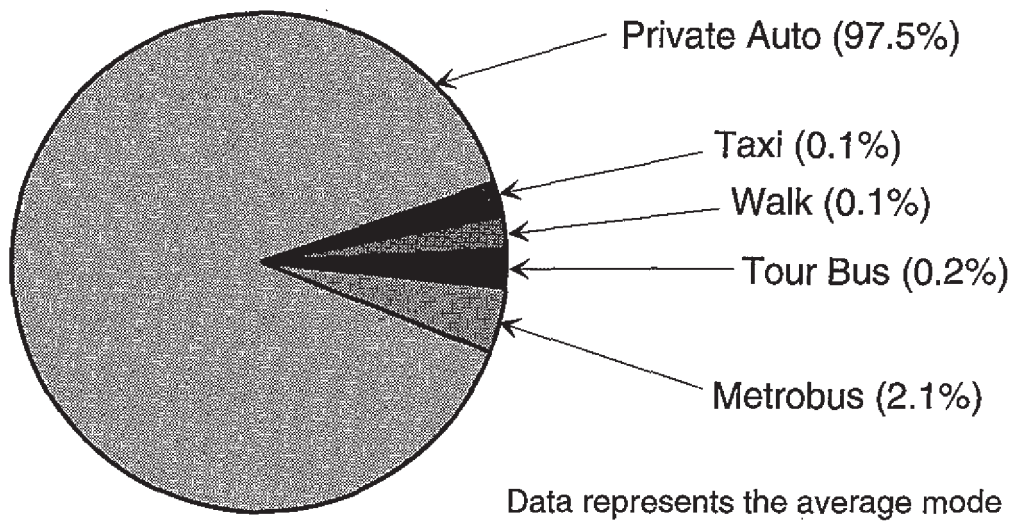
	June 1	June 2
Ticket Count	7181	7267
Jumping the fence (estimated)	100	100
Total Attendance	7281	7367
Total Employees	289	220
Total People On-Site	7570	7587

C. Mode of Arrival, Vehicle Occupancy and Vehicle Classification

1. Mode of Arrival

The mode of arrival for evening performances was observed during the CSN concert held June 1st and 2nd in 1992. According to the data, the principle mode of transportation that is used by patrons to access Wolf Trap Farm Park is the private automobile. About 97.5% of all patrons arrive by private car. The next largest group (2.1%) arrived by taking the Metrorail system to the West Falls Church Metro Station and riding the Metro shuttle bus from there to the Park. About 0.2% of the patrons arrive by tour bus. It is estimated that about 0.1% of the patrons walk from their homes and less than 0.1% arrive by taxi. This mode of arrival distribution is considered representative of most performances held at Wolf Trap Farm Park. FIGURE 2 shows a break down of the mode of arrival.

Figure 2 - Mode of Arrival
Wolf Trap Farm Park



Data represents the average mode of arrival observed on June 1, 1992 and June 2, 1992.

2. Vehicle Occupancy

A vehicle occupancy survey was conducted during several performances during June and July of 1992. These performances included Crosby, Stills, and Nash, the Kirov Ballet, and the Four Tops/Temptations. The number of passengers riding in each vehicle was observed and recorded as the vehicles entered the Park. Buses

and taxis were not included in this survey. There was no way to distinguish between employees and patrons in this survey.

According to this data about 78% of the vehicles had only one or two occupants. The data did not significantly change from night to night. The average occupancy was determined to be about 2.2 persons per vehicle for a typical performance. Separate vehicle use data provided by the Park indicates that the employee vehicle occupancy is 1.18 persons per vehicle.

The vehicle occupancy rate varies somewhat depending on the type of show. The range is estimated to be as low as 2.05 to as high as 2.40 persons per vehicle. The different vehicle occupancy rates that were observed during 1992 are presented in TABLE 2.

TABLE 2
VARIATIONS IN VEHICLE OCCUPANCY

DATE	PERFORMANCE	VEHICLE OCCUPANCY (Pers./Vehicle)	SAMPLE SIZE (Vehicles)
06/01/92	Crosby, Stills & Nash	2.22	741
06/02/92	Crosby, Stills & Nash	2.17	766
07/06/92	Kirov Ballet	2.19	1089
07/07/92	Kirov Ballet	2.09	1057
07/19/92	4 Tops/Temptations	2.39	1328
07/20/92	4 Tops/Temptations	2.23	1984

3. Vehicle Classification

The vast majority (99.7%) of the vehicles related to the concerts were private cars. There were no vehicles with trailers or RVs. There were no large trucks. Some pickup trucks (one ton or less) were observed but not counted separately since these trucks fit into a normal-sized parking stall similar to a car. Only three motorcycles were observed on-site each night. There were between 6 and 9 buses on-site each night. They included 2 Metrorail shuttle busses, 1 tour bus, and 3 to 6 buses for the performers. There were also 1 or 2 large tractor-trailer trucks on-site that carried the performer's stage sets and equipment.

D. Traffic Circulation

Field observations indicate that about 70% of the concert patrons arrive via Trap Road at the south entrance to the Park. The vast majority of these people are using the Dulles Toll Road (VA-267). The other 30% of the vehicles arrive through

the north entrance on Trap Road. These vehicles are using the Leesburg Pike (VA-7), Towlston Road and Trap Road to access the site. FIGURE 3 shows the major access routes and the average weekday traffic volumes that typically occur on these routes.

The traffic volume data presented in Figure 3 is based on machine traffic counts conducted by the Consultant during July 1992, February 1993 and April 1993. All counts were seasonally adjusted to represent annual average weekday traffic volumes.

The loading of the on-site parking lots occurs in an orderly and efficient manner. The NPS parking attendants are well trained and work well as a team. They direct drivers to several separate parking areas at a time throughout the evening loading process.

The parking crews park the large turf areas first because they take the most time to load. These areas are also parked first because the early traffic arrives at a slow uniform rate which works well with the relatively slow loading time associated with the large turf areas. After the large turf areas are full the parking crews direct the remaining vehicles to the paved lots. Finally, the small turf mass parking areas are loaded and vehicles are allowed to park on a portion of the sidewalk within the Park.

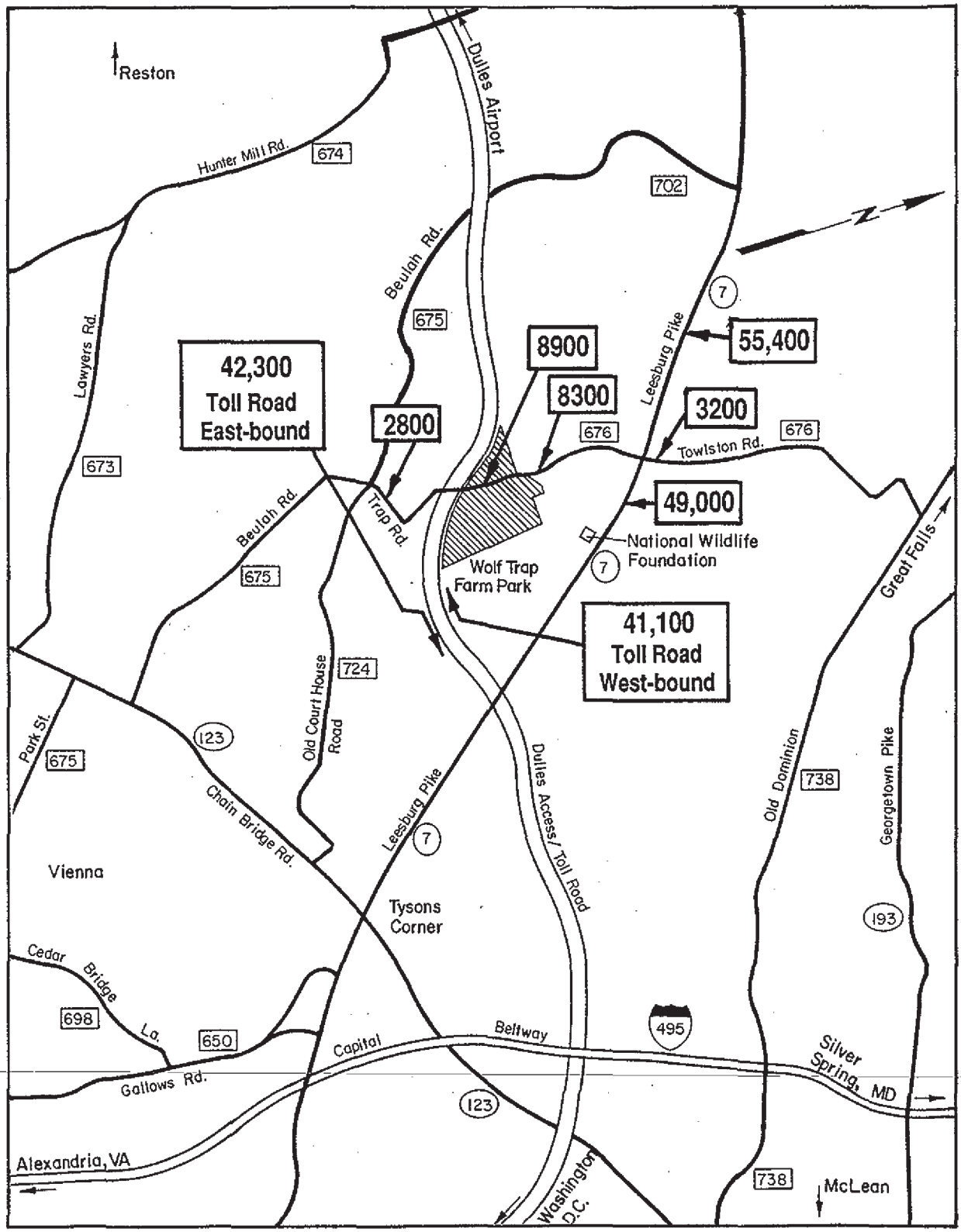
It should be noted that prior to the 1992 season "stack parking" occurred in some of the smaller turf parking areas. That means they would park the vehicles bumper to bumper and door to door without any aisles. Areas that are stack parked cannot clear at the end of the night until the majority of the drivers are in their vehicles. These stack parked areas have been the source of some bad feelings in the past when a patron wished to leave early and could not because their car was trapped by the other vehicles. The practice of "stack parking" was discontinued at the beginning of the 1992 season.

Parking begins about two hours before show time. Traffic congestion does not typically occur on the approach roads to the site until about 20 to 30 minutes before the concert. At this time the rate of arrival exceeds the parking area loading rate and vehicle queues form at the entrances and do not dissipate until about 5 or 10 minutes after show time.

Field observations indicate that most patrons appeared to be very dissatisfied when they were turned away because all of the on-site parking areas were full. This was especially true when the individual has been waiting in a long line of vehicles to get to the Park. These patrons are directed back to the north and south where they park in the nearby residential neighborhoods.

The exit process at the end of a performance is very disorganized, resulting in mass congestion. This occurs because everyone at the concert is trying to leave at the same time and there are only two exit routes. Each of the routes is essentially

Figure 3 - Major Access Routes
Wolf Trap Farm Park



NOTE: Traffic counts by RPA during July, 1992, February, 1993, and April, 1993. All counts have been seasonally adjusted to represent annual average weekday volumes. Data represents 24 hour traffic volumes.

a single exit lane. The exit traffic to the south has to form a single lane prior to crossing the bridge over the Toll Road. The access ramp onto the Toll Road is also a single lane. The exit route to the north is reduced to a single traffic lane by vehicles parked along Towlston and Trap Roads. The exit process is also greatly impaired by pedestrians walking in the roads. People who park outside of the Park usually walk in the road because there are no sidewalks or street lights. This includes Trap Road north to Shouse Village and south over the Toll Road bridge to the Barns of Wolf Trap.The queue of vehicles exiting the park to the south does not dissipate until about 55 minutes after the show. The vehicles exiting to the north do so with minimal delay after they are out of the parking areas. No vehicle queuing or stopped delays were observed on the north exit route within sight of the Park. Some vehicular delays occur at the intersection of Towlston Road and the Leesburg Pike. This intersection is controlled by a traffic signal. Field observations indicate that the exit traffic divides into two traffic lanes on the immediate approach to the intersection. Although the right lane holds the majority of the traffic volume, it moves quickly with the vehicles turning right on red. There is very little opposing traffic on Route 7 between 10 PM and midnight. The traffic signal functions relatively well under the exit conditions. The traffic signal has been programmed so that during performance exit hours the signal will provide the maximum green phase for exit traffic on the south approach on Towlston Road. The green phase will remain on the Towlston approaches continuously if there is no traffic on Route 7. The signal will only shift the green phase to Route 7 if a vehicle is present on the east or west intersection approaches.

The following traffic circulation problems have been identified:

1. Traffic congestion and delays entering the site

Traffic delays tend to occur within a half hour of the beginning of a performance. This results in traffic congestion on the north and south approaches to the site. This problem occurs because the vehicle approach rate exceeds the parking lot loading rate. In most cases the congestion and delays only occur when the on-site parking is approaching capacity. When the on-site parking fills to capacity there is much confusion on the part of the patrons still trying to access the site and park. At this point the remaining patrons must be redirected away from the Park to the only remaining areas where parking is allowed, which are in the nearby neighborhoods. This situation creates additional circulation problems and increases the potential for pedestrian/vehicular conflicts. This situation also impacts the surrounding neighborhoods.

2. Traffic congestion and delays exiting the area

Major traffic congestion occurs during the exit process. The facility takes close to an hour to empty after a sellout performance. Many patrons are unsure of the exit routes and would prefer to leave the site by the same route they used to arrive. In many cases this is not possible because of the traffic congestion. Although both

the north and south exit routes can be used to get to the Toll Road, VA-7, I-66, or I-495 most patrons would prefer to exit to the south because they are unfamiliar with the north exit route. In fact, when vehicles are forced to the north, some north-bound vehicles will actually make a u-turn and head back into the traffic congestion in the Park so they can exit to the south. It is estimated that about 70% of the vehicles would exit to the south if given the opportunity.

3. Bridge over the Dulles Toll Road

The traffic volumes that occur during the exit of the facility require two southbound traffic lanes over the Toll Road. The current "bottleneck" in traffic south of the Park occurs when traffic on Trap Road has to merge from two lanes down to one lane on the bridge approach.

4. Junction of Trap Road and the Toll Road

The top of the Toll Road access ramp is a critical bottleneck on the south exit route. The adjacent vegetation makes this intersection hard to identify in the dark. There is no street lighting in this area. The lack of appropriate signing at this critical junction also lends to the confusion.

The operation of this intersection controls the effectiveness of the south exit route. Traffic congestion and other operational problems occur when vehicles approach the intersection from the south. These vehicles have the right of way at the intersection and greatly disrupt the flow of exiting traffic from the Park. It is desirable to have the Park Police stationed at this intersection to provide manual traffic control during the exit process.

5. On-street parking along Towlston Road

On-street parking along Towlston Road is permitted and occurs to some extent on most performance nights. Vehicles parked along the north-bound side of the road reduce the number of available traffic lanes from two to only one. This tends to slow the exit process from the Park. This parking practice also encourages people to walk along Trap Road which tends to increase the potential for pedestrian/vehicle conflicts.

E. Parking

Wolf Trap Farm Park has a total of 1,388 designated paved parking spaces in three major paved parking lots. The largest paved lot is the West lot which has 900 marked spaces and is located on the west side of Trap Road. The East lot, located on the east side of Trap Road, has a semi-circular layout and 350 marked spaces. The third paved lot is located behind the Filene Center. This lot has 138 spaces, and is used by employees, production staff, performers, and disabled patrons. The lot has 5 designated spaces for handicap vehicles. This lot is also used by large trucks and buses associated with the performers.

Another 132 paved parking spaces are available in several minor parking areas. These parking spaces are located along Circle Road, Stage Road, and in the associates parking lot. This brings the total number of designated paved parking spaces to 1,520. In addition to these areas, about 55 vehicles are parked on the sidewalk along Circle Road between the east parking lot and Barn Road.

Parking is permitted in several turf areas within the Park. The number of vehicles that can be parked on the turf areas will vary from performance to performance because the turf areas are not striped. The Park can accommodate approximately 1,242 vehicles within the turf areas. Between 100 and 250 vehicle spaces are lost during periods when the turf is wet. These spaces are lost in areas where the slope of the ground is too steep to safely park vehicles.

A summary of the parking inventory is presented in TABLE 3. This table identifies 16 different areas that are traditionally used for performance parking within the Park. The location of each parking area mentioned in the summary is shown in FIGURE 4.

When the on-site parking fills to capacity the remaining vehicles are forced to park off-site in the surrounding neighborhoods. Both of the Crosby, Stills, and Nash concerts held on June 1st and 2nd of 1992 were sellouts and the NPS had to close the Park to additional vehicles when all on-site parking spaces were full. According to the data there were a total of 2766 passenger vehicles on-site and 477 vehicles off-site on June 1st. On June 2nd there were 2887 passenger vehicles on-site and 523 off-site. The difference in the on-site capacities is attributed to the different vehicle densities that occurred on the turf lots on the two nights.

Historical data indicates that in 1990, the on-site parking filled to capacity 9 times. In 1991, it filled to capacity 19 times, and in 1992 it filled to capacity 27 times.

The following parking related problems have been identified:

1. Lack of adequate parking

There is only enough paved parking to handle about 40% of the parking demand generated by a sellout performance. Even with the use of the turf parking areas the Park can handle only about 85% of the peak demand. This results in the displacement of about 500 vehicles into the surrounding neighborhoods. When this occurs there is an obvious impact on these neighborhoods. Off-site parking creates additional pedestrian/vehicular conflict problems as these patrons walk to and from the Park.

2. Parking on Towlston and Trap Roads

Parking along Trap and Towlston Roads creates traffic congestion problems and pedestrian conflicts.

3. Parking on turf areas of the Park

Parking vehicles on the turf areas within the Park destroys these grass areas and degrades the aesthetic quality of the Park. There is also concern for pedestrian and vehicle safety during the exit process. This is especially true on evenings when the grass is wet and slippery.

4. Parking in the residential areas near the Park

Parking by patrons in the residential areas near the Park occurs to some extent on most performance evenings. People park along Towlston Road and in Shouse Village to the north and along Trap Road and at the Barns of Wolf Trap located to the south of the Park. This overflow parking impacts the surrounding neighborhoods. It also causes pedestrian safety problems because there are no adequate pedestrian facilities between these areas and the Park. Traffic congestion problems are also created by these overflow vehicles parking along the main access and egress routes to the Park.

F. Pedestrian Traffic

Pedestrian traffic occurs between the parking areas and the Filene Center. This pedestrian traffic conflicts with the vehicles on the roads and in the parking areas before and after performances and subsequently slows the parking area loading and unloading process.

The Park has provided pedestrians a 20 foot wide tunnel under Trap Road which has eliminated the largest potential pedestrian/vehicular conflict. The greatest amount of pedestrian/vehicular conflict now occurs at the junction of Barn Road and Circle Road which is near the pedestrian tunnel under Trap Road. The pedestrian traffic tends to walk through this intersection before and after the concerts.

The Circle Road leading from the Filene Center down to Barn Road was observed to have a large number of pedestrian/vehicular conflicts. Pedestrians were observed walking down this section of road 8 abreast during the exit of the show.

Pedestrians also conflict with the south exit traffic on the bridge over the Toll Road and especially at the top of the access ramp on the south side of the Toll Road.

Spot pedestrian counts were conducted during the exit after the concerts. Counts were taken on Circle Road and on Barn Road. The maximum one minute pedestrian volumes were recorded at both of these locations. A maximum flow of 196 people per minute was recorded on Circle Road. It is estimated that about 4,000 patrons walk along Circle Road during a 45 minute period after a show.

A maximum pedestrian volume of 94 people per minute was observed on Barn

TABLE 3 PARKING INVENTORY		
Parking Area	Surfacing	Capacity (spaces)
1.Lot 1 - including loading dock area	Paved	138
2.Filene Center drive-thru	Paved	6
3.Stage Road - between gates	Paved	6
4.Circle - all except triangle	Paved	80
5.Triangle	Turf	46
6.Dust Bowl	Turf	275
7.Associates Lawn	Turf	45
8.Lot 3 - including driveway	Paved	30
9.Gil's Hill - except area #10	Turf	650
10.Gil's Hill Mass Parking Area	Turf	60
11.Tunnel Mass Parking Area	Turf	38
12.Marquee Mass Parking Area	Turf	28
13.East Lot - incl. turf median	Paved/Turf	350 / 100
14.Sidewalk - Barn Rd. to Park Entrance	Paved	55
15.West Lot	Paved	900
16.Maintenance Yard	Paved	10
TOTAL SPACES		2817

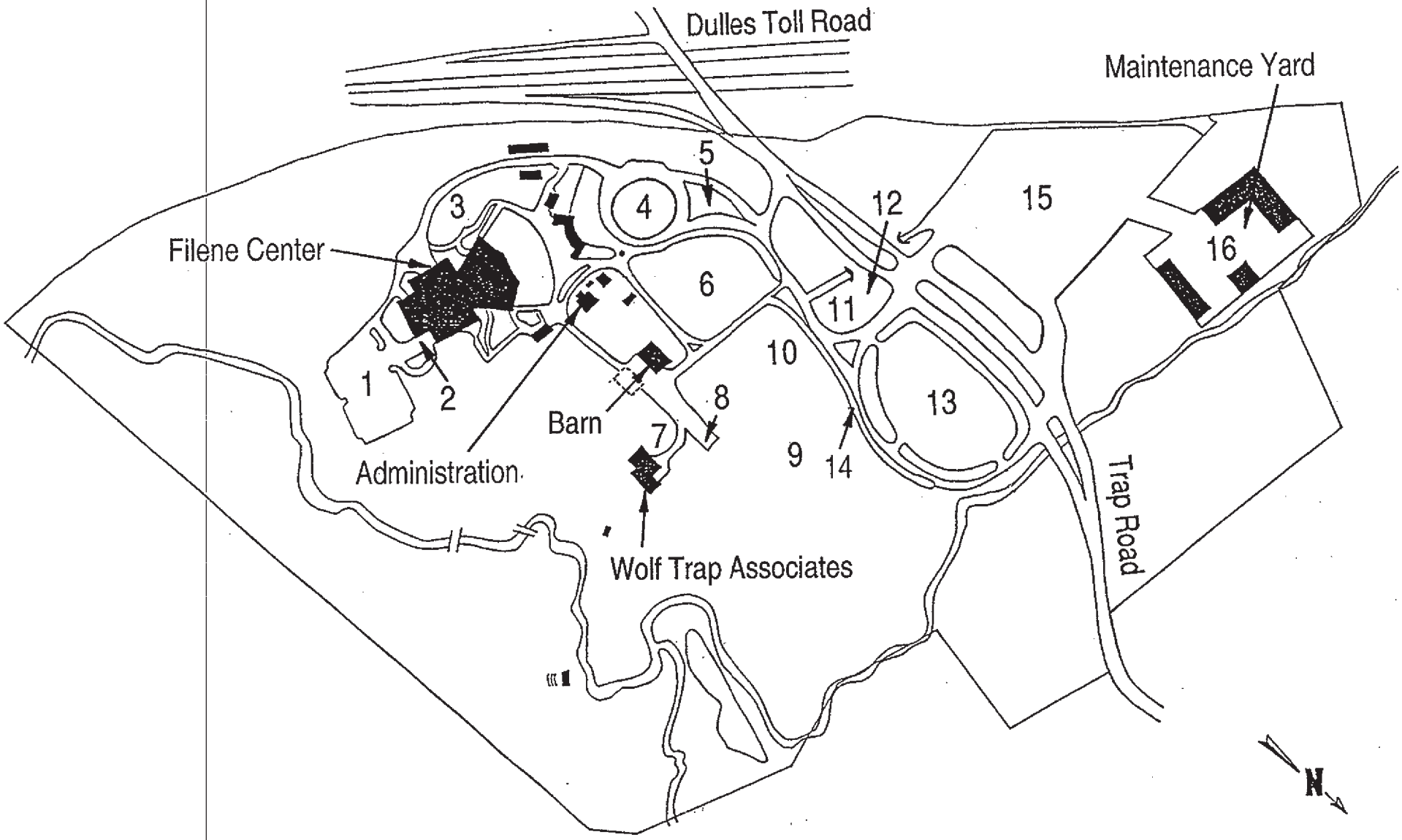


Figure 4 - Parking Area Reference Map

Wolf Trap Farm Park

Road after the concert performances. It is estimated that about 1,000 pedestrians walk along Barn Road after a performance. The remainder of the show patrons use the various other paths and trails that lead to the parking areas.

It is estimated that about 400 pedestrians cross the Toll Road on the overpass structure and about 800 pedestrians walk along Trap and Towlston Roads north of the Park. These groups of pedestrians park their vehicles in the adjacent neighborhoods because all of the on-site parking is full.

The following pedestrian related problems have been identified:

1. Lack of adequate pedestrian facilities

The principal pedestrian paths in the Park are undersized for the demand. These paths are poorly lighted and do not function well. Most of the crowd tends to walk in the road because the paths are too narrow and poorly illuminated. The fact that many patrons are carrying large coolers, lawn chairs, and picnic baskets tends to increase the need for adequately sized pedestrian paths.

There are no sidewalks or street lights along the south exit route leading across the bridge over the Toll Road and down to the Barns of Wolf Trap. In this area the patrons have no choice but to walk in the road which tends to impede the vehicle traffic flow.

2. Parking on sidewalks

The practice of parking vehicles on the sidewalk within the Park creates a pedestrian problem. These vehicles force the patrons to walk in the street with moving traffic.

3. Lighting for pedestrians

Proper corridor lighting for pedestrian traffic is very desirable. In areas where lighting does not exist or where lighting levels are low, the pedestrian usually chooses to walk in the road where the footing is more predictable. This causes traffic congestion and increases the probability of pedestrian/vehicular conflicts.

CHAPTER 3. EVALUATION OF A FULL DIAMOND INTERCHANGE AT TRAP ROAD

The need for a full diamond interchange at Trap Road was analyzed as part of this study. The current interchange only has connecting ramps to the Toll Road on the east side of Trap Road. To convert the interchange into a full diamond it would be necessary to add two ramps on the west side of the interchange. It should be noted that for the purposes of this analysis the operation of the full diamond interchange is limited to Park functions only, which is similar to the current operation of the east ramps.

Because of the limited operation of the interchange it is assumed that any modifications to the interchange would not alter the regional travel patterns of the general public.

The existing interchange functions well in providing access to the Park from the east. Unfortunately, the interchange does not function as well during the exit process. This is due to the existence of only a single southbound travel lane on the Trap Road Bridge. Trap Road has two southbound lanes through the Park. Significant traffic congestion occurs when these two lanes merge into a single southbound lane on the approach to the bridge.

The Federal Highway Administration conducted a brief feasibility study to determine if it is possible to actually construct the additional ramps. They concluded that it was possible and that it would cost about $1 million to convert this interchange into a full diamond.

In order to determine the need for the full diamond interchange it is first necessary to estimate where the Park patrons are coming from, when they arrive, and where they go after the performance is over. Not all patrons travel from their homes directly to the Park. It is assumed that some patrons come to evening shows directly from their place of employment, while others are arriving from restaurants.

The general distribution of the location of the residences of the patrons was determined by scanning the addresses of advance ticket mailings. The Wolf Trap Farm Park Foundation was contacted to assist in this determination. Using a computer listing of last years' advance ticket sales it was possible to do a search for certain residential locations in the area. The data from Wolf Trap Farm Park Box Office included 319,047 advanced ticket sales (mail orders and telephone sales) sold for the 1992 season.

The data search was performed for the following communities: Great Falls,

McLean, Vienna, Oakton, Herndon, Reston and Frederick, Maryland. These seven residential communities represent the most likely origins for people living north, south, and west of the Park. The remainder of the patrons were assumed to be located to the east of the Park.

It is noted that some patrons would drive to the Park for a show without going home first. It is assumed that most people doing this are working to the east of the Park in Washington D.C. or the surrounding business areas. These people would most likely be coming to the Park from the east, using the Capital Beltway (I-495) and either the Toll Road or Route 7 to access the Park.

The results of the computer search are presented below:

North (Great Falls) - 1%
West (Reston, Hernden, and Frederick, Md.) - 5%
South (Vienna and Oakton) - 5%
East - 89%

The information gained from the computer search of the advance ticket sales mailing list was useful in gaining a general idea of the distribution of traffic on the access routes. Unfortunately, it was not considered accurate for the purposes of this analysis. In order to get a better understanding of the actual routes that are being used to approach and leave the Park, a review of the traffic count data was conducted. A copy of the machine traffic count data collected by the Consultant is presented in Appendix A of this report.

Estimates based on turning movement counts conducted during the summer of 1992 were used to help verify the information obtained from the ticket sales information. Manual turning movement count information from traffic counts made during two sellout performances in 1992 was used to estimate the approach directions. The turning movement count data collected at the Towlston/Route 7 intersection combined with machine traffic count information was used to determine the percentage of vehicles arriving and departing from each direction. The distribution of the approach and departing traffic on the various routes was estimated using the traffic count data and is presented in FIGURE 5.

The information shown in FIGURE 5 indicates that there is a significant difference between the routes taken to approach the Park versus the routes used to depart. This is due to the fact that many drivers do not have a choice in departure routes because of the way the parking lots unload. The greatest difference between before and after is the shift in the percentage of vehicles using the Toll Road. This decrease in the use of this route after a performance is a result of the traffic congestion that occurs when the traffic has to merge from two southbound lanes into one traffic lane on the approach to the bridge over the Toll Road.

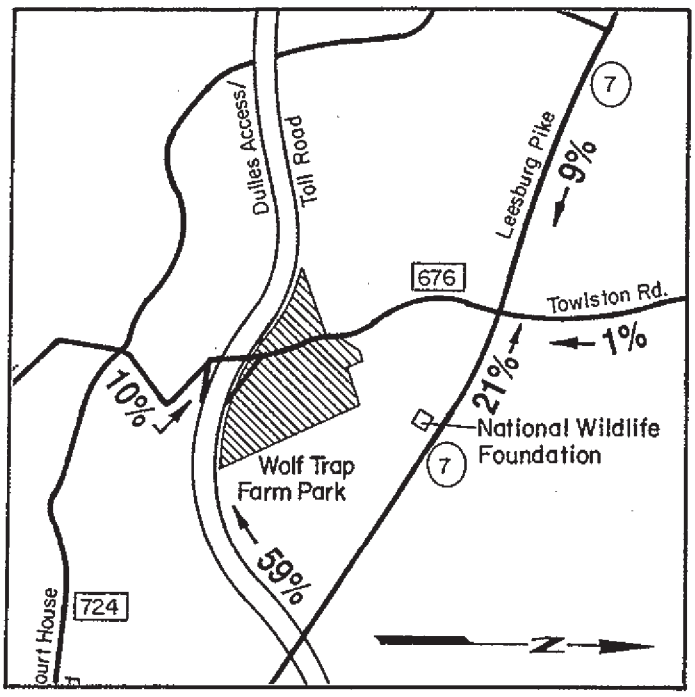
It may be possible that future private development and the resulting traffic volume increases would alter the approach and departure traffic patterns. The

Figure 5 - Approach Traffic Distribution With And Without a Full Diamond Interchange

Wolf Trap Farm Park

Without Interchange

Approach Configuration



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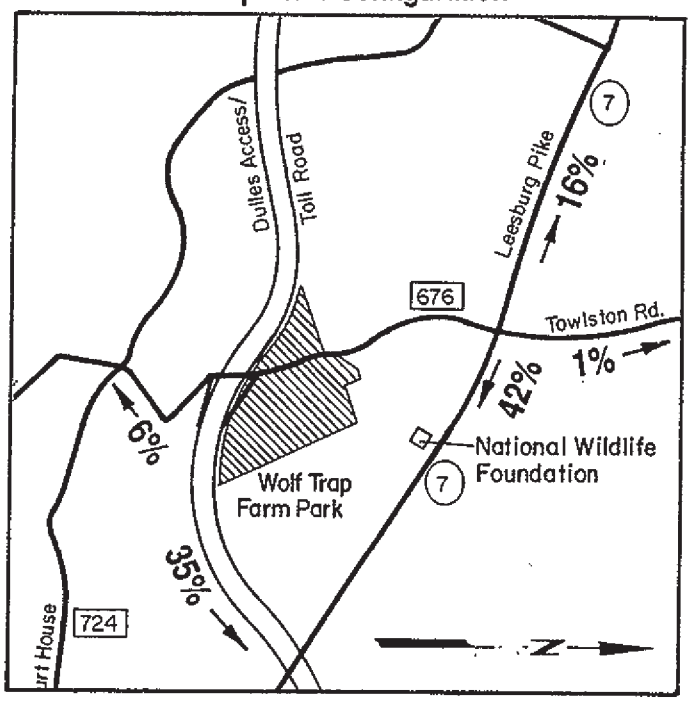

With Interchange

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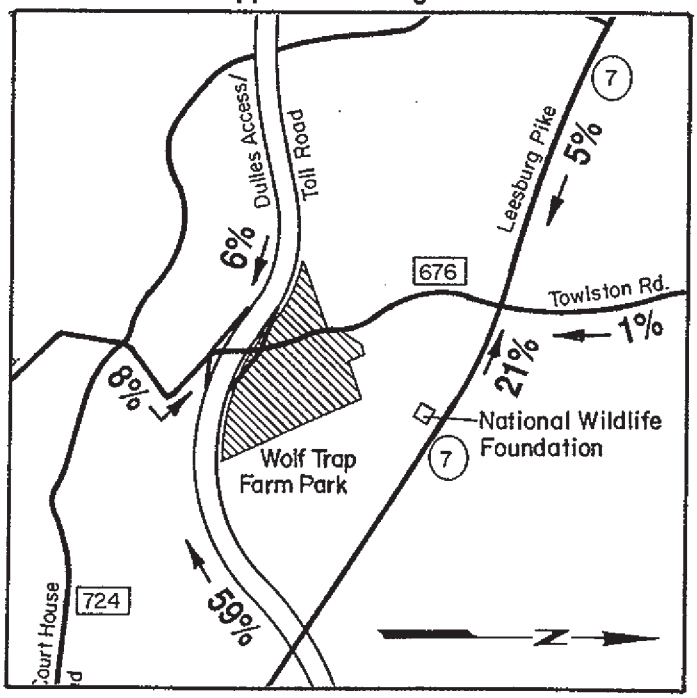

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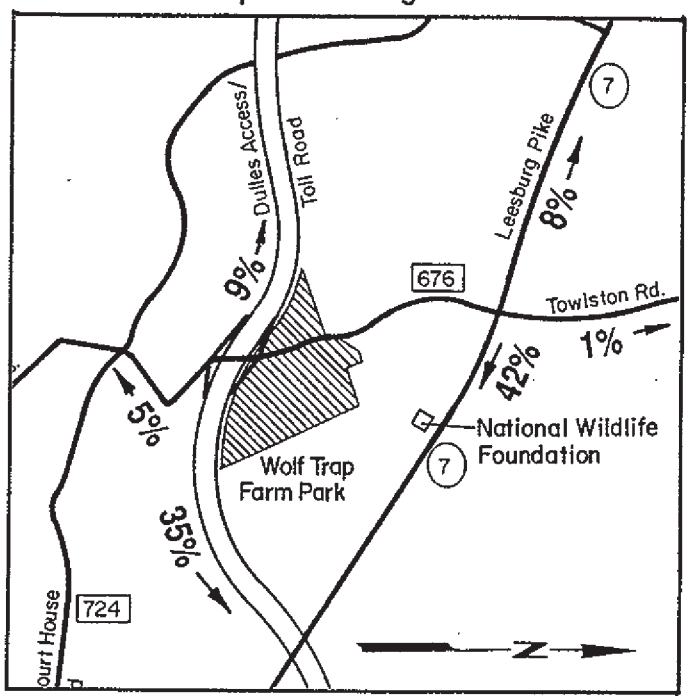


Virginia Department of Transportation (DOT) was contacted to see if they have any traffic volume projections for the roads in the vicinity of the Park. They did not have any data in the vicinity of the Park but they did have 24 hour, two way traffic counts for the year 1989 for sections of Leesburg Pike, and the Dulles Toll Road. They also had year 2010 traffic projections for these two roads. This information is presented in TABLE 4. Virginia DOT did not have any traffic count information relating to Towlston and Trap Roads or any other roads near the Park.

TABLE 4
TRAFFIC VOLUME PROJECTIONS

Route Name	1989 Actual	2010 Projection
Dulles Toll Road (VA-267) VA-7 to VA-674	74,700 VPD	95,000 VPD
Leesburg Pike (VA-7) VA-28 to VA-267	64,900 VPD	86,000 VPD

SOURCE: JOHN HARDING, VIRGINIA DEPARTMENT OF TRANSPORTATION, NORTHERN VIRGINIA DISTRICT OFFICE, TRANSPORTATION PLANNING SECTION

The traffic projections indicate that significant increases are anticipated to occur on both the Toll Road and Route 7. Both facilities are expected to have volume increases of 25 to 30 percent between the base year (1989) and the year 2010. This indicates that the level of service provided by both corridors will deteriorate at about the same rate over the next 17 years. There is no information that would lead one to believe that one corridor will be significantly more effective than the other in future years. The increases in traffic volumes on these routes is an indication that Virginia DOT anticipates a certain amount of growth to occur to the west of the Park as well as all other areas within the region. Therefore it is assumed that the approach proportions to the Park would remain relatively constant for the foreseeable future with some minor increases (10% to 20%) in the percentage of patrons that would arrive and depart to the west.

According to the data about 9% of all vehicles approach the Park from the west, and 16% leave to the west at this time. This represents about 306 vehicles approaching and 544 vehicles departing. Currently all of these vehicles are using Route 7 to access the Park. If a full diamond interchange were constructed, it is estimated that about 6% of all vehicles (204 vehicles) would approach the Park from the west on the Toll Road. It is also estimated that about 9% of the total vehicles attending a performance (about 330 vehicles) would exit using the westbound ramp. This shift in traffic patterns would result in reducing the traffic exiting to the west on Rt. 7 to about 8% and reduce the number of vehicles using Trap Road to the south to about 5%. It should be noted that these projections assume that the Trap Road Bridge would remain as is.

FIGURE 5 shows the effects of constructing a full diamond interchange. As shown in the figure, the presence of the two west ramps would not change the traffic patterns to the east and north. However, they would alter the travel patterns to the west and south. The minor amounts of traffic redistribution that are anticipated to occur as a result of the interchange additions are not large enough to change the traffic operations on the Toll Road, Route 7, or Trap Road. The existence of a full diamond interchange would increase the daily traffic volume on the Toll Road west of Trap Road by about 500 vehicles (0.6%). A similar decrease in traffic volumes on Route 7, west of Towlston Road, and Towlston Road, between the Park and Route 7, is anticipated. It is estimated that the new ramps would be used by about 200 vehicles during the approach and 300 vehicles during the departure on a night with a sell out performance in 1993. By the year 2010 this volume is anticipated to increase to 240 and 360 vehicles respectively.

The addition of the west ramps to the existing interchange would have certain benefits. The new ramps would increase the access options to patrons approaching the Park from the west. The full diamond interchange would cause a slight reduction in the traffic volumes on Route 7, west of Towlston Road. The ramp additions would also reduce the amount of traffic that would have to travel through the residential area along Towlston Road. The traffic load on the signalized intersection at Towlston Road and Route 7 would also be reduced by the interchange modification. The full diamond configuration would not significantly affect any of the other approach routes including the Toll Road and Route 7, east of the Park.

It is important to consider the cost of the interchange addition with respect to benefits derived from the improved access and egress to the Park. It is estimated that the full diamond would cost about $1 million and be used by an average of 150 approach vehicles and 225 departing vehicles each night of the 130 day season. If the cost of the interchange additions were spread out over 20 years the cost would be $1.28 per vehicle that uses the new eastbound exit ramp and $0.85 per vehicle that uses the new westbound access ramp.

Considering the costs, the relatively small number of vehicles that would use the ramps and the fact that the new ramps do not significantly change or solve any of the current traffic problems at the Park, it is difficult to justify the full diamond configuration.

CHAPTER 4. Trap Road Bridge over the Dulles Access/Toll Road

The Trap Road Bridge deck over the Dulles Toll Road is 461 feet long and 29 feet 4 inches wide. It has 2.5 foot high concrete guardwalls with 6 foot high chain link fencing on top. The bridge also has 1.5 foot wide raised walkways on both sides. The actual roadway is 24 feet wide, measured from face of curb to face of curb. The curb is 6 inches high. There is no lighting on the bridge. FIGURE 6 shows a cross sectional view of the existing bridge.

The design of the existing bridge is the single most controlling factor that determines the amount of traffic delay and congestion that occurs at the end of a performance. This is due to the fact that Trap Road narrows from two lanes down to one lane on the bridge approach. This road narrowing produces excessive delays and results in an exit time of nearly an hour. There is a definite need to expand the dimensions of the bridge in order to improve the safety and operation of the exit process.

The bridge should be widened to accommodate the 2,400 south bound vehicles that would like to use the bridge within 45 minutes after the end of the show. Bridge widening is also necessary to accommodate an estimated 400 pedestrians that typically cross this bridge before and after a performance.

It is recommended that the bridge be widened so it provides three 12 foot wide traffic lanes (1 north bound lane and 2 south bound lanes) and a six foot wide pedestrian walkway on the east side of the bridge. The additional south bound traffic lane would greatly reduce the traffic congestion and delays on Trap Road south of the Park. The recommended widening of the bridge is shown in FIGURE 6.

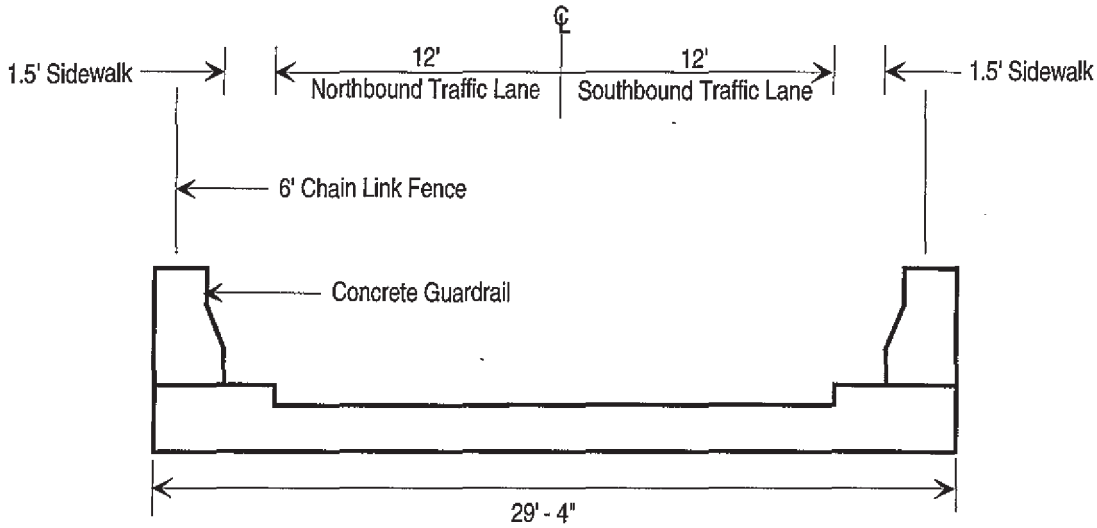
The bridge expansion would cost an estimated $1.25 million plus $500,000 to modify both bridge approaches. It would cost an additional $250,000 for widening the top half of the eastbound ramp onto the toll road to a full two lanes wide. By widening the top of the ramp to two lanes, the exit traffic would be able to progress two at a time across the bridge and onto the Toll Road access ramp. This ramp would merge into one lane in the bottom half of the ramp and connect to the Toll Road in the conventional manner.

It is estimated that an average of about 2000 vehicles would use these improvements every performance night of the season. If the $2 million cost of these improvements were spread over 20 years and compared to the number of vehicles that would use the improvements during this period of time, we find a cost of $0.38 per vehicle using the improvements.

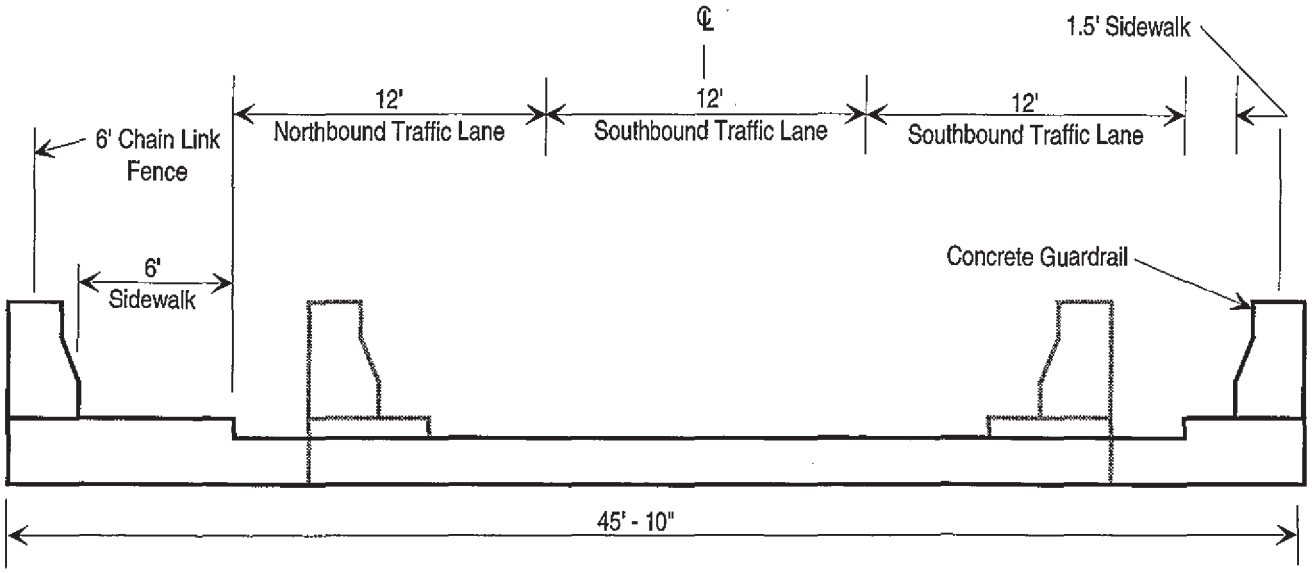
There is a definite need for improvements to the bridge. The pavement widening of the bridge and the east bound access ramp would greatly reduce a significant traffic congestion problem. The addition of a lighted pedestrian walkway is very much needed for the safety of these park patrons.

Figure 6 - Trap Road Bridge Over The Dulles Access/Toll Road

Wolf Trap Farm Park



Existing Bridge



Recommended Bridge

CHAPTER 5. PARKING GARAGE ANALYSIS

As mentioned in the parking section in Chapter 2, a sellout performance generates a parking demand for about 3,400 vehicles. It is very desirable to accommodate the entire parking demand within the Park. It is also desirable to eliminate the practice of parking vehicles on the turf areas and on the sidewalks within the Park.

The Park currently has 1,388 paved parking spaces in the three major parking lots (900 - West Lot, 350 - East Lot, and 138 - Lot behind the Filene Center). Another 132 paved or graveled parking spaces exist in several parking lots. This brings the total number of acceptable parking spaces to 1,500.

Given the parking demand of 3,400 vehicles and a parking supply of 1,500 vehicle spaces it has been determined that an additional 1,900 paved parking spaces are required to meet the needs of the Park. If the required additional parking were provided in the form of a surface parking lot it would require about 13 acres of land. The Park does not have a space of that size that could be used for a parking lot.

A parking garage could be used to satisfy the parking demand. Three possible locations were identified for a future parking garage. Two of these sites are within the Park, while the other site is located on the south side of the Dulles Toll Road. The general location of the three sites is presented in FIGURE 7.

Site A

This site is located on the current site of the 900 space West Parking Lot. If the garage were constructed on this site it would take the existing 900 parking spaces out of service. This results in a parking garage that would have to hold 2,800 vehicles (1,900 + 900). If the garage was designed for three levels the structure would have a foot print that is about 280,000 square feet (6.4 acres) in size. This size structure would fit within Site A. The topography of Site A lends itself to an above ground structure that is built into the hill to the south.

The garage should have vehicle access ports on at least two different levels (most likely the lower and middle levels). The two vehicle access roads to the garage would come directly off of Trap Road. Each of these access roads should be designed with at least two lanes so that traffic can approach or leave the garage two at a time from each access port.

Access to the garage can be provided by the existing access routes. There may be

Figure 8 - New Access Ramp Alignment

Wolf Trap Farm Park

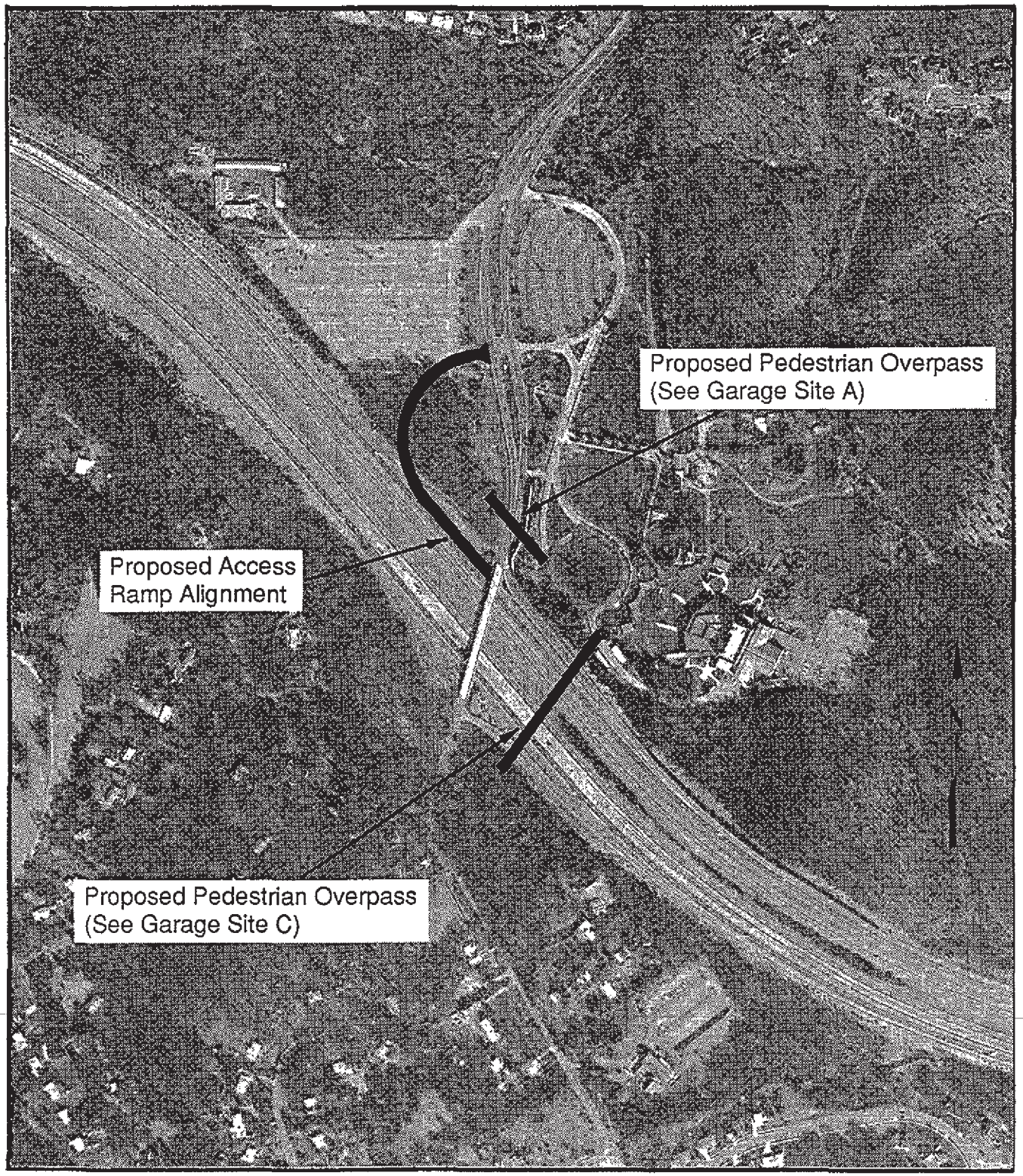
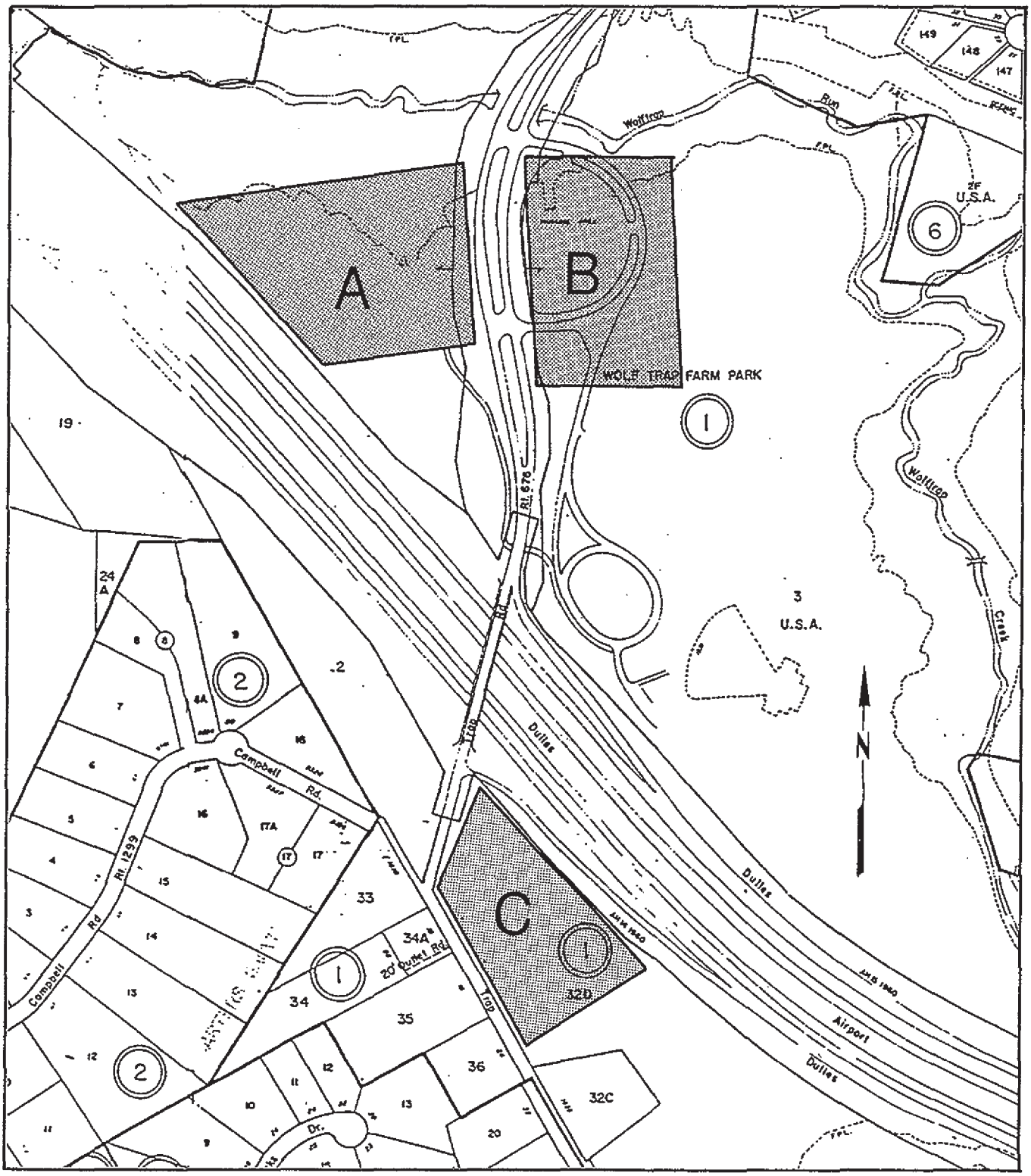


Figure 7 - Parking Garage Locations

Wolf Trap Farm Park



some traffic congestion at the intersection where a northbound vehicle on Trap Road has to turn left into the garage.

It is also possible to construct a direct access ramp from the Toll Road to this garage location. The alignment of this new access ramp is shown in FIGURE 8. The ramp would begin just west of the bridge and loop around into the Park. This access ramp could be designed to intersect Trap Road near the marquee intersection. Direct access into the garage on Site A from the Toll Road could be provided using this alignment. If this new ramp was constructed then the existing off-ramp could be eliminated or retained and used as an additional access. Exiting traffic from the garage would leave the Park using the same routes that are currently used.

It would also be convenient to have a pedestrian walkway from the third level of the garage that connects to a pedestrian overpass over Trap Road leading to the Filene Center. The overpass should be about 20 feet in width in order to handle the anticipated pedestrian traffic volumes. The existing pedestrian tunnel under Trap Road could be used to serve the middle and lower garage levels. The new access ramp and the path leading to the existing pedestrian tunnel would have to be designed to avoid an at-grade pedestrian/vehicle intersection.

It is estimated that a three level garage located on Site A would cost about $28 million and the pedestrian overpass and connecting paths would cost an additional $500,000. The proposed off-ramp from the Toll Road would cost an estimated $500,000, bringing the total cost to $29 million.

If the garage were located at Site A it would be necessary to widen the bridge and the eastbound access ramp onto the Toll Road. It would be desirable to add a lighted pedestrian walkway to the bridge structure. These additions bring the total project cost to $31 million.

This site has the advantage of being located almost entirely on disturbed property within the Park. Good vehicular and pedestrian access to the garage site could be provided.

Site B

This site is located on the east side of Trap Road within the Park. The garage footprint would be on the site of the 350 space east parking lot and a good portion of Gil's Hill. If the garage were located on this site and the 900 space west parking lot were retained, then the garage would have to accommodate 2,250 vehicles (1,900 + 350). A garage of this size would have to be a three level structure with a footprint of 225,000 square feet (5.2 acres). Considering the topography of the site it is likely that the structure would be built into the hillside with all three levels partially below grade and exposed to the daylight on the west side of the structure.

Vehicular access to the garage would be from Trap Road. Similar to the garage on Site A, the access to this garage should be provided by two separate garage access roads. Each of these roadways should be two lanes wide. It is desirable to have these two routes serve two different levels of the structure (most likely the middle and lower levels). There would not be any benefit to altering the access routes into the Park. The existing access ramp from the Toll Road would adequately serve the garage on Site B.

Pedestrian access from the garage to the Filene Center could be designed so that lighted paths were provided to each level of the garage. The paths could be aligned so that they follow the contours of Gil's Hill and converge at a location near the top of Barn Road leading to the Filene Center.

The three level garage structure described for Site B would cost an estimated $22.5 million.

If the garage were located at Site B it would be desirable to widen the bridge and the eastbound access ramp onto the Toll Road. It would also be desirable to add a lighted pedestrian walkway to the bridge structure. These additions would bring the total project cost to $24.5 million.

The benefits of this site are that the garage would be located partially on developed property within the Park and be designed with very good vehicular and pedestrian access. Using this site would eliminate many of the pedestrian/vehicular conflicts because the pedestrians would not have to cross any roads to walk between the garage and the Filene Center. And finally, this site would not require any new access route modifications.

Site C

This site is located on the south side of the Toll Road and on the east side of Trap Road. If the garage were constructed on this site and the 1,500 paved parking spaces that currently exist within the Park were retained, then the structure would have to accommodate 1,900 vehicles. If the structure were designed with three levels then the footprint of the building would cover 190,000 square feet (4.4 acres). This size garage would fit into the Site C. This site is relatively level and lends itself to an above ground structure. It may also be possible to place the lowest level of the structure underground with only two levels above the surface of the surface.

Vehicle access to this structure would be directly from Trap Road. Once again two routes leading to different levels of the structure would be desirable. It is possible to design the garage exits so the vehicles would make a direct connection to the eastbound access ramp to the Toll Road. It would be necessary to widen Trap Road south of the bridge in order to provide adequate width for a southbound left turn bay.

Access to a garage located on the south side of the Toll Road would require that the intersection of the exit ramp from the Toll Road and Trap Road be redesigned to allow left turns. A large volume of left turns at this intersection would slow the approach traffic and most likely create traffic congestion on the ramp. The existing intersection has been designed for right turns only. An examination of the existing intersection reveals that some major structural modification would have to be made to the north end of the bridge, the intersection and the exit ramp. It is likely that the ramp would have to be widened to accommodate two lanes to avoid long traffic queues at the intersection. This would require that the walls along the existing ramp would have to be relocated farther to the north within the Park.

All things considered, using the current exit ramp to access the garage would not function very well and would cost an estimated $1 million to construct.

It would be desirable to use the same access configuration that was mentioned in the discussion of Site A and shown in FIGURE 8. This ramp configuration would allow vehicles to exit the Toll Road and take a running right at Trap Road and cross the bridge to the garage. This access route would also work well for the existing parking areas within the Park. The existing access ramp off of the Toll Road could also be retained and used as an access route to the parking areas within the Park.

Pedestrian access to the Filene Center from the garage in Site C would be provided by a stand alone pedestrian walkway over the Toll Road as shown in FIGURE 8.. The structure could be designed with a gentle grade along a relatively short and very direct route to the Filene Center. The walkway could be located east of the existing bridge and connect directly to the garage and the top of Circle Drive in front of the Center. The advantage of this alignment is that it would eliminate all pedestrian/vehicular conflicts and provide the most direct and shortest route to the Filene Center. The walkway should be 20 feet wide and equipped with a lighting system.

The feasibility of attaching a pedestrian walkway to the east side of the existing bridge was considered and rejected. If it were to be attached to the existing bridge the walkway should be at least 12 feet wide to accommodate the anticipated volume of pedestrian traffic. The problem with this arrangement is that it would create major at grade pedestrian crossings at the top of the two Toll Road access ramps. This could only be eliminated if the pedestrian walkway were elevated 17 feet above the road at both ends of the bridge so that the walkway goes over the access ramps. The cost of this addition to the bridge would be greater than a stand alone structure.

A three level garage structure located on Site C would cost an estimated $19 million. This cost estimate does not include the cost of the land. The pedestrian overpass is estimated to cost about $1.5 million. The new access ramp would cost an estimated $500,000.

If the garage were constructed on Site C the bridge widening and pedestrian walkway mentioned in Chapter 4 would not be required. The widening of the eastbound access ramp would be required, and as mentioned earlier, Trap Road would need to be widened south of the bridge. These improvements would cost an estimated $500,000. This would bring the total project cost to an estimated $21.5 million.

This garage site has the advantage of a relatively low cost, good vehicular access, and short, direct pedestrian access from the garage to the Filene Center. The fact that the structure would not be located within the Park is considered to be an advantage in that it would protect the Park environment and allow for the possibility of more open space alternatives within the Park.

CHAPTER 6. SHUTTLE SERVICE EVALUATION

Shuttle service is currently provided between the West Falls Church Metrorail station and the Park. This service provides rides for about 75 visitors each performance night. It is unlikely that the demand for this service would increase significantly in the foreseeable future unless major marketing efforts are made to encourage the use of the metrorail system.

An evaluation of a shuttle service was conducted considering the anticipated needs of the Park both with and without a new garage. The evaluation concluded that there would be no need for any new shuttle services if any of the three garages discussed in the previous chapter are constructed. The need for a new shuttle service is only anticipated if a garage is not constructed.

Shuttle bus service could be used in two different ways. One way is to provide a short-term solution of the overflow parking problems that occur on evenings that have sell out performances. This is suggested only as a short-term corrective action and not a long-term solution to the parking shortage at the Park. The other use of shuttle bus service is in the form of a park and ride facility.

It should be mentioned that the shuttle bus system does not work well for those patrons carrying large coolers, lawn chairs, and picnic baskets due to space limitations on the bus. Another drawback to the use of the current shuttle system is that the buses travel on the same roads as all of the other vehicles trying to access or leave the Park. The buses have to contend with traffic congestion and resulting delays.

A. Overflow Parking Area Shuttle Service

A short-term solution to the overflow parking problem would involve the use of a shuttle system. The concept involves providing a remote parking area outside of the Park for the overflow parking demand. The remote parking area and shuttle bus system would be used to mitigate the overflow parking impacts on the residential neighborhoods. The location of this remote parking facility would be critical to the effectiveness of the shuttle system. The site should be as close to the Park as possible, and have good access to the major access routes.

The Park has the option of purchasing a piece of property and constructing a remote parking area. However, the preferred option would be to enter into a shared use agreement with a nearby business or organization that already has a parking lot of the desired size. The business or organization would use the parking area during the normal daily business hours and the Park would use the space in the evenings when large attendance performances require additional parking space.

The best remote parking location that might work in the shared use concept would be the parking lot at the National Wildlife Foundation (NWF). The NWF is located about half a mile east of Towlston Road on Route 7. The parking lot at the NWF could accommodate up to 600 vehicles. This is the magnitude of the Park's off-site parking needs. A typical sellout performance will generate between 500 and 550 surplus vehicles that cannot be accommodated within the Park. A cooperative agreement with the NWF would be required.

A shuttle system would have to be provided to transport the patrons to and from the Park. It is recommended that the shuttle stop in the Park be located on the east side of Trap Road between the two main intersections within the Park. This location would allow the shuttle buses to recirculate quickly with minimum stop time. A lighted shelter should be provided for patrons waiting for the bus.

The shuttle fleet for a route serving the NWF would have to include about 10 fifty passenger buses to carry the estimated 1,000 passengers between the NWF and the Park. It is anticipated that the ridership demand before the show will be about 75% of the demand that would occur after the show. This is due to people dropping off passengers at the Park while only the driver of the vehicle travels to the remote parking site. However, at the end of the performance it is anticipated that all of the people associated with the vehicles in the remote parking area would require a shuttle bus ride to the remote facility.

The demands on the shuttle system would usually be intense and occur within a relatively short time period. Before the show the overflow parking area and the shuttle system would not be needed until the Park fills to capacity. The patrons would not even begin to park at the overflow parking site until only a few minutes before show time. Therefore, the shuttle service would have to be efficient and timely if these patrons are going to arrive at the beginning of the show. In reality, it is likely that they would be late arriving at the show. The round trip travel time between the NWF and the Park is estimated to be 20 minutes. Therefore if each bus traveled the route twice the demand could be accommodated within a 40 minute period.

Although there is an abundance of parking in the Tyson's Corner area, it is doubtful if a remote parking area located that far from the Park would function well as an overflow parking area. If the remote parking area were located at Tyson's Corner the round trip travel time would be 40 minutes. It would require 20 fifty passenger buses to accommodate the anticipated 1,000 passenger demand.

The cost of providing shuttle service to the NWF location is estimated to be $250 per bus per evening or about $2.50 per round trip ride. This amounts to $75,000 per season. This does not include any fee for using the NWF parking area. If the remote parking site were at Tyson's Corner the annual cost would be $150,000 or about $5.00 per round trip ride. This also does not include the cost of using the parking facility.

B. Shuttle Service for a Park and Ride Facility

The use of a remote parking area as a park and ride facility is another possible use for a shuttle system. The previously mentioned NWF site could be used as a park and ride location. If the remote parking area were several miles from the Park, like at Tyson's Corner, the site could function adequately as a park and ride facility. This would mean that the patrons would drive directly to the park and ride location and arrive early enough to catch the shuttle bus and be at the Park in time for the show. In the overflow concept the patrons would only arrive at the remote lot after being turned away at the Park and would most likely miss the beginning of the show. In the park and ride concept the people using the park and ride would plan on using the site from the outset.

There currently is no noticeable demand for a park and ride facility. It may be desirable to create a demand for such a facility in order to reduce the parking demands at the Park. The patrons would have to have some form of incentive to encourage the voluntary use of the park and ride facility. These incentives could include expensive parking fees for on-site parking, special ticket price discounts for individuals or groups parking at the remote site, and strict enforcement of off-site parking restrictions. The park and ride concept would only work if some of the patrons are forced to use it.

The round trip travel time between the NWF and the Park is estimated to be 20 minutes. Therefore if each bus traveled the route twice the demand could be accommodated with a 40 minute period. The cost of providing shuttle service to this location is estimated to be $2.50 per round trip ride.

There is an abundance of parking in the Tyson's Corner area that could be used as a park and ride facility. If the remote parking area were located at Tyson's Corner the round trip travel time is estimated to be 40 minutes. The cost of providing shuttle service would be about $5.00 per round trip ride, not including the cost of using the parking facility.

CHAPTER 7. SAFETY AND LIGHTING ISSUES

During the process of making field observations and conducting the necessary traffic studies, several problems and areas of concern were identified with respect to safety and lighting. Other issues and problems were brought up by members of the Park Staff and the Park Police. These safety and lighting issues are identified herein along with recommended improvements.

A. Safety

The identified safety problems and recommended improvements include the following:

1. Parking on the Sidewalks

Problem: A total of 50 vehicles park on the sidewalk along a principal pedestrian path forcing pedestrians into vehicle travel lanes on Circle Road.

It is desirable to keep the vehicles in the road and the pedestrians on the sidewalk. In this case the cars are on the sidewalk and the people have to walk in the street. This does not encourage the desired behavior of the pedestrians and tends to complicate the situation.

Recommendation: The current practice of allowing vehicles to park on the sidewalk along the Main Road should be discontinued. It is believed that the loss of the additional 50 spaces does not outweigh the benefits of keeping the pedestrians out of the street and on the sidewalks. It is recommended to discontinue the practice of parking vehicles on the sidewalks within the Park.

2. Intersection of Main and Barn Roads

Problem: This intersection is the site of numerous pedestrian/vehicle conflicts. This problem occurs because the intersection is on the direct route between the Filene Center and the pedestrian tunnel located to the west of the intersection. It is desirable to have the pedestrians cross Main Road on the south side of the intersection. This allows the intersection to function more efficiently.

Recommendation: It is recommended that a split rail fence be installed from the east end of the tunnel extending up the path to Main Road. The fence should be installed behind the curb and extending south along Main Road to the pedestrian crossing on the south side of the intersection at Barn Road. A 20-foot wide pedestrian crossing should be delineated with pavement markings. This crossing should be illuminated.

3. Pedestrian Crossing for the East Lot

Problem: The patrons who park in the east parking lot have to cross Circle Road to get to the Filene Center. There is no designated crossing for this purpose. This situation results in pedestrian/vehicular conflicts.

Recommendation: Establish a formal pedestrian crossing at this location. The crossing should be equipped with a painted crosswalk and appropriate warning signs. The crossing should be illuminated.

4. Widen Main Sidewalk

Problem: The sidewalk that extends from the entrance of the Filene Center down along the Circle to the junction with Barn Road is less than 12 feet wide and poorly illuminated. This walkway is inadequate to handle the peak pedestrian volumes. As a result the patrons walk in the road when exiting the Filene Center, blocking all vehicular traffic on this road.

Recommendation: It is recommended that this pedestrian walkway be widened to 20 feet and properly illuminated. This improvement would require some earthwork and the relocation of a split rail fence. This sidewalk should be adequately illuminated. The current lighting system is totally inadequate due to the low intensity lights and the low mounting height of the luminaries.

It is hoped that by widening and properly lighting this pedestrian corridor it would become attractive for pedestrians to use rather than walking in the road. If these improvements do not yield the desired pedestrian patterns it may be necessary to install a split rail fence behind the curb thereby physically separating the sidewalk from the street. Small gates would have to be provided in the fence to allow access to the Metro buses and to the vehicles parked on the Circle.

5. Parking South of the Park

Problem: There are problems associated with people parking south of the Toll Road. There are no pedestrian facilities on the overpass or along this narrow portion of Trap Road. There is no street lighting along the corridor that leads from the Park to the Barns.

Pedestrian/vehicular conflicts occur on the overpass and at the top of the Toll Road on-ramp. These conflicts are potentially dangerous and impede the flow of traffic exiting the Park.

Recommendation: Because of these problems, it is recommended that patrons not be encouraged to park on the south side of the Toll Road until better pedestrian facilities are provided. Installing sidewalks on the overpass and along Trap Road south of the Toll Road would be expensive and would take time.

6. Turf Parking in Wet Conditions

Problem: When the turf parking areas become wet from the rain, the grass becomes very slippery. This translates into a loss of vehicle control. Most of the turf parking areas are located on a gentle grade and a small proportion of these areas are on steeper hillsides. These steeper areas are hazardous to vehicles and pedestrians when the grass is wet.

Recommendation: The Park currently prohibits the use of the steeper turf areas whenever there is a possibility of wet conditions. It is recommended that the Park continues this practice, but be conservative in exercising this parking restriction. If necessary a Park employee should be stationed at these locations to warn and redirect pedestrians and motorists away from the potential hazards of these steep turf areas.

B. Lighting

The following lighting related problems have been identified:

1. Pedestrian Lighting System

Problem: It is understood that the Park is trying to keep the ambient light levels low in an effort to preserve the viewing quality of the night sky. There are several major pedestrian corridors that are inadequately lighted.

Recommendation: It is recommended that an overhead pedestrian lighting system be installed along all major pedestrian corridors. The lighting system should be capable of adjustable levels of light intensity. During the performance the lights could be kept at a low intensity thus preserving the night sky experience. At the end of the performance the pedestrian lighting system could be turned up to a higher intensity.

The pedestrian lighting system should be designed so the sidewalks are illuminated and the roads are not. Since the lighting system would be installed on the major pedestrian paths, the lighting could be used to direct the patrons along the desired routes and therefore encourage the proper pedestrian travel patterns.

The lighting system should be designed with shielded luminaries that direct the light towards the ground.

2. Junction of Trap Road and the Toll Road

Problem: This intersection has no street lighting. It is estimated that about 400 pedestrians walk across this intersection, in the dark, after a performance at Wolf Trap Farm Park.

Recommendation: Street lighting should be installed at this intersection. The operation of this intersection controls the effectiveness of the south exit route. Park Police should be stationed at this intersection and provide manual traffic control and assist the pedestrians in crossing this intersection safely during the exit process.

3. Sidewalks and Street Lighting on Trap Road

Problem: As many as 500 vehicles may have to park north of the Park when the on-site parking is full. This translates to about 1100 pedestrians who are required to walk along Trap Road before and after a performance. A sidewalk is provided for part of the way on the west side of the road. There is no street lighting. The same situation exists on Trap Road south of the Park. There are no pedestrian facilities or on-street lighting between the Park and the Barns of Wolf Trap. Several hundred people walk along this road in the dark after a performance.

Recommendation: Continuous sidewalks and street lighting should be installed along Trap Road from the Park north to the intersection of Towlston Road and from the Park south to the Barns of Wolf Trap. This includes pedestrian facilities and lighting on the bridge over the Toll Road.

CHAPTER 8. SIGN REQUIREMENTS

A. Approach Signs

All of the major access routes are equipped with signs directing patrons to the Park. These signs have been placed at 16 different locations on Route 7, the Dulles Access Toll Road, I-495 and on Trap and Towlston Roads. These signs are well placed along these corridors and appear to function well. The signs appear to be of standard size and are easily seen and read by the motorist. The sign message is relatively standard, indicating the direction or route that leads to the Wolf Trap Farm Park. No significant problems were identified with respect to the approach signing.

B. On-Site Directional and Guidance Signs

There is a general lack of effective directional and guidance signs within the Park. Although there are some directional signs within the Park they do not appear to be as effective as they could be. The lack of appropriate signs is noticeable by observing the number of motorists that stop and ask the Park Police questions as they enter the Park. Field observations indicate that one car in four will stop and ask the Park Police something. Most of the time the question relates to some form of directions or information that should have been conveyed to the motorist through an appropriate sign. Usually the motorist is inquiring about where to park or where to go to pick up tickets.

There is also a lack of effective directional signs at the exits of the major parking areas. Many patrons are forced to leave the Park by a route they are not familiar with. This lack of information causes confusion, traffic congestion, and unnecessary delays.

C. On-Site Regulatory Signs

The most prominent regulatory sign within the Park is the "No Parking" sign. These signs appear in at least 34 locations within the Park. The other regulatory signs include speed limit signs, stop and yield signs, and a variety of signs that restrict access or limit parking to 5 minutes. All of the regulatory signs are used appropriately. The signs present the correct message in accordance with the

Manual on Uniform Traffic Control Devices. The only problem identified with respect to the regulatory signs is the large amount of no parking signs.

D. Sign Recommendations

Specific signing problems and recommendations are presented below:

1. Directional and Guidance Signs at the Park Entrances

Problem: The patrons need information and directions when they enter the Park. The current signs do not provide adequate information to the motorists.

Recommendation: Large directional signs should be provided at the north and south entrances to the Park that indicate the routes to the Box Office, Will Call, VIP parking, handicap parking and general parking. Repetitive signs leading to these areas should be provided.

2. Exit Signs

Problem: Patrons require clear and effective directional signs when exiting the parking areas. The current exit signs do not provide the motorist with the route information they require.

Recommendation: Install a guidance sign north of the lower intersection, for north-bound traffic, indicating that this exit route leads to VA-7, I-66, I-495 and the Dulles Toll Road. Similar signing would also be required near the Towlston and Trap Road intersections with VA-7. The sign messages should be limited to destination route numbers and directional arrows.

Similar directional signs should be located at the southern most intersection identifying the major highways that would be accessed by using the south exit route. These signs would help inform and direct the patrons while encouraging a desirable traffic flow pattern during the exit of the facility.

Install destination signs at the major exits of the parking areas at the junctions on Trap Road. These signs should have simple messages consisting of the route destinations and directional arrows.

3. Junction of Trap Road and the Toll Road

Problem: This intersection is critical to the exit process after a performance. It is important that this intersection function as well as possible. Unfortunately this intersection is hard to locate in the dark due to the lack of adequate signs and lighting. The adjacent vegetation makes it difficult to identify the intersection as the motorist approaches on Trap Road.

Recommendation: A directional sign should be installed at this intersection. The sign should identify the on-ramp to the Toll Road and indicate the major highways that can be accessed via this route. It is also recommended to cut back the vegetation adjacent to the intersection so that the top of the ramp and the intersection can be seen clearly and identified from all approaches.

The operation of this intersection controls the effectiveness of the south exit route. Park Police should be stationed at this intersection and provide manual traffic

control during the exit process.

4. Advance Route Signing

Problem: It is estimated by Park Officials that 70% of the traffic desires to exit to the south. Unfortunately this is not always possible due to the way the parking areas are unloaded. Many motorists are unfamiliar with the north exit route. The north exit route rarely experiences stop delays and actually provides easy access to all of the major highways in the area.

Recommendation: It may be helpful to inform the patrons that by parking in these three areas, they may have to exit to the north after the performance. It is recommended to place signs at the pedestrian exits of the these parking areas. The signs should present a map that shows all of the exit routes and how each exit route connects to the major highways in the area.

5. Electronic Marquee

Problem: There is currently no way to inform the motorist that the show is sold out or that the on-site parking is full.

Recommendation: The marquee sign on Trap Road is centrally located and highly visible from both approaches to the Park. This marquee should be modified to include an electronic message sign. The sign could then be used to indicate when the performance is sold out, and when the on-site parking is full.

6. Short Range Radio Message

Problem: The people arriving at the Park for a performance often have a variety of questions. These individuals generally stop the first Park Police person they encounter. This usually occurs at one of the busy access intersections. This stopping of traffic has a devastating effect on the smooth flow of traffic.

Recommendation: It is desirable to provide the patron with current information concerning traffic, parking, ticket availability and other facts concerning performances as far in advance as possible. It is recommended to install and operate a radio transmitter that has a limited range of perhaps less than 3 miles. Signs will be required along the major access routes identifying the informational radio service. The recorded message should be designed to provide answers to the most asked questions. Current information concerning the traffic and parking conditions also should be broadcast.

7. Provide a Parking Count Down

Problem: The motorists that arrive within 30 minutes of show time need information concerning the availability of on-site parking. Often these people are in a line of vehicles only to be turned away at the gate. This unnecessary delay

is extremely frustrating to the patron.

Recommendation: As the parking facility fills it would be helpful to the Park Police and to the patrons to know how many parking spaces are still available on-site. If this information were known the patrons could determine their chances of getting on-site and are able to make informed decisions as to whether they should continue to wait in line or seek off-site parking. This information could be conveyed to the patrons through the use of the electronic marquee or the short range radio system.

8. Center Line Article

Problem: Many of the Park visitors feel that the current traffic and parking conditions at the Park detract from the visitor experience. Some of the problems the visitor encounters could be minimized through an information exchange. If the patron were aware of the typical problems that occur at the Park, they could make changes that might help their situation and the overall operation of the Park.

Recommendation: Publish a short article in the Center Line that describes the traffic and parking problems at the Park and what is being done about them. Describe how the exit operation will occur and indicate that some patrons may not have a choice in exit routes. Clearly indicate on a map how the north and south exit routes lead to all of the major road systems such as VA-7, I-66, I-495, and the Dulles Toll Road. Tell the patrons that the north exit route has the least delays and would probably get them home just as fast as the south exit route. The article should also encourage the use of the Metrorail system and car pooling as means to reduce the traffic and parking problems at the Park.

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... Trap Road, N. of Parking Area # 13, NB
Location Code ..... Trap 2 NB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:07
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 18:00
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 13
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											167	257	220	165	182	169	192	178	155	101	214	577	451	3028
											44	68	67	33	34	35	55	47	33	29	33	79	332	
											35	54	52	42	39	51	46	47	47	29	76	58	70	
											34	71	39	42	70	45	37	37	37	28	49	135	27	
											54	64	62	48	39	38	54	47	38	15	56	305	22	

AM Peak Hour ..... 11:00 to 12:00 (167 vehicles)
AM Peak Hour Factor 77.3%
PM Peak Hour ..... 22:30 to 23:30 (842 vehicles)
PM Peak Hour Factor 63.4%

Saturday 07/18/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
32	17	14	1	5	13	22	34	57	126	139	153	233	174	142	172	160	157	165	277	163	113	566	1179	4114
14	5	4	0	2	3	3	5	17	27	37	52	61	52	37	26	40	47	53	24	76	19	50	480	
14	9	5	0	0	2	1	6	3	32	38	30	52	28	43	46	44	41	51	37	31	39	51	378	
3	3	5	1	3	3	6	12	18	31	32	37	52	40	33	47	41	40	19	40	25	23	128	280	
1	0	0	0	0	5	12	11	19	36	32	34	68	54	29	53	35	29	42	176	31	32	337	41	

AM Peak Hour ..... 10:15 to 11:15 (154 vehicles)
AM Peak Hour Factor 74.0%
PM Peak Hour ..... 22:45 to 23:45 (1475 vehicles)
PM Peak Hour Factor 76.8%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	3488	13:00-	3474	14:00-	3450	15:00-	3404	16:00-	3381
17:00-	3371	18:00-	3362	19:00-	3327	20:00-	3314	21:00-	3436	22:00-	3498	23:00-	3397	24:00-	3386

Sunday 07/19/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
111	24	15	18	2	5	14	38	54	86	110	130	137	147	154	142	161	152	162	121	164	208	1632	113	3900
32	12	4	11	0	1	2	12	17	16	19	36	34	35	54	31	31	41	47	18	55	34	174	52	
34	4	4	2	0	0	2	2	4	35	29	30	40	32	37	40	41	43	38	29	38	41	567	35	
30	2	2	1	0	4	6	7	15	16	28	22	26	40	41	32	49	26	32	36	39	54	625	17	
15	6	5	4	2	0	4	17	18	19	34	42	37	40	22	39	40	42	45	38	32	79	266	9	

AM Peak Hour ..... 11:00 to 12:00 (130 vehicles)
AM Peak Hour Factor 77.4%
PM Peak Hour ..... 22:00 to 23:00 (1632 vehicles)
PM Peak Hour Factor 65.3%

24-Hour Moving Total

01:00-	4193	02:00-	4200	03:00-	4201	04:00-	4218	05:00-	4215	06:00-	4207	07:00-	4199	08:00-	4203
09:00-	4200	10:00-	4160	11:00-	4131	12:00-	4108	13:00-	4012	14:00-	3985	15:00-	3997	16:00-	3967
17:00-	3968	18:00-	3963	19:00-	3960	20:00-	3804	21:00-	3805	22:00-	3900	23:00-	4966	24:00-	3900

Monday 07/20/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
22	9	2	4	2	12	79	140	149	105	148	265	180	166	133	153	200	246	299	154	382	239	1522	303	4914
8	3	1	2	0	3	8	24	53	30	34	67	57	41	41	38	46	78	64	47	245	50	127	229	
3	2	1	0	0	2	11	36	42	35	22	84	42	43	37	37	72	52	89	29	47	61	457	42	
8	4	0	0	1	0	23	48	31	22	24	41	38	32	24	41	40	64	81	38	46	48	475	24	
3	0	0	2	1	7	37	32	23	18	68	73	43	50	31	37	42	52	65	40	44	80	463	8	

AM Peak Hour ..... 11:00 to 12:00 (265 vehicles)
AM Peak Hour Factor 78.9%
PM Peak Hour ..... 22:15 to 23:15 (1624 vehicles)
PM Peak Hour Factor 85.5%

24-Hour Moving Total

01:00-	3811	02:00-	3796	03:00-	3783	04:00-	3769	05:00-	3769	06:00-	3776	07:00-	3841	08:00-	3943
09:00-	4038	10:00-	4057	11:00-	4095	12:00-	4230	13:00-	4273	14:00-	4292	15:00-	4271	16:00-	4282
17:00-	4321	18:00-	4415	19:00-	4552	20:00-	4585	21:00-	4803	22:00-	4834	23:00-	4724	24:00-	4914

Volume Report, 'Trap Road, N. of Parking Area # 13, NB'

Tuesday 07/21/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
37	7	4	2	4	16	80	173	158	121	145	121	244	192	144	161	1	0							1610
11	3	0	0	0	4	12	38	55	43	30	29	52	53	33	52	1	0							
14	2	0	2	1	2	9	30	47	31	38	36	71	55	32	32	0	0							
3	1	0	0	1	1	36	52	27	26	40	29	70	44	33	51	0	0							
9	1	4	0	2	9	23	53	29	21	37	27	51	40	46	26	0	0							

AM Peak Hour ..... 07:30 to 08:30 (207 vehicles)
AM Peak Hour Factor 94.1%
PM Peak Hour ..... 12:15 to 13:15 (245 vehicles)
PM Peak Hour Factor 86.3%

24-Hour Moving Total

01:00-	4929	02:00-	4927	03:00-	4929	04:00-	4927	05:00-	4929	06:00-	4933	07:00-	4934	08:00-	4967
09:00-	4976	10:00-	4992	11:00-	4989	12:00-	4845	13:00-	4909	14:00-	4935	15:00-	4946	16:00-	4954
17:00-	4755	18:00-	4509	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

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Location ..... Trap Road, N. of Parking Area # 13, SB
Location Code ..... Trap 1 SB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:05
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 18:00
Sample Time ..... 15 Minutes
Operator Number ... 1
Machine Number 171
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											107	118	97	110	111	141	170	342	440	97	55	91	32	1911
											30	25	27	30	28	26	39	56	113	36	12	12	17	
											22	36	27	38	27	41	41	71	121	27	14	12	6	
											25	34	28	24	28	42	40	117	112	26	16	22	6	
											30	23	15	18	28	32	50	98	94	8	13	45	3	

AM Peak Hour ..... 11:00 to 12:00 (107 vehicles)
AM Peak Hour Factor 89.2%
PM Peak Hour ..... 18:30 to 19:30 (449 vehicles)
PM Peak Hour Factor 92.8%

Saturday 07/18/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
13	14	8	3	6	5	18	37	49	88	151	111	124	117	95	134	127	233	614	655	134	69	63	79	2947
4	5	4	1	0	1	2	10	12	16	31	25	35	34	27	25	27	31	113	180	46	16	13	14	
4	5	0	0	2	1	3	5	12	19	34	19	21	30	25	40	46	41	151	197	35	17	8	31	
3	4	1	1	2	1	5	10	17	27	45	30	36	26	21	27	29	75	187	124	30	18	17	25	
2	0	3	1	2	2	8	12	8	26	41	37	32	27	22	42	25	86	163	154	23	18	25	9	

AM Peak Hour ..... 10:00 to 11:00 (151 vehicles)
AM Peak Hour Factor 83.9%
PM Peak Hour ..... 18:30 to 19:30 (727 vehicles)
PM Peak Hour Factor 92.3%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	2303	13:00-	2307	14:00-	2313	15:00-	2333	16:00-	2318
17:00-	2341	18:00-	2327	19:00-	2390	20:00-	2662	21:00-	2877	22:00-	2914	23:00-	2928	24:00-	2900

Volume Report, 'Trap Road, N. of Parking Area # 13, SB'

Sunday 07/19/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
21	10	6	4	3	4	16	18	37	65	85	83	101	131	106	122	145	260	611	581	112	67	69	22	2679
10	3	1	1	1	1	1	6	9	14	14	10	27	36	38	33	34	35	96	176	35	20	33	9	
7	0	1	1	0	1	0	1	7	23	17	18	22	32	24	27	38	44	152	169	36	10	17	4	
3	3	2	0	1	1	4	6	9	14	32	29	26	27	23	34	28	87	199	138	23	17	16	6	
1	4	2	2	1	1	11	5	12	14	22	26	26	36	21	28	45	94	164	98	18	20	3	3	

AM Peak Hour ..... 10:00 to 11:00 (85 vehicles)
AM Peak Hour Factor 66.4%
PM Peak Hour ..... 18:30 to 19:30 (708 vehicles)
PM Peak Hour Factor 88.9%

24-Hour Moving Total

01:00-	2955	02:00-	2951	03:00-	2949	04:00-	2950	05:00-	2947	06:00-	2946	07:00-	2944	08:00-	2925
09:00-	2913	10:00-	2890	11:00-	2824	12:00-	2796	13:00-	2773	14:00-	2787	15:00-	2798	16:00-	2786
17:00-	2804	18:00-	2831	19:00-	2828	20:00-	2754	21:00-	2732	22:00-	2730	23:00-	2736	24:00-	2679

Monday 07/20/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
8	4	3	0	4	14	33	82	99	138	106	118	111	122	94	140	192	264	570	673	233	66	125	79	3278
3	2	0	0	0	0	4	20	17	37	28	29	23	29	22	32	54	47	114	191	150	22	12	63	
2	2	2	0	1	4	7	14	28	32	37	33	28	28	28	27	47	52	137	182	38	16	29	11	
1	0	0	0	0	0	7	27	26	33	14	26	29	30	22	38	44	71	180	203	30	9	44	2	
2	0	1	0	3	10	15	21	28	36	27	30	31	35	22	43	47	94	139	97	15	19	40	3	

AM Peak Hour ..... 09:00 to 10:00 (138 vehicles)
AM Peak Hour Factor 93.2%
PM Peak Hour ..... 18:45 to 19:45 (715 vehicles)
PM Peak Hour Factor 88.1%

24-Hour Moving Total

01:00-	2666	02:00-	2660	03:00-	2657	04:00-	2653	05:00-	2654	06:00-	2664	07:00-	2681	08:00-	2745
09:00-	2807	10:00-	2880	11:00-	2901	12:00-	2936	13:00-	2946	14:00-	2937	15:00-	2925	16:00-	2943
17:00-	2990	18:00-	2994	19:00-	2953	20:00-	3045	21:00-	3166	22:00-	3165	23:00-	3221	24:00-	3278

Tuesday 07/21/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
13	8	4	2	2	16	50	72	100	157	110	107	106	135	106	100	2	0							1090
5	5	1	2	0	3	11	19	19	36	32	17	26	35	29	31	0	0							
2	1	0	0	1	4	9	11	28	39	32	28	33	39	25	23	2	0							
4	1	3	0	0	3	9	22	28	37	27	32	24	34	27	31	0	0							
2	1	0	0	1	6	21	20	25	45	19	30	23	27	25	15	0	0							

AM Peak Hour ..... 09:00 to 10:00 (157 vehicles)
AM Peak Hour Factor 87.2%
PM Peak Hour ..... 13:00 to 14:00 (135 vehicles)
PM Peak Hour Factor 86.5%

24-Hour Moving Total

01:00-	3283	02:00-	3287	03:00-	3288	04:00-	3290	05:00-	3288	06:00-	3290	07:00-	3307	08:00-	3297
09:00-	3298	10:00-	3317	11:00-	3321	12:00-	3310	13:00-	3305	14:00-	3318	15:00-	3330	16:00-	3290
17:00-	3100	18:00-	2836	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

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Location ..... Trap Road, W. of Parking Area # 13, NB
Location Code ..... Trap 4 NB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:27
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 17:45
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 34
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Parameter checksum is NOT OK.

Friday 07/17/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											140	196	164	131	140	139	187	421	492	102	85	52	56	2305
											36	50	50	27	30	30	49	65	139	44	19	13	14	
											28	41	33	34	36	38	42	91	147	28	25	16	21	
											33	60	35	31	40	36	36	110	120	19	29	19	5	
											43	45	46	39	34	35	60	155	86	11	12	4	16	

AM Peak Hour ..... 11:00 to 12:00 (140 vehicles)
AM Peak Hour Factor 81.4%
PM Peak Hour ..... 18:45 to 19:45 (561 vehicles)
PM Peak Hour Factor 90.5%

Saturday 07/18/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
17	12	9	2	3	8	16	24	47	101	108	116	143	127	104	145	133	203	1011	897	126	61	68	74	3555
3	5	3	1	1	2	2	3	12	20	33	43	35	32	24	26	36	43	143	283	53	16	16	21	
9	6	3	0	0	1	2	3	2	27	31	24	32	24	33	41	33	52	288	247	29	18	21	27	
4	1	3	1	2	3	5	8	15	24	25	26	33	31	26	40	31	40	271	212	20	8	18	13	
1	0	0	0	0	2	7	10	18	30	19	23	43	40	21	38	33	68	309	155	24	19	13	13	

AM Peak Hour ..... 09:45 to 10:45 (119 vehicles)
AM Peak Hour Factor 90.2%
PM Peak Hour ..... 18:15 to 19:15 (1151 vehicles)
PM Peak Hour Factor 93.1%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	2652	13:00-	2628	14:00-	2575	15:00-	2538	16:00-	2511
17:00-	2516	18:00-	2510	19:00-	2526	20:00-	3116	21:00-	3521	22:00-	3545	23:00-	3521	24:00-	3537

Sunday 07/19/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
55	15	10	12	1	4	9	30	40	64	82	95	104	133	139	142	160	226	940	802	146	83	40	41	3373
14	7	2	6	0	1	1	10	10	11	16	27	26	25	45	25	29	40	133	190	58	21	17	7	
17	2	3	2	0	0	1	2	2	26	24	22	30	31	35	46	34	52	256	232	39	25	8	20	
16	1	2	1	0	3	4	7	15	14	20	18	23	44	42	32	57	56	289	199	28	19	8	11	
8	5	3	3	1	0	3	11	13	13	22	28	25	33	17	39	40	78	262	181	21	18	7	3	

AM Peak Hour ..... 11:00 to 12:00 (95 vehicles)
AM Peak Hour Factor 84.8%
PM Peak Hour ..... 18:15 to 19:15 (997 vehicles)
PM Peak Hour Factor 86.2%

24-Hour Moving Total

01:00-	3593	02:00-	3596	03:00-	3597	04:00-	3607	05:00-	3605	06:00-	3601	07:00-	3594	08:00-	3600
09:00-	3593	10:00-	3556	11:00-	3530	12:00-	3509	13:00-	3470	14:00-	3476	15:00-	3511	16:00-	3508
17:00-	3535	18:00-	3558	19:00-	3487	20:00-	3392	21:00-	3412	22:00-	3434	23:00-	3406	24:00-	3373

Monday 07/20/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
13	5	2	2	2	8	55	90	99	73	101	165	104	116	81	95	135	185	805	895	269	103	83	54	3540
4	2	1	1	0	2	5	16	36	19	25	44	33	30	28	26	29	54	121	304	170	29	27	21	
2	1	1	0	0	1	7	24	27	20	14	51	28	32	21	26	41	35	197	250	33	27	36	15	
5	2	0	0	1	0	13	28	18	19	20	24	23	24	10	21	33	49	218	221	38	25	10	14	
2	0	0	1	1	5	30	22	18	15	42	46	20	30	22	22	32	47	269	120	28	22	10	4	

AM Peak Hour ..... 11:00 to 12:00 (165 vehicles)
AM Peak Hour Factor 80.9%
PM Peak Hour ..... 18:45 to 19:45 (1044 vehicles)
PM Peak Hour Factor 85.9%

24-Hour Moving Total

01:00-	3331	02:00-	3321	03:00-	3313	04:00-	3303	05:00-	3304	06:00-	3308	07:00-	3354	08:00-	3414
09:00-	3473	10:00-	3482	11:00-	3501	12:00-	3571	13:00-	3571	14:00-	3554	15:00-	3496	16:00-	3449
17:00-	3424	18:00-	3383	19:00-	3248	20:00-	3341	21:00-	3464	22:00-	3484	23:00-	3527	24:00-	3540

Volume Report, 'Trap Road, W. of Parking Area # 13, NB'

Tuesday 07/21/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	6	3	1	4	11	57	108	101	78	106	91	140	127	96	109	35	0							1093
6	3	0	0	0	1	8	23	33	29	26	22	27	35	19	32	21	0							
8	1	0	1	1	1	7	20	31	18	28	27	41	35	20	25	14	0							
3	1	0	0	1	3	22	34	20	16	25	21	43	31	24	22	0	0							
3	1	3	0	2	6	20	31	17	15	27	21	29	26	33	30	0								

AM Peak Hour ..... 07:30 to 08:30 (129 vehicles)
AM Peak Hour Factor 94.9%
PM Peak Hour ..... 12:15 to 13:15 (148 vehicles)
PM Peak Hour Factor 86.0%

24-Hour Moving Total

01:00-	3547	02:00-	3548	03:00-	3549	04:00-	3548	05:00-	3550	06:00-	3553	07:00-	3555	08:00-	3573
09:00-	3575	10:00-	3580	11:00-	3585	12:00-	3511	13:00-	3547	14:00-	3558	15:00-	3573	16:00-	3587
17:00-	3487	18:00-	N/A	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

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Location ..... Trap Road, W. of Parking Area # 13, SB
Location Code ..... Trap 3 SB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:30
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 18:00
Sample Time ..... 15 Minutes
Operator Number ... 1
Machine Number 76
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											120	134	112	117	115	147	159	214	105	73	137	357	193	1983
											34	31	35	34	32	29	42	49	24	23	13	57	145	
											22	38	23	41	23	42	45	37	32	20	53	50	35	
											33	34	35	24	34	41	37	74	25	22	22	60	9	
											31	31	19	18	26	35	35	54	24	8	49	190	4	

AM Peak Hour ..... 11:00 to 12:00 (120 vehicles)
AM Peak Hour Factor 88.2%
PM Peak Hour ..... 22:15 to 23:15 (445 vehicles)
PM Peak Hour Factor 58.6%

Saturday 07/18/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
13	14	8	4	6	5	15	38	50	96	157	114	138	119	104	133	124	154	297	573	164	93	476	721	3616
4	5	4	2	0	2	1	9	14	18	34	23	29	37	29	25	25	27	62	81	54	20	20	160	
4	5	0	0	3	1	5	5	12	20	30	23	28	29	25	40	44	35	93	150	44	20	46	223	
3	4	1	1	1	1	3	12	16	27	49	31	39	24	21	26	28	45	81	133	34	22	158	273	
2	0	3	1	2	1	6	12	8	31	44	37	42	29	29	42	27	47	61	209	32	31	252	65	

AM Peak Hour ..... 10:00 to 11:00 (157 vehicles)
AM Peak Hour Factor 80.1%
PM Peak Hour ..... 22:45 to 23:45 (908 vehicles)
PM Peak Hour Factor 83.2%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	2389	13:00-	2383	14:00-	2387	15:00-	2394	16:00-	2381
17:00-	2399	18:00-	2376	19:00-	2371	20:00-	2454	21:00-	2922	22:00-	3013	23:00-	2969	24:00-	3088

Sunday 07/19/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
45	11	6	5	3	4	12	15	39	76	90	89	105	135	107	122	137	179	256	451	160	178	961	61	3247
19	3	1	1	1	1	1	3	10	20	13	9	28	37	36	32	43	32	42	67	50	32	132	38	
17	0	1	1	0	1	0	1	8	21	22	17	21	31	25	32	29	29	51	113	49	19	299	5	
8	5	2	0	1	1	3	5	8	21	32	35	29	31	27	33	25	67	119	143	36	36	272	13	
1	3	2	3	1	1	8	6	13	14	23	28	27	36	19	25	40	51	44	128	25	91	258	5	

AM Peak Hour ..... 10:00 to 11:00 (90 vehicles)
AM Peak Hour Factor 70.3%
PM Peak Hour ..... 22:00 to 23:00 (961 vehicles)
PM Peak Hour Factor 80.4%

24-Hour Moving Total

01:00-	3648	02:00-	3645	03:00-	3643	04:00-	3644	05:00-	3641	06:00-	3640	07:00-	3637	08:00-	3614
09:00-	3603	10:00-	3583	11:00-	3516	12:00-	3491	13:00-	3458	14:00-	3474	15:00-	3477	16:00-	3466
17:00-	3479	18:00-	3504	19:00-	3463	20:00-	3341	21:00-	3337	22:00-	3422	23:00-	3907	24:00-	3247

Monday 07/20/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
9	4	5	0	4	13	23	85	102	158	130	132	132	131	97	157	174	229	170	375	295	161	885	218	3689
3	2	0	0	0	0	4	21	17	39	36	35	31	32	28	37	42	48	42	57	194	28	62	188	
3	2	3	0	1	4	5	13	28	38	40	34	33	31	28	28	40	47	39	59	47	28	303	20	
1	0	0	0	1	3	6	31	26	39	14	31	36	32	22	50	41	48	45	150	34	29	257	3	
2	0	2	0	2	6	8	20	31	42	40	32	32	36	19	42	51	86	44	109	20	76	263	7	

AM Peak Hour ..... 09:00 to 10:00 (158 vehicles)
AM Peak Hour Factor 94.0%
PM Peak Hour ..... 22:15 to 23:15 (1011 vehicles)
PM Peak Hour Factor 83.4%

24-Hour Moving Total

01:00-	3211	02:00-	3204	03:00-	3203	04:00-	3198	05:00-	3199	06:00-	3208	07:00-	3219	08:00-	3289
09:00-	3352	10:00-	3434	11:00-	3474	12:00-	3517	13:00-	3544	14:00-	3540	15:00-	3530	16:00-	3565
17:00-	3602	18:00-	3652	19:00-	3566	20:00-	3490	21:00-	3625	22:00-	3608	23:00-	3532	24:00-	3689

Volume Report, 'Trap Road, W. of Parking Area # 13, SB' page 3

Tuesday 07/21/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
16	16	4	2	2	16	43	68	106	179	131	125	128	144	123	118	16	1							1238
8	5	1	2	0	3	11	17	22	37	42	26	29	39	26	34	13	0							
2	4	0	0	1	4	7	9	28	43	37	30	44	42	30	27	3	0							
4	6	3	0	0	4	9	23	26	46	29	36	24	36	33	31	0	0							
2	1	0	0	1	5	16	19	30	53	23	33	31	27	34	26	0	1							

AM Peak Hour ..... 09:15 to 10:15 (184 vehicles)
AM Peak Hour Factor 86.8%
PM Peak Hour ..... 12:45 to 13:45 (148 vehicles)
PM Peak Hour Factor 88.1%

24-Hour Moving Total

01:00-	3696	02:00-	3708	03:00-	3707	04:00-	3709	05:00-	3707	06:00-	3710	07:00-	3730	08:00-	3713
09:00-	3717	10:00-	3738	11:00-	3739	12:00-	3732	13:00-	3728	14:00-	3741	15:00-	3767	16:00-	3728
17:00-	3570	18:00-	3342	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

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Location ..... Trap Road, W. of Parking Area # 6, NB
Location Code ..... Trap 6 NB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:45
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 18:00
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 96
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											151	225	188	176	189	185	264	571	658	154	74	52	56	2943
											35	53	51	33	41	47	56	95	182	64	17	7	27	
											32	46	52	45	47	53	65	130	181	45	18	9	13	
											33	67	33	49	57	44	50	143	167	27	28	25	2	
											51	59	52	49	44	41	93	203	128	18	11	11	14	

AM Peak Hour ..... 11:00 to 12:00 (151 vehicles)
AM Peak Hour Factor 74.0%
PM Peak Hour ..... 18:45 to 19:45 (733 vehicles)
PM Peak Hour Factor 90.3%

Saturday 07/18/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
15	13	11	1	6	13	21	35	59	125	148	145	169	155	159	178	172	427	1391	1151	195	68	62	77	4796
4	5	3	0	2	3	2	3	16	28	40	50	50	47	40	25	45	71	220	366	72	16	19	27	
6	6	3	0	0	1	0	6	3	31	42	27	30	24	50	49	40	85	351	328	54	21	17	24	
4	2	5	1	4	4	6	10	16	29	34	34	37	36	32	49	45	90	425	257	29	9	13	15	
1	0	0	0	0	5	13	16	24	37	32	34	52	48	37	55	42	181	395	200	40	22	13	11	

AM Peak Hour ..... 10:15 to 11:15 (158 vehicles)
AM Peak Hour Factor 79.0%
PM Peak Hour ..... 18:15 to 19:15 (1537 vehicles)
PM Peak Hour Factor 90.4%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	3390	13:00-	3384	14:00-	3328	15:00-	3295	16:00-	3278
17:00-	3267	18:00-	3254	19:00-	3417	20:00-	4237	21:00-	4730	22:00-	4771	23:00-	4765	24:00-	4775

Sunday 07/19/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
67	17	13	17	3	3	15	36	52	86	110	130	145	168	143	167	191	374	1253	831	180	86	48	42	4177
18	10	3	8	0	1	1	9	15	12	19	37	36	40	46	38	38	51	194	208	70	29	23	15	
24	2	4	3	0	0	3	2	2	36	34	29	42	37	37	57	41	79	342	281	47	19	9	18	
17	1	2	2	0	2	4	9	16	19	28	25	31	44	41	31	59	94	332	216	31	19	14	7	
8	4	4	4	3	0	7	16	19	19	29	39	36	47	19	41	53	150	385	126	32	19	2	2	

AM Peak Hour ..... 11:00 to 12:00 (130 vehicles)
AM Peak Hour Factor 83.3%
PM Peak Hour ..... 18:15 to 19:15 (1267 vehicles)
PM Peak Hour Factor 82.3%

24-Hour Moving Total

01:00-	4848	02:00-	4852	03:00-	4854	04:00-	4870	05:00-	4867	06:00-	4857	07:00-	4851	08:00-	4852
09:00-	4845	10:00-	4806	11:00-	4768	12:00-	4753	13:00-	4729	14:00-	4742	15:00-	4726	16:00-	4715
17:00-	4734	18:00-	4681	19:00-	4543	20:00-	4223	21:00-	4208	22:00-	4226	23:00-	4212	24:00-	4177

Monday 07/20/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
17	6	3	4	3	10	79	129	144	143	145	251	163	160	135	180	226	425	1297	1241	328	121	67	62	5339
6	3	2	3	0	2	9	20	50	32	34	63	40	43	39	51	47	81	193	451	162	36	17	26	
3	2	1	0	0	1	8	35	37	36	24	81	41	41	46	52	61	82	285	354	57	32	24	19	
6	1	0	0	1	0	16	42	26	42	28	44	35	36	23	43	53	107	351	275	53	23	14	13	
2	0	0	1	2	7	46	32	31	33	59	63	47	40	27	34	65	155	468	161	56	30	12	4	

AM Peak Hour ..... 11:00 to 12:00 (251 vehicles)
AM Peak Hour Factor 77.5%
PM Peak Hour ..... 18:30 to 19:30 (1624 vehicles)
PM Peak Hour Factor 86.8%

24-Hour Moving Total

01:00-	4127	02:00-	4116	03:00-	4106	04:00-	4093	05:00-	4093	06:00-	4100	07:00-	4164	08:00-	4257
09:00-	4349	10:00-	4406	11:00-	4441	12:00-	4562	13:00-	4580	14:00-	4572	15:00-	4564	16:00-	4577
17:00-	4612	18:00-	4663	19:00-	4707	20:00-	5117	21:00-	5265	22:00-	5300	23:00-	5319	24:00-	5339

Volume Report, 'Trap Road, W. of Parking Area # 6, NB' page 3

Tuesday 07/21/92 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
25	6	4	1	9	19	87	171	151	165	162	129	192	183	156	150	28	0							1638
6	1	0	0	0	2	11	39	52	43	39	27	35	42	39	46	27	0							
12	2	1	1	3	1	14	28	44	36	49	46	54	59	37	39	1	0							
4	0	0	0	3	8	34	50	29	47	38	27	67	44	27	31	0	0							
3	3	3	0	3	8	28	54	26	39	36	29	36	38	53	34	0	0							

AM Peak Hour ..... 07:30 to 08:30 (200 vehicles)
AM Peak Hour Factor 92.6%
PM Peak Hour ..... 12:30 to 13:30 (204 vehicles)
PM Peak Hour Factor 76.1%

24-Hour Moving Total

01:00-	5347	02:00-	5347	03:00-	5348	04:00-	5345	05:00-	5351	06:00-	5360	07:00-	5368	08:00-	5410
09:00-	5417	10:00-	5439	11:00-	5456	12:00-	5334	13:00-	5363	14:00-	5386	15:00-	5407	16:00-	5377
17:00-	5179	18:00-	4754	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... Trap Road, W. of Parking Area # 6, SB
Location Code ..... Trap 5 SB
County ..... Fairfax County, VA
Recorder Set 07/17/92 10:50
Recording Start ... 07/17/92 11:00
Recording End 07/21/92 17:45
Sample Time ..... 15 Minutes
Operator Number ... 1
Machine Number 36
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
											161	158	136	134	134	160	217	173	81	79	155	432	286	2306
											45	48	39	38	34	28	58	44	15	19	19	46	224	
											43	42	36	39	33	40	65	41	25	29	60	64	42	
											36	37	36	32	40	56	50	55	21	23	24	79	14	
											37	31	25	25	27	36	44	33	20	8	52	243	6	

AM Peak Hour ..... 11:00 to 12:00 (161 vehicles)
AM Peak Hour Factor 89.4%
PM Peak Hour ..... 22:15 to 23:15 (610 vehicles)
PM Peak Hour Factor 62.8%

Saturday 07/18/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
25	18	9	4	8	6	15	45	56	95	136	123	152	144	121	146	125	151	122	262	127	109	498	943	3440
5	5	3	1	0	2	1	14	12	20	30	28	42	45	35	27	28	39	38	22	52	21	27	216	
12	6	1	0	2	1	5	5	18	20	43	24	34	37	31	46	38	37	34	19	31	25	51	266	
4	7	2	1	3	2	4	13	18	27	30	33	38	30	22	27	25	37	31	33	17	28	124	332	
4	0	3	2	3	1	5	13	8	28	33	38	38	32	33	46	34	38	19	188	27	35	296	129	

AM Peak Hour ..... 10:00 to 11:00 (136 vehicles)
AM Peak Hour Factor 79.1%
PM Peak Hour ..... 22:45 to 23:45 (1110 vehicles)
PM Peak Hour Factor 83.6%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	2723	13:00-	2685	14:00-	2679	15:00-	2687	16:00-	2674
17:00-	2686	18:00-	2651	19:00-	2585	20:00-	2534	21:00-	2715	22:00-	2763	23:00-	2717	24:00-	2783

141

Sunday 07/19/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
87	14	6	5	4	6	12	16	36	84	107	94	104	133	137	119	137	133	139	116	114	205	1166	111	3085
36	4	1	1	2	2	0	4	8	20	11	15	29	33	45	36	37	31	41	29	37	30	101	54	
29	0	1	1	0	2	2	2	6	32	24	17	29	39	30	29	30	26	35	19	26	28	356	33	
20	4	1	0	1	1	4	4	10	14	36	27	22	26	34	30	27	47	33	38	26	47	359	20	
2	6	3	3	1	1	6	6	12	18	36	35	24	35	28	24	43	29	30	30	25	100	350	4	

AM Peak Hour ..... 10:15 to 11:15 (111 vehicles)
AM Peak Hour Factor 77.1%
PM Peak Hour ..... 22:00 to 23:00 (1166 vehicles)
PM Peak Hour Factor 81.2%

24-Hour Moving Total

01:00-	3502	02:00-	3498	03:00-	3495	04:00-	3496	05:00-	3492	06:00-	3492	07:00-	3489	08:00-	3460
09:00-	3440	10:00-	3429	11:00-	3400	12:00-	3371	13:00-	3323	14:00-	3312	15:00-	3328	16:00-	3301
17:00-	3313	18:00-	3295	19:00-	3312	20:00-	3166	21:00-	3153	22:00-	3249	23:00-	3917	24:00-	3085

Monday 07/20/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
15	8	7	0	4	15	26	108	116	119	93	145	143	135	118	171	167	199	154	103	221	190	948	353	3558
8	2	0	0	0	0	3	28	18	44	19	32	38	43	30	41	49	39	49	30	114	30	79	288	
4	5	5	0	1	4	9	18	33	30	24	42	35	32	39	35	27	61	29	29	42	32	291	35	
1	1	0	0	0	0	7	35	34	25	21	36	33	30	21	55	45	50	32	23	34	40	284	23	
2	0	2	0	3	11	7	27	31	20	29	35	37	30	28	40	46	49	44	21	31	88	294	7	

AM Peak Hour ..... 11:00 to 12:00 (145 vehicles)
AM Peak Hour Factor 86.3%
PM Peak Hour ..... 22:15 to 23:15 (1157 vehicles)
PM Peak Hour Factor 98.4%

24-Hour Moving Total

01:00-	3013	02:00-	3007	03:00-	3008	04:00-	3003	05:00-	3003	06:00-	3012	07:00-	3026	08:00-	3118
09:00-	3198	10:00-	3233	11:00-	3219	12:00-	3270	13:00-	3309	14:00-	3311	15:00-	3292	16:00-	3344
17:00-	3374	18:00-	3440	19:00-	3455	20:00-	3442	21:00-	3549	22:00-	3534	23:00-	3316	24:00-	3558

Tuesday 07/21/92 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	18	7	2	3	18	49	85	139	141	112	136	142	180	130	117	21	0							1320
8	5	2	2	0	2	12	25	31	45	25	22	46	53	35	33	20	0							
5	7	1	0	2	4	10	15	42	44	40	35	44	44	31	26	1	0							
5	4	4	0	0	5	13	25	33	28	23	38	33	48	27	32	0	0							
2	2	0	0	1	7	14	20	33	24	24	41	19	35	37	26	0								

AM Peak Hour ..... 08:30 to 09:30 (155 vehicles)
AM Peak Hour Factor 86.1%
PM Peak Hour ..... 13:00 to 14:00 (180 vehicles)
PM Peak Hour Factor 84.9%

24-Hour Moving Total

01:00-	3563	02:00-	3573	03:00-	3573	04:00-	3575	05:00-	3574	06:00-	3577	07:00-	3600	08:00-	3577
09:00-	3600	10:00-	3622	11:00-	3641	12:00-	3632	13:00-	3631	14:00-	3676	15:00-	3688	16:00-	3634
17:00-	3488	18:00-	N/A	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... Trap Road Bridge over Dulles Toll Rd
Location Code ..... Trap 7 ND
County ..... Fairfax County, VA
Recorder Set 07/17/92 11:15
Recording Start ... 07/17/92 12:00
Recording End 07/21/92 18:00
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 28
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Friday 07/17/92 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
												383	327	315	333	360	442	447	316	191	300	686	490	4590
												101	94	74	81	73	117	117	74	53	42	81	352	
												106	86	91	68	81	127	97	88	54	100	107	90	
												89	73	77	102	120	105	136	75	65	60	110	23	
												87	74	73	82	86	93	97	79	19	98	388	25	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 22:15 to 23:15 (957 vehicles)
PM Peak Hour Factor 61.7%

Saturday 07/18/92 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
51	37	24	7	15	15	38	92	123	221	323	287	352	333	276	334	325	366	476	619	252	202	649	1275	6692
12	6	8	2	1	4	4	15	25	48	88	74	96	99	74	55	82	96	115	97	102	40	51	281	
17	20	5	0	4	2	9	21	30	54	91	64	80	77	78	97	78	87	140	92	59	51	86	328	
19	11	5	1	6	5	10	28	36	55	64	76	86	70	59	84	84	89	111	107	42	49	162	418	
3	0	6	4	4	4	15	28	32	64	80	73	90	87	65	98	81	94	110	323	49	62	350	248	

AM Peak Hour ..... 10:00 to 11:00 (323 vehicles)
AM Peak Hour Factor 88.7%
PM Peak Hour ..... 22:45 to 23:45 (1377 vehicles)
PM Peak Hour Factor 82.4%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	5823	14:00-	5792	15:00-	5798	16:00-	5759
17:00-	5760	18:00-	5725	19:00-	5649	20:00-	5678	21:00-	5981	22:00-	6042	23:00-	5944	24:00-	5907

Sunday 07/19/92 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
211	27	20	22	7	11	30	39	92	206	226	223	271	300	298	285	326	346	515	366	256	377	1512	262	6228
88	9	7	9	2	3	1	10	23	39	26	47	67	77	93	71	74	59	120	102	93	68	181	142	
68	7	2	5	0	2	3	7	18	74	61	48	75	73	73	77	81	98	119	101	60	56	410	73	
32	5	5	1	2	4	6	8	25	42	75	60	61	69	78	73	67	96	139	85	50	83	446	31	
23	6	6	7	3	2	20	14	26	51	64	68	68	81	54	64	104	93	137	78	53	170	475	16	

AM Peak Hour ..... 10:15 to 11:15 (247 vehicles)
AM Peak Hour Factor 82.3%
PM Peak Hour ..... 22:00 to 23:00 (1512 vehicles)
PM Peak Hour Factor 79.6%

24-Hour Moving Total

01:00-	6852	02:00-	6842	03:00-	6838	04:00-	6853	05:00-	6845	06:00-	6841	07:00-	6833	08:00-	6780
09:00-	6749	10:00-	6734	11:00-	6637	12:00-	6573	13:00-	6492	14:00-	6459	15:00-	6481	16:00-	6432
17:00-	6433	18:00-	6413	19:00-	6452	20:00-	6199	21:00-	6203	22:00-	6378	23:00-	7241	24:00-	6228

Monday 07/20/92 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
35	17	8	6	10	24	91	257	284	280	238	384	327	305	271	363	381	472	544	477	396	842	1208	595	7315
16	5	1	4	0	2	13	60	67	89	55	92	88	77	70	89	99	99	130	137	180	68	145	415	
9	7	7	1	0	4	20	54	84	69	53	108	86	79	87	93	89	133	130	116	83	62	353	111	
7	5	0	0	3	5	23	75	67	68	54	96	68	71	56	100	91	119	137	135	72	72	332	49	
3	0	0	1	7	13	35	68	66	54	76	88	85	78	58	81	102	121	147	89	61	140	378	20	

AM Peak Hour ..... 11:00 to 12:00 (384 vehicles)
AM Peak Hour Factor 88.9%
PM Peak Hour ..... 22:15 to 23:15 (1478 vehicles)
PM Peak Hour Factor 89.0%

24-Hour Moving Total

01:00-	6052	02:00-	6042	03:00-	6030	04:00-	6014	05:00-	6017	06:00-	6030	07:00-	6091	08:00-	6309
09:00-	6501	10:00-	6575	11:00-	6587	12:00-	6748	13:00-	6804	14:00-	6809	15:00-	6782	16:00-	6860
17:00-	6915	18:00-	7041	19:00-	7070	20:00-	7181	21:00-	7321	22:00-	7286	23:00-	6982	24:00-	7315

Tuesday 07/21/92 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
52	29	16	5	8	37	129	228	292	340	262	278	342	373	288	290	102	0							3071
18	7	5	4	0	5	27	53	73	112	61	55	94	94	73	89	80	0							
13	8	3	1	1	3	21	41	90	86	81	83	87	89	67	67	21	0							
13	7	2	0	3	15	34	69	63	78	60	73	98	107	62	76	1	0							
8	7	6	0	4	14	47	65	66	64	60	67	63	83	86	58	0	0							

AM Peak Hour ..... 08:45 to 09:45 (342 vehicles)
AM Peak Hour Factor 76.3%
PM Peak Hour ..... 13:00 to 14:00 (373 vehicles)
PM Peak Hour Factor 87.1%

24-Hour Moving Total

01:00-	7332	02:00-	7344	03:00-	7352	04:00-	7351	05:00-	7349	06:00-	7362	07:00-	7400	08:00-	7371
09:00-	7379	10:00-	7439	11:00-	7463	12:00-	7357	13:00-	7372	14:00-	7440	15:00-	7457	16:00-	7384
17:00-	7105	18:00-	6633	19:00-	N/A	20:00-	N/A	21:00-	N/A	22:00-	N/A	23:00-	N/A	24:00-	N/A

Volume Count Report

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Location ..... Trap Rd, S. of Dulles Toll Rd, Non-Dir.
Location Code ..... Trap NON DIR
County ..... Fairfax
Recorder Set 02/04/93 15:12
Recording Start ... 02/04/93 16:00
Recording End 02/10/93 12:15
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 98
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 02/04/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
																224	263	208	194	92	90	122	30	1223
																57	67	42	41	26	29	21	6	
																51	70	64	50	20	21	15	15	
																63	63	55	51	26	24	53	6	
																53	63	47	52	20	16	33	3	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (263 vehicles)
PM Peak Hour Factor 93.9%

Friday 02/05/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
10	7	5	0	6	16	87	206	212	168	152	176	189	207	187	230	245	256	226	216	113	84	57	97	3152
2	5	1	0	1	5	14	34	69	60	37	41	51	61	52	55	60	73	69	44	37	15	16	56	
1	0	3	0	0	4	18	46	45	39	27	39	46	49	34	71	65	54	57	49	35	30	18	20	
3	2	1	0	1	5	26	56	44	41	56	51	39	45	42	55	64	60	56	73	24	15	11	10	
4	0	0	0	4	2	29	70	54	28	32	45	53	52	59	49	56	69	44	50	17	24	12	11	

AM Peak Hour ..... 07:15 to 08:15 (241 vehicles)
AM Peak Hour Factor 86.1%
PM Peak Hour ..... 16:15 to 17:15 (258 vehicles)
PM Peak Hour Factor 88.4%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	N/A	16:00-	N/A
17:00-	3081	18:00-	3102	19:00-	3095	20:00-	3113	21:00-	3135	22:00-	3156	23:00-	3150	24:00-	3085

Saturday 02/06/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
30	16	17	4	3	10	16	49	91	143	173	178	210	206	176	154	177	173	212	85	148	178	56	168	2673
11	0	4	1	2	1	5	6	16	34	39	41	52	50	46	42	38	41	39	32	14	48	21	13	
9	6	3	1	0	3	5	9	23	49	41	49	54	54	47	35	52	48	34	25	8	48	18	6	
2	1	4	1	1	3	5	10	19	31	47	40	48	48	35	39	48	44	73	16	13	46	5	72	
8	9	6	1	0	3	1	24	33	29	46	48	56	54	48	38	39	40	66	12	113	36	12	77	

AM Peak Hour ..... 10:30 to 11:30 (183 vehicles)
AM Peak Hour Factor 93.4%
PM Peak Hour ..... 20:45 to 21:45 (255 vehicles)
PM Peak Hour Factor 56.4%

24-Hour Moving Total

01:00-	3172	02:00-	3181	03:00-	3193	04:00-	3197	05:00-	3194	06:00-	3188	07:00-	3117	08:00-	2960
09:00-	2839	10:00-	2814	11:00-	2835	12:00-	2837	13:00-	2858	14:00-	2857	15:00-	2846	16:00-	2770
17:00-	2702	18:00-	2619	19:00-	2605	20:00-	2474	21:00-	2509	22:00-	2603	23:00-	2602	24:00-	2673

Sunday 02/07/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
33	17	8	6	3	5	12	27	52	83	142	121	186	155	157	150	164	122	121	97	51	33	28	25	1798
13	7	3	3	1	0	1	3	5	23	28	29	44	45	44	28	30	40	27	25	13	7	7	10	
11	3	1	0	1	0	4	4	9	18	32	23	59	37	36	33	51	33	38	19	11	8	9	7	
5	4	2	0	0	2	5	8	15	21	37	31	41	32	41	52	35	21	31	25	18	11	7	6	
4	3	2	3	1	3	2	12	23	21	45	38	42	41	36	37	48	28	25	28	9	7	5	2	

AM Peak Hour ..... 10:15 to 11:15 (143 vehicles)
AM Peak Hour Factor 79.4%
PM Peak Hour ..... 12:15 to 13:15 (187 vehicles)
PM Peak Hour Factor 79.2%

24-Hour Moving Total

01:00-	2676	02:00-	2677	03:00-	2668	04:00-	2670	05:00-	2670	06:00-	2665	07:00-	2661	08:00-	2639
09:00-	2600	10:00-	2540	11:00-	2509	12:00-	2452	13:00-	2428	14:00-	2377	15:00-	2358	16:00-	2354
17:00-	2341	18:00-	2290	19:00-	2199	20:00-	2211	21:00-	2114	22:00-	1969	23:00-	1941	24:00-	1798

Monday 02/08/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
14	5	1	1	8	17	68	204	196	155	125	176	179	194	185	187	210	256	193	124	80	56	26	19	2679
4	3	0	0	0	2	11	32	59	40	24	36	37	43	45	42	52	74	51	46	21	16	6	2	
2	0	0	0	1	1	13	41	50	40	29	48	41	57	51	55	53	65	55	30	19	18	10	6	
4	2	1	0	1	6	19	60	42	34	29	46	47	57	42	53	62	63	43	26	24	14	5	6	
4	0	0	1	6	8	25	71	45	41	43	46	54	37	47	37	43	54	44	22	16	8	5	5	

AM Peak Hour ..... 07:30 to 08:30 (240 vehicles)
AM Peak Hour Factor 84.5%
PM Peak Hour ..... 17:00 to 18:00 (256 vehicles)
PM Peak Hour Factor 86.5%

24-Hour Moving Total

01:00-	1779	02:00-	1767	03:00-	1760	04:00-	1755	05:00-	1760	06:00-	1772	07:00-	1828	08:00-	2005
09:00-	2149	10:00-	2221	11:00-	2204	12:00-	2259	13:00-	2252	14:00-	2291	15:00-	2319	16:00-	2356
17:00-	2402	18:00-	2536	19:00-	2608	20:00-	2635	21:00-	2664	22:00-	2687	23:00-	2685	24:00-	2679

Tuesday 02/09/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
5	3	3	0	8	21	91	231	207	166	114	156	179	197	166	194	225	259	194	113	66	71	41	24	2734
3	1	0	0	1	3	8	40	54	45	28	41	52	43	50	49	51	62	51	33	17	21	14	8	
1	0	2	0	1	1	19	48	56	50	26	42	34	52	36	44	53	70	62	29	25	14	11	5	
1	0	0	0	3	5	29	67	46	41	37	25	39	52	29	43	71	66	42	23	14	15	8	7	
0	2	1	0	3	12	35	76	51	30	23	48	54	50	51	58	50	61	39	28	10	21	8	4	

AM Peak Hour ..... 07:30 to 08:30 (253 vehicles)
AM Peak Hour Factor 83.2%
PM Peak Hour ..... 17:00 to 18:00 (259 vehicles)
PM Peak Hour Factor 92.5%

24-Hour Moving Total

01:00-	2670	02:00-	2668	03:00-	2670	04:00-	2669	05:00-	2669	06:00-	2673	07:00-	2696	08:00-	2723
09:00-	2734	10:00-	2745	11:00-	2734	12:00-	2714	13:00-	2714	14:00-	2717	15:00-	2698	16:00-	2705
17:00-	2720	18:00-	2723	19:00-	2724	20:00-	2713	21:00-	2699	22:00-	2714	23:00-	2729	24:00-	2734

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... VA Rte 7, S. of Towlston Rd, NB
Location Code ..... Rte 7 S NB
County ..... Fairfax
Recorder Set 02/04/93 16:13
Recording Start ... 02/04/93 17:00
Recording End 02/10/93 11:30
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 111
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 02/04/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
																	2960	2583	1811	1474	1409	965	520	11722
																	750	687	519	392	361	302	161	
																	757	643	404	385	353	247	146	
																	729	650	390	363	358	233	114	
																	724	603	498	334	337	183	99	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (2960 vehicles)
PM Peak Hour Factor 97.8%

Friday 02/05/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
254	157	119	88	84	211	744	1008	1082	945	1101	1261	1331	1432	1708	2311	2878	2876	2553	1835	1330	1375	990	805	28478
101	38	35	20	16	33	106	225	271	249	264	290	336	351	389	505	709	718	664	452	356	339	273	218	
68	38	25	26	30	48	173	272	270	221	277	287	327	346	408	559	733	764	684	486	323	358	247	196	
36	39	28	19	19	63	224	281	250	217	283	330	299	370	448	628	733	701	628	463	362	326	235	211	
49	42	31	23	19	67	241	230	291	258	277	354	369	365	463	619	703	693	577	434	289	352	235	180	

AM Peak Hour ..... 11:00 to 12:00 (1261 vehicles)
AM Peak Hour Factor 89.1%
PM Peak Hour ..... 16:30 to 17:30 (2918 vehicles)
PM Peak Hour Factor 95.5%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	N/A	16:00-	N/A
17:00-	N/A	18:00-	28436	19:00-	28352	20:00-	28322	21:00-	28346	22:00-	28202	23:00-	28168	24:00-	28193

Saturday 02/06/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
522	289	244	128	81	155	375	490	706	776	1073	1344	1673	1731	1871	1845	1877	1894	1611	1320	946	1111	861	736	23659
162	75	80	46	24	22	74	107	164	169	225	323	355	413	491	478	532	475	417	354	241	260	222	185	
145	68	48	28	25	38	89	103	158	187	267	331	438	438	403	438	438	477	416	342	239	286	213	184	
119	71	69	27	9	41	111	146	196	216	272	326	431	455	509	485	460	473	430	322	230	290	218	181	
96	75	47	27	23	54	101	134	188	204	309	364	449	425	468	444	447	469	348	302	236	275	208	186	

AM Peak Hour ..... 11:00 to 12:00 (1344 vehicles)
AM Peak Hour Factor 92.3%
PM Peak Hour ..... 15:15 to 16:15 (1899 vehicles)
PM Peak Hour Factor 89.2%

24-Hour Moving Total

01:00- 28746	02:00- 28878	03:00- 29003	04:00- 29043	05:00- 29040	06:00- 28984	07:00- 28615	08:00- 28097
09:00- 27721	10:00- 27552	11:00- 27524	12:00- 27607	13:00- 27949	14:00- 28248	15:00- 28411	16:00- 27945
17:00- 26944	18:00- 25962	19:00- 25020	20:00- 24505	21:00- 24121	22:00- 23857	23:00- 23728	24:00- 23659

Sunday 02/07/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
523	332	252	147	75	96	147	208	362	467	720	986	1477	1482	1565	1719	1758	1731	1443	997	784	703	516	369	18859
146	87	67	41	22	22	24	51	80	102	154	239	324	390	391	398	436	482	387	274	201	195	153	103	
124	71	75	47	18	23	37	53	89	117	153	249	397	347	393	440	454	410	390	240	224	169	136	96	
136	94	53	38	15	23	39	49	87	113	185	243	366	395	404	426	416	418	338	257	184	176	118	84	
117	80	57	21	20	28	47	55	106	135	228	255	390	350	377	455	452	421	328	226	175	163	109	86	

AM Peak Hour ..... 11:00 to 12:00 (986 vehicles)
AM Peak Hour Factor 96.7%
PM Peak Hour ..... 16:15 to 17:15 (1804 vehicles)
PM Peak Hour Factor 93.6%

24-Hour Moving Total

01:00- 23660	02:00- 23703	03:00- 23711	04:00- 23730	05:00- 23724	06:00- 23665	07:00- 23437	08:00- 23155
09:00- 22811	10:00- 22502	11:00- 22149	12:00- 21791	13:00- 21595	14:00- 21346	15:00- 21040	16:00- 20914
17:00- 20795	18:00- 20632	19:00- 20464	20:00- 20141	21:00- 19979	22:00- 19571	23:00- 19226	24:00- 18859

Monday 02/08/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
224	112	68	56	80	220	713	1006	929	876	914	1133	1295	1299	1456	2105	2844	2941	2489	1804	1319	1221	809	390	26303
68	27	23	14	11	27	121	244	227	219	190	262	324	323	324	432	643	751	680	548	365	306	255	121	
59	27	20	17	14	51	156	235	216	227	233	263	338	333	337	492	700	770	630	465	319	326	224	99	
50	31	13	14	26	78	246	281	248	202	228	304	313	321	372	535	730	738	623	432	346	309	171	90	
47	27	12	11	29	64	190	246	238	228	263	304	320	322	423	646	771	682	556	359	289	280	159	80	

AM Peak Hour ..... 11:00 to 12:00 (1133 vehicles)
AM Peak Hour Factor 93.2%
PM Peak Hour ..... 16:45 to 17:45 (3030 vehicles)
PM Peak Hour Factor 98.2%

24-Hour Moving Total

01:00- 18560	02:00- 18340	03:00- 18156	04:00- 18065	05:00- 18070	06:00- 18194	07:00- 18760	08:00- 19558
09:00- 20125	10:00- 20534	11:00- 20728	12:00- 20875	13:00- 20693	14:00- 20510	15:00- 20401	16:00- 20787
17:00- 21873	18:00- 23083	19:00- 24129	20:00- 24936	21:00- 25471	22:00- 25989	23:00- 26282	24:00- 26303

Tuesday 02/09/93 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
213	98	59	70	90	244	784	1013	968	918	970	1116	1227	1297	1557	2207	2797	3011	2516	1799	1412	1461	912	474	27213
78	25	16	22	17	37	150	236	232	208	237	268	295	289	370	452	666	797	674	492	352	387	289	145	
54	25	19	8	26	62	180	261	240	238	232	259	319	331	374	517	713	789	627	465	377	377	238	133	
46	25	17	15	23	73	237	268	243	246	264	283	323	341	385	606	725	698	639	449	336	333	183	99	
35	23	7	25	24	72	217	248	253	226	237	306	290	336	428	632	693	727	576	393	347	364	202	97	

AM Peak Hour ..... 11:00 to 12:00 (1116 vehicles)
AM Peak Hour Factor 91.2%
PM Peak Hour ..... 17:00 to 18:00 (3011 vehicles)
PM Peak Hour Factor 94.4%

24-Hour Moving Total

01:00- 26292	02:00- 26278	03:00- 26269	04:00- 26283	05:00- 26293	06:00- 26317	07:00- 26388	08:00- 26395
09:00- 26434	10:00- 26476	11:00- 26532	12:00- 26515	13:00- 26447	14:00- 26445	15:00- 26546	16:00- 26648
17:00- 26601	18:00- 26671	19:00- 26698	20:00- 26693	21:00- 26786	22:00- 27026	23:00- 27129	24:00- 27213

Volume Count Report

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Location ..... VA Rte 7, S. of Towlston Rd, SB
Location Code ..... Rte 7 S SB
County ..... Fairfax
Recorder Set 02/04/93 16:23
Recording Start ... 02/04/93 17:00
Recording End 02/10/93 11:45
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 36
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 02/04/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
																	1536	1264	967	600	575	533	283	5758
																	379	342	278	181	141	145	82	
																	427	327	260	140	125	142	80	
																	381	298	230	162	151	157	65	
																	349	297	199	117	158	89	56	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (1536 vehicles)
PM Peak Hour Factor 89.9%

Friday 02/05/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
158	70	43	85	232	1137	2966	3316	3010	2027	1543	1366	1500	1447	1379	1469	1401	1512	1405	1165	716	625	602	512	29686
54	23	13	21	30	134	596	834	803	544	434	313	348	337	324	356	312	347	364	333	229	139	171	149	
38	13	14	18	44	206	746	838	827	556	347	308	398	431	356	337	377	454	379	324	160	136	138	126	
33	12	9	21	60	351	803	842	708	495	397	332	382	354	354	363	357	364	347	283	183	179	142	120	
33	22	7	25	98	446	821	802	672	432	365	413	372	325	345	413	355	347	315	225	144	171	151	117	

AM Peak Hour ..... 06:45 to 07:45 (3335 vehicles)
AM Peak Hour Factor 99.0%
PM Peak Hour ..... 17:15 to 18:15 (1529 vehicles)
PM Peak Hour Factor 84.2%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	N/A	16:00-	N/A
17:00-	N/A	18:00-	28907	19:00-	28883	20:00-	29024	21:00-	29222	22:00-	29338	23:00-	29388	24:00-	29457

Saturday 02/06/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
268	168	114	73	106	301	564	863	1361	1626	1745	1857	1908	1946	1743	1604	1606	1449	1395	1005	738	636	554	584	24214
100	47	42	16	16	63	88	146	284	395	408	463	444	489	410	418	388	400	337	278	216	185	140	143	
62	44	23	16	17	78	160	202	326	382	451	475	436	491	446	423	441	355	377	278	169	155	141	138	
55	37	20	18	37	77	174	237	380	423	435	450	526	480	453	361	364	347	330	260	169	135	138	130	
51	40	29	23	36	83	142	278	371	426	451	469	502	486	434	402	413	347	351	189	184	161	135	173	

AM Peak Hour ..... 11:00 to 12:00 (1857 vehicles)
AM Peak Hour Factor 97.7%
PM Peak Hour ..... 12:30 to 13:30 (2008 vehicles)
PM Peak Hour Factor 95.4%

24-Hour Moving Total

01:00- 29796	02:00- 29894	03:00- 29965	04:00- 29953	05:00- 29827	06:00- 28991	07:00- 26589	08:00- 24136
09:00- 22487	10:00- 22086	11:00- 22288	12:00- 22779	13:00- 23187	14:00- 23686	15:00- 24050	16:00- 24185
17:00- 24390	18:00- 24327	19:00- 24317	20:00- 24157	21:00- 24179	22:00- 24190	23:00- 24142	24:00- 24214

Sunday 02/07/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
390	191	124	71	75	141	307	377	637	1050	1278	1504	1744	1775	1657	1514	1441	1198	1027	724	636	562	365	266	19054
118	56	39	21	8	30	70	70	115	211	290	349	354	473	469	414	363	346	270	220	185	135	102	74	
104	55	34	17	23	34	76	82	144	267	323	339	432	438	395	341	381	276	270	180	139	160	106	66	
95	42	25	13	20	42	101	119	177	288	339	394	459	424	404	369	340	303	251	168	141	148	91	55	
73	38	26	20	24	35	60	106	201	284	326	422	499	440	389	390	357	273	236	156	171	119	66	71	

AM Peak Hour ..... 11:00 to 12:00 (1504 vehicles)
AM Peak Hour Factor 89.1%
PM Peak Hour ..... 12:30 to 13:30 (1869 vehicles)
PM Peak Hour Factor 93.6%

24-Hour Moving Total

01:00- 24336	02:00- 24359	03:00- 24369	04:00- 24367	05:00- 24336	06:00- 24176	07:00- 23919	08:00- 23433
09:00- 22709	10:00- 22133	11:00- 21666	12:00- 21313	13:00- 21149	14:00- 20978	15:00- 20892	16:00- 20802
17:00- 20637	18:00- 20386	19:00- 20018	20:00- 19737	21:00- 19635	22:00- 19561	23:00- 19372	24:00- 19054

Monday 02/08/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
122	57	40	86	231	1203	3070	3390	2807	1964	1565	1301	1346	1297	1380	1443	1360	1469	1166	870	571	497	377	225	27837
28	22	7	7	29	150	621	838	719	469	398	312	339	325	345	313	344	355	290	265	168	131	117	54	
40	13	12	18	48	246	748	842	737	563	423	362	301	318	339	341	342	433	308	247	138	121	106	77	
25	14	12	30	58	338	824	862	692	477	388	322	360	309	349	373	337	376	296	202	154	124	94	56	
29	8	9	31	96	469	877	848	659	455	356	305	346	345	347	416	337	305	272	156	111	121	60	38	

AM Peak Hour ..... 06:45 to 07:45 (3419 vehicles)
AM Peak Hour Factor 97.5%
PM Peak Hour ..... 16:45 to 17:45 (1501 vehicles)
PM Peak Hour Factor 86.7%

24-Hour Moving Total

01:00- 18786	02:00- 18652	03:00- 18568	04:00- 18583	05:00- 18739	06:00- 19801	07:00- 22564	08:00- 25577
09:00- 27747	10:00- 28661	11:00- 28948	12:00- 28745	13:00- 28347	14:00- 27869	15:00- 27592	16:00- 27521
17:00- 27440	18:00- 27711	19:00- 27850	20:00- 27996	21:00- 27931	22:00- 27866	23:00- 27878	24:00- 27837

Tuesday 02/09/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
125	75	62	70	255	1260	3060	3308	3169	2093	1513	1357	1396	1373	1362	1401	1407	1416	1327	920	627	531	423	250	28780
34	21	21	17	30	138	634	846	789	597	426	339	342	347	328	346	359	333	370	285	196	139	129	68	
31	22	14	15	46	241	754	836	807	557	363	347	330	346	350	342	355	401	360	222	154	131	101	61	
37	10	13	17	67	374	845	827	796	494	367	319	343	347	346	366	356	331	327	251	143	140	92	67	
23	22	14	21	112	507	827	799	777	445	357	352	381	333	338	347	337	351	270	162	134	121	101	54	

AM Peak Hour ..... 06:30 to 07:30 (3354 vehicles)
AM Peak Hour Factor 99.1%
PM Peak Hour ..... 17:15 to 18:15 (1453 vehicles)
PM Peak Hour Factor 90.6%

24-Hour Moving Total

01:00- 27840	02:00- 27858	03:00- 27880	04:00- 27864	05:00- 27888	06:00- 27945	07:00- 27935	08:00- 27853
09:00- 28215	10:00- 28344	11:00- 28292	12:00- 28348	13:00- 28398	14:00- 28474	15:00- 28456	16:00- 28414
17:00- 28461	18:00- 28408	19:00- 28569	20:00- 28619	21:00- 28675	22:00- 28709	23:00- 28755	24:00- 28780

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... VA Rte 7, N. of Towlston Rd, SB
Location Code ..... Rte 7 N SB
County ..... Fairfax
Recorder Set 02/04/93 17:33
Recording Start ... 02/04/93 18:00
Recording End 02/10/93 12:00
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 40
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 02/04/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
																		1293	989	632	610	515	286	4325
																		348	289	193	156	153	83	
																		333	264	138	124	144	77	
																		304	236	175	157	135	68	
																		308	200	126	173	83	58	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 18:00 to 19:00 (1293 vehicles)
PM Peak Hour Factor 92.9%

Friday 02/05/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
161	77	48	94	248	1211	3093	3346	3041	2069	1593	1457	1619	1522	1502	1558	1498	1644	1445	1199	743	657	619	515	30959
52	25	15	24	31	136	603	841	799	561	432	338	400	358	362	373	339	403	377	355	240	141	168	138	
42	15	17	20	47	215	802	848	824	567	362	322	423	443	372	376	421	481	396	320	162	150	159	129	
33	14	10	21	63	370	834	833	734	498	426	355	384	376	381	401	382	395	361	298	185	183	149	121	
34	23	6	29	107	490	854	824	684	443	373	442	412	345	387	408	356	365	311	226	156	183	143	127	

AM Peak Hour ..... 06:30 to 07:30 (3377 vehicles)
AM Peak Hour Factor 98.9%
PM Peak Hour ..... 17:00 to 18:00 (1644 vehicles)
PM Peak Hour Factor 85.4%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	N/A	16:00-	N/A
17:00-	N/A	18:00-	N/A	19:00-	30106	20:00-	30258	21:00-	30468	22:00-	30579	23:00-	30626	24:00-	30730

Saturday 02/06/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
268	181	122	82	114	321	605	904	1404	1735	1794	1910	1968	1961	1789	1611	1635	1455	1411	1018	711	649	582	561	24791
97	52	47	17	18	66	103	160	301	439	443	479	446	492	434	421	399	388	352	280	218	174	150	141	
58	45	25	20	20	81	168	210	331	416	463	510	463	499	455	428	435	373	386	281	176	165	139	133	
54	41	22	20	37	83	194	258	406	443	443	455	544	485	465	378	377	334	331	258	178	137	148	134	
59	43	28	25	39	91	140	276	366	437	445	466	515	485	435	384	424	360	342	199	139	173	145	153	

AM Peak Hour ..... 11:00 to 12:00 (1910 vehicles)
AM Peak Hour Factor 93.6%
PM Peak Hour ..... 12:30 to 13:30 (2050 vehicles)
PM Peak Hour Factor 94.2%

24-Hour Moving Total

01:00- 31066	02:00- 31170	03:00- 31244	04:00- 31232	05:00- 31098	06:00- 30208	07:00- 27720	08:00- 25278
09:00- 23641	10:00- 23307	11:00- 23508	12:00- 23961	13:00- 24310	14:00- 24749	15:00- 25036	16:00- 25089
17:00- 25226	18:00- 25037	19:00- 25003	20:00- 24822	21:00- 24790	22:00- 24782	23:00- 24745	24:00- 24791

Sunday 02/07/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
394	201	133	73	80	153	319	390	663	1077	1276	1506	1776	1800	1672	1558	1462	1222	1041	734	655	584	387	266	19422
115	59	40	20	11	32	77	75	131	217	293	357	369	459	458	424	368	350	267	232	195	142	114	78	
111	58	39	16	22	43	82	76	142	268	321	339	437	457	404	333	392	273	276	184	143	169	113	69	
98	43	27	19	23	42	100	126	185	293	340	390	466	433	435	385	331	326	263	163	140	152	91	54	
70	41	27	18	24	36	60	113	205	299	322	420	504	451	375	416	371	273	235	155	177	121	69	65	

AM Peak Hour ..... 11:00 to 12:00 (1506 vehicles)
AM Peak Hour Factor 89.6%
PM Peak Hour ..... 12:30 to 13:30 (1886 vehicles)
PM Peak Hour Factor 93.6%

24-Hour Moving Total

01:00- 24917	02:00- 24937	03:00- 24948	04:00- 24939	05:00- 24905	06:00- 24737	07:00- 24451	08:00- 23937
09:00- 23196	10:00- 22538	11:00- 22020	12:00- 21616	13:00- 21424	14:00- 21263	15:00- 21146	16:00- 21093
17:00- 20920	18:00- 20687	19:00- 20317	20:00- 20033	21:00- 19977	22:00- 19912	23:00- 19717	24:00- 19422

Monday 02/08/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
128	62	48	93	244	1294	3186	3384	2847	1957	1569	1341	1393	1331	1389	1461	1409	1516	1177	899	556	532	389	245	28450
31	22	11	8	32	162	664	852	722	479	396	331	342	334	342	313	347	371	313	272	158	133	120	59	
41	16	13	18	47	258	789	857	735	572	431	354	328	326	344	344	379	459	299	254	137	133	112	82	
26	15	14	33	61	372	845	860	711	454	395	327	365	310	349	391	347	367	293	205	148	134	94	59	
30	9	10	34	104	502	888	815	679	452	347	329	358	361	354	413	336	319	272	168	113	132	63	45	

AM Peak Hour ..... 06:45 to 07:45 (3457 vehicles)
AM Peak Hour Factor 97.3%
PM Peak Hour ..... 16:45 to 17:45 (1533 vehicles)
PM Peak Hour Factor 83.5%

24-Hour Moving Total

01:00- 19156	02:00- 19017	03:00- 18932	04:00- 18952	05:00- 19116	06:00- 20257	07:00- 23124	08:00- 26118
09:00- 28302	10:00- 29182	11:00- 29475	12:00- 29310	13:00- 28927	14:00- 28458	15:00- 28175	16:00- 28078
17:00- 28025	18:00- 28319	19:00- 28455	20:00- 28620	21:00- 28521	22:00- 28469	23:00- 28471	24:00- 28450

Tuesday 02/09/93 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
126	80	69	74	272	1351	3183	3320	3212	2107	1521	1361	1403	1409	1356	1424	1405	1460	1327	941	622	554	431	259	29267
35	21	25	17	31	147	655	858	784	608	425	325	340	365	350	347	352	362	375	304	192	139	136	75	
31	24	17	16	52	249	799	846	802	547	363	353	327	357	329	364	371	415	368	211	149	137	100	60	
37	10	13	18	74	403	893	826	840	514	376	311	333	355	350	348	344	324	308	253	144	153	95	68	
23	25	14	23	115	552	836	790	786	438	357	372	403	332	327	365	338	359	276	173	137	125	100	56	

AM Peak Hour ..... 06:30 to 07:30 (3433 vehicles)
AM Peak Hour Factor 96.1%
PM Peak Hour ..... 12:45 to 13:45 (1480 vehicles)
PM Peak Hour Factor 91.8%

24-Hour Moving Total

01:00- 28448	02:00- 28466	03:00- 28487	04:00- 28468	05:00- 28496	06:00- 28553	07:00- 28550	08:00- 28486
09:00- 28851	10:00- 29001	11:00- 28953	12:00- 28973	13:00- 28983	14:00- 29061	15:00- 29028	16:00- 28991
17:00- 28987	18:00- 28931	19:00- 29081	20:00- 29123	21:00- 29189	22:00- 29211	23:00- 29253	24:00- 29267

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... VA Rte 7, N. of Towlson Road, N-Bound
Location Code ..... VA7 NB
County ..... Fairfax County, VA
Recorder Set 04/01/93 12:52
Recording Start ... 04/01/93 13:00
Recording End 04/10/93 15:15
Sample Time ..... 15 Minutes
Operator Number ... 7
Machine Number 98
Channels ..... 1 through 2
Divide By 1
Summation ..... No
Two-Way ..... No

Thursday 04/01/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
													1344	1566	2241	2825	2830	2377	1707	1389	1275	957	540	19051
													319	355	474	624	697	667	450	388	315	308	173	
													320	385	499	746	713	600	475	376	365	246	127	
													336	410	631	718	710	550	435	319	309	223	123	
													369	416	637	737	710	560	347	306	286	180	117	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 16:15 to 17:15 (2898 vehicles)
PM Peak Hour Factor 97.1%

Friday 04/02/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
297	168	101	105	86	240	752	1023	939	998	1049	1204	1374	1361	1724	2313	2858	2813	2362	1738	1384	1374	974	791	28028
91	42	37	28	14	32	124	225	229	226	233	290	323	340	381	563	661	699	641	454	365	338	250	223	
70	36	21	23	20	70	150	254	245	245	267	286	382	336	389	488	740	709	645	477	356	314	257	197	
73	50	18	26	23	60	246	271	223	244	281	302	335	337	464	674	741	736	553	405	322	370	239	200	
63	40	25	28	29	78	232	273	242	283	268	326	334	348	490	588	716	669	523	402	341	352	228	171	

AM Peak Hour ..... 11:00 to 12:00 (1204 vehicles)
AM Peak Hour Factor 92.3%
PM Peak Hour ..... 16:15 to 17:15 (2896 vehicles)
PM Peak Hour Factor 97.7%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	27387	15:00-	27404	16:00-	27562
17:00-	27634	18:00-	27667	19:00-	27650	20:00-	27635	21:00-	27666	22:00-	27661	23:00-	27760	24:00-	27777

Saturday 04/03/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
534	347	242	146	92	156	349	555	878	992	1199	1372	1642	1714	1777	1867	1961	1839	1632	1295	1059	1052	909	850	24459
156	88	77	48	30	25	67	100	185	233	264	333	397	398	449	468	480	457	401	345	301	264	236	231	
138	91	64	30	15	36	82	123	201	224	292	346	398	438	438	452	514	493	474	348	242	255	213	239	
134	88	63	38	20	45	105	162	238	255	296	343	411	433	440	478	465	467	401	325	274	264	214	193	
106	80	38	30	27	50	95	170	254	280	347	350	436	445	450	469	502	422	356	277	242	269	246	187	

AM Peak Hour ..... 11:00 to 12:00 (1372 vehicles)
AM Peak Hour Factor 98.0%
PM Peak Hour ..... 16:00 to 17:00 (1961 vehicles)
PM Peak Hour Factor 95.4%

24-Hour Moving Total

01:00- 28265	02:00- 28444	03:00- 28585	04:00- 28626	05:00- 28632	06:00- 28548	07:00- 28145	08:00- 27677
09:00- 27616	10:00- 27610	11:00- 27760	12:00- 27928	13:00- 28196	14:00- 28549	15:00- 28602	16:00- 28156
17:00- 27259	18:00- 26285	19:00- 25555	20:00- 25112	21:00- 24787	22:00- 24465	23:00- 24400	24:00- 24459

Sunday 04/04/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
542	358	250	133	111	150	297	427	550	731	1060	1484	1620	1667	1655	1798	1684	1520	1139	883	788	624	433	220	20124
155	105	85	41	19	24	39	102	114	149	226	304	378	410	406	426	425	434	325	217	216	166	135	68	
162	88	75	33	32	45	78	104	132	171	239	403	405	428	395	486	428	400	293	232	219	163	105	65	
123	81	50	30	32	41	73	109	142	202	267	384	424	436	421	451	418	361	256	206	186	164	98	41	
102	84	40	29	28	40	107	112	162	209	328	393	413	393	433	435	413	325	265	228	167	131	95	46	

AM Peak Hour ..... 11:00 to 12:00 (1484 vehicles)
AM Peak Hour Factor 92.1%
PM Peak Hour ..... 15:00 to 16:00 (1798 vehicles)
PM Peak Hour Factor 92.5%

24-Hour Moving Total

01:00- 24467	02:00- 24478	03:00- 24486	04:00- 24473	05:00- 24492	06:00- 24486	07:00- 24434	08:00- 24306
09:00- 23978	10:00- 23717	11:00- 23578	12:00- 23690	13:00- 23668	14:00- 23621	15:00- 23499	16:00- 23430
17:00- 23153	18:00- 22834	19:00- 22341	20:00- 21929	21:00- 21658	22:00- 21230	23:00- 20754	24:00- 20124

Monday 04/05/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
119	103	82	60	204	730	990	978	842	919	1014	1197	1336	1458	2094	2817	2977	2428	1642	1323	1227	766	476	289	26071
69	29	30	16	30	109	216	228	208	203	240	290	327	322	430	683	754	687	462	337	325	227	130	90	
3	22	17	13	49	158	241	275	209	213	236	280	333	356	499	665	777	666	434	337	333	182	103	90	
5	29	13	19	52	215	285	251	231	251	287	306	338	385	565	717	746	573	384	357	290	196	149	64	
42	23	22	12	73	248	248	224	194	252	251	321	338	395	600	752	700	502	362	292	279	161	94	45	

AM Peak Hour ..... 11:00 to 12:00 (1197 vehicles)
AM Peak Hour Factor 93.2%
PM Peak Hour ..... 15:45 to 16:45 (3029 vehicles)
PM Peak Hour Factor 97.5%

24-Hour Moving Total

01:00- 19701	02:00- 19446	03:00- 19278	04:00- 19205	05:00- 19298	06:00- 19878	07:00- 20571	08:00- 21122
09:00- 21414	10:00- 21602	11:00- 21556	12:00- 21269	13:00- 20985	14:00- 20776	15:00- 21215	16:00- 22234
17:00- 23527	18:00- 24435	19:00- 24938	20:00- 25378	21:00- 25817	22:00- 25959	23:00- 26002	24:00- 26071

Tuesday 04/06/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
130	96	64	99	212	758	1005	971	950	930	1161	1287	1300	1508	2116	2752	2816	2416	1753	1424	1316	948	626	254	26892
36	25	20	32	28	116	231	233	210	208	256	314	304	359	419	627	733	646	470	357	337	298	172	80	
25	29	17	16	49	163	251	264	240	203	284	303	329	384	494	677	706	629	475	358	327	281	189	76	
32	18	14	15	67	224	279	238	247	287	327	324	335	348	602	694	737	621	430	365	334	189	151	49	
37	24	13	36	68	255	244	236	253	232	294	346	332	417	601	754	640	520	378	344	318	180	114	49	

AM Peak Hour ..... 11:00 to 12:00 (1287 vehicles)
AM Peak Hour Factor 93.0%
PM Peak Hour ..... 15:45 to 16:45 (2930 vehicles)
PM Peak Hour Factor 97.1%

24-Hour Moving Total

01:00- 26082	02:00- 26075	03:00- 26057	04:00- 26096	05:00- 26104	06:00- 26132	07:00- 26147	08:00- 26140
09:00- 26248	10:00- 26259	11:00- 26406	12:00- 26496	13:00- 26460	14:00- 26510	15:00- 26532	16:00- 26467
17:00- 26306	18:00- 26294	19:00- 26405	20:00- 26506	21:00- 26595	22:00- 26777	23:00- 26927	24:00- 26892

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... Towlston Rd, N. of VA Rte 7, Non-Dir.
Location Code ..... Towl NON DIR
County ..... Fairfax
Recorder Set 02/04/93 16:45
Recording Start ... 02/04/93 17:00
Recording End 02/10/93 11:45
Sample Time ..... 15 Minutes
Operator Number ... 2
Machine Number 76
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 02/04/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
																	386	236	135	71	65	45	17	955
																	91	69	45	21	20	8	6	
																	94	63	32	26	15	17	6	
																	99	52	32	11	11	5	3	
																	102	52	26	13	19	15	2	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (386 vehicles)
PM Peak Hour Factor 94.6%

Friday 02/05/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
12	6	2	5	12	35	155	211	213	159	142	191	149	167	184	261	333	358	262	164	91	230	69	61	3472
5	4	0	0	1	4	25	44	64	42	35	46	39	38	52	58	71	92	82	57	15	22	19	18	
3	0	0	2	2	9	27	54	60	44	22	49	34	42	33	64	88	90	82	34	31	24	10	9	
2	2	1	0	3	6	58	55	44	35	51	55	38	44	50	75	83	83	46	37	21	19	17	15	
2	0	1	3	6	16	45	58	45	38	34	41	38	43	49	64	91	93	52	36	24	165	23	19	

AM Peak Hour ..... 07:30 to 08:30 (237 vehicles)
AM Peak Hour Factor 92.6%
PM Peak Hour ..... 17:00 to 18:00 (358 vehicles)
PM Peak Hour Factor 96.2%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	N/A	16:00-	N/A
17:00-	N/A	18:00-	3192	19:00-	3164	20:00-	3190	21:00-	3219	22:00-	3239	23:00-	3404	24:00-	3428

Saturday 02/06/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
29	15	9	3	8	9	34	45	73	108	144	166	182	199	177	147	171	141	140	118	67	74	56	60	2175
9	3	1	0	2	1	6	5	21	27	28	38	51	50	45	43	45	34	34	37	15	20	16	14	
7	2	2	1	3	1	11	6	14	22	29	47	43	44	43	34	45	37	25	30	12	20	17	16	
7	7	6	0	2	1	3	16	20	27	50	41	43	49	51	36	47	29	44	30	14	14	17	14	
6	3	0	2	1	6	14	18	18	32	37	40	45	56	38	34	34	41	37	21	26	20	6	16	

AM Peak Hour ..... 10:30 to 11:30 (172 vehicles)
AM Peak Hour Factor 86.0%
PM Peak Hour ..... 13:00 to 14:00 (199 vehicles)
PM Peak Hour Factor 88.8%

24-Hour Moving Total

01:00-	3489	02:00-	3498	03:00-	3505	04:00-	3503	05:00-	3499	06:00-	3473	07:00-	3352	08:00-	3186
09:00-	3046	10:00-	2995	11:00-	2997	12:00-	2972	13:00-	3005	14:00-	3037	15:00-	3030	16:00-	2916
17:00-	2754	18:00-	2537	19:00-	2415	20:00-	2369	21:00-	2345	22:00-	2189	23:00-	2176	24:00-	2175

Sunday 02/07/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
22	8	6	6	5	9	14	20	46	74	102	121	156	156	164	152	157	128	104	82	67	47	22	33	1701
10	1	4	3	1	1	6	6	9	7	19	37	40	56	49	33	30	37	34	18	19	15	6	7	
6	4	1	0	1	1	3	4	14	12	25	28	47	38	47	41	43	40	23	21	21	14	4	8	
2	1	0	2	1	1	2	3	9	32	29	35	34	30	37	43	44	22	28	20	20	10	5	7	
4	2	1	1	2	6	3	7	14	23	29	21	35	32	31	35	40	29	19	23	7	8	7	11	

AM Peak Hour ..... 10:45 to 11:45 (129 vehicles)
AM Peak Hour Factor 87.2%
PM Peak Hour ..... 12:15 to 13:15 (172 vehicles)
PM Peak Hour Factor 76.8%

24-Hour Moving Total

01:00-	2168	02:00-	2161	03:00-	2158	04:00-	2161	05:00-	2158	06:00-	2158	07:00-	2138	08:00-	2113
09:00-	2086	10:00-	2052	11:00-	2010	12:00-	1965	13:00-	1939	14:00-	1896	15:00-	1883	16:00-	1888
17:00-	1874	18:00-	1861	19:00-	1825	20:00-	1789	21:00-	1789	22:00-	1762	23:00-	1728	24:00-	1701

Monday 02/08/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
16	1	2	3	10	32	143	221	225	158	141	163	142	129	186	222	305	387	259	140	94	61	33	20	3093
1	0	0	0	0	8	25	54	77	35	29	39	26	34	45	51	65	100	83	50	28	10	12	6	
3	0	0	0	1	6	33	60	52	43	38	36	37	22	43	51	70	108	67	29	27	25	9	7	
6	0	1	1	5	4	35	52	46	40	37	48	38	34	50	69	90	92	68	37	22	12	6	3	
6	1	1	2	4	14	50	55	50	40	37	40	41	39	48	51	80	87	41	24	17	14	6	4	

AM Peak Hour ..... 07:15 to 08:15 (244 vehicles)
AM Peak Hour Factor 79.2%
PM Peak Hour ..... 17:00 to 18:00 (387 vehicles)
PM Peak Hour Factor 89.6%

24-Hour Moving Total

01:00-	1695	02:00-	1688	03:00-	1684	04:00-	1681	05:00-	1686	06:00-	1709	07:00-	1838	08:00-	2039
09:00-	2218	10:00-	2302	11:00-	2341	12:00-	2383	13:00-	2369	14:00-	2342	15:00-	2364	16:00-	2434
17:00-	2582	18:00-	2841	19:00-	2996	20:00-	3054	21:00-	3081	22:00-	3095	23:00-	3106	24:00-	3093

Tuesday 02/09/93 Channel: 1

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
7	6	4	3	10	32	166	234	241	158	145	126	162	159	163	232	331	355	282	133	87	72	50	18	3176
1	0	0	1	1	4	22	42	70	46	35	26	54	30	26	53	64	86	83	43	27	21	20	3	
2	0	3	1	3	4	36	62	63	42	35	35	32	45	44	61	75	87	71	32	23	17	9	5	
2	2	0	1	2	10	56	54	48	35	39	34	36	34	51	57	109	86	74	33	21	14	11	3	
2	4	1	0	4	14	52	76	60	35	36	31	40	50	42	61	83	96	54	25	16	20	10	7	

AM Peak Hour ..... 07:30 to 08:30 (263 vehicles)
AM Peak Hour Factor 86.5%
PM Peak Hour ..... 16:30 to 17:30 (365 vehicles)
PM Peak Hour Factor 83.7%

24-Hour Moving Total

01:00-	3084	02:00-	3089	03:00-	3091	04:00-	3091	05:00-	3091	06:00-	3091	07:00-	3114	08:00-	3127
09:00-	3143	10:00-	3143	11:00-	3147	12:00-	3110	13:00-	3130	14:00-	3160	15:00-	3137	16:00-	3147
17:00-	3173	18:00-	3141	19:00-	3164	20:00-	3157	21:00-	3150	22:00-	3161	23:00-	3178	24:00-	3176

Volume Count Report

Generated by MSC3000 Version 2.00 Copyright 1990, 1991 Mitron Systems Corporation

Location ..... Dulles Toll Rd, East of Trap Rd, EB
Location Code ..... Dul EB
County ..... Fairfax County, VA
Recorder Set 04/01/93 13:08
Recording Start ... 04/01/93 14:00
Recording End 04/10/93 15:30
Sample Time ..... 15 Minutes
Operator Number ... 7
Machine Number 97
Channel 1
Divide By 1
Summation ..... No
Two-Way ..... No

Thursday 04/01/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
														1808	2288	2702	3405	2622	1603	974	830	644	395	17271
														421	512	629	754	703	510	301	188	181	124	
														475	567	633	946	707	443	246	226	154	97	
														466	584	691	865	639	355	219	230	166	96	
														446	625	749	840	573	295	208	186	143	78	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (3405 vehicles)
PM Peak Hour Factor 90.0%

Friday 04/02/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
229	115	87	68	152	797	3682	5535	5302	3121	2069	2144	2108	1929	1984	2510	2764	3342	2636	1782	1023	804	723	608	45514
82	25	29	22	22	90	532	1391	1313	916	498	505	532	449	460	607	666	768	750	484	295	186	181	202	
76	29	25	17	34	131	840	1411	1428	878	538	567	533	491	504	583	644	886	708	508	285	211	191	149	
38	22	14	11	33	203	996	1375	1405	700	557	517	527	525	484	648	684	839	592	423	255	208	161	146	
33	39	19	18	63	373	1314	1358	1156	627	476	555	516	464	536	672	770	849	586	367	188	199	190	111	

AM Peak Hour ..... 07:00 to 08:00 (5535 vehicles)
AM Peak Hour Factor 98.1%
PM Peak Hour ..... 17:00 to 18:00 (3342 vehicles)
PM Peak Hour Factor 94.3%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	N/A	15:00-	44609	16:00-	44785
17:00-	45007	18:00-	45069	19:00-	45006	20:00-	45020	21:00-	45199	22:00-	45248	23:00-	45222	24:00-	45301

Saturday 04/03/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
456	179	111	72	86	238	639	1109	1671	1998	1991	1938	1943	1717	1648	1504	1556	1534	1501	1251	824	666	738	776	26146
220	47	44	27	25	41	113	182	330	422	487	477	472	449	402	387	390	360	388	333	249	148	169	245	
101	54	22	16	17	48	144	276	388	480	513	472	493	429	448	372	377	410	388	352	220	164	171	228	
66	44	22	11	24	58	182	298	463	558	502	498	516	418	394	370	396	369	393	285	203	192	166	168	
69	34	23	18	20	91	200	353	490	538	489	491	462	421	404	375	393	395	332	281	152	162	232	135	

AM Peak Hour ..... 09:30 to 10:30 (2096 vehicles)
AM Peak Hour Factor 93.9%
PM Peak Hour ..... 12:00 to 13:00 (1943 vehicles)
PM Peak Hour Factor 94.1%

24-Hour Moving Total

01:00- 45741	02:00- 45805	03:00- 45829	04:00- 45833	05:00- 45767	06:00- 45208	07:00- 42165	08:00- 37739
09:00- 34108	10:00- 32985	11:00- 32907	12:00- 32701	13:00- 32536	14:00- 32324	15:00- 31988	16:00- 30982
17:00- 29774	18:00- 27966	19:00- 26831	20:00- 26300	21:00- 26101	22:00- 25963	23:00- 25978	24:00- 26146

Sunday 04/04/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
351	190	135	95	117	335	385	651	1046	1304	1605	1706	1717	1616	1500	1393	1284	1200	934	768	655	533	343	175	20038
132	57	37	18	22	43	63	137	248	296	380	433	388	388	365	345	324	304	268	203	166	154	107	53	
98	55	46	21	31	80	92	168	258	305	407	384	473	401	387	360	311	304	223	209	195	127	74	50	
64	46	27	25	33	104	116	155	276	328	390	449	416	414	357	343	349	305	216	193	152	146	82	36	
57	32	25	31	31	108	114	191	264	375	428	440	440	413	391	345	300	287	227	163	142	106	80	36	

AM Peak Hour ..... 11:00 to 12:00 (1706 vehicles)
AM Peak Hour Factor 95.0%
PM Peak Hour ..... 12:00 to 13:00 (1717 vehicles)
PM Peak Hour Factor 90.8%

24-Hour Moving Total

01:00- 26041	02:00- 26052	03:00- 26076	04:00- 26099	05:00- 26130	06:00- 26227	07:00- 25973	08:00- 25515
09:00- 24890	10:00- 24196	11:00- 23810	12:00- 23578	13:00- 23352	14:00- 23251	15:00- 23103	16:00- 22992
17:00- 22720	18:00- 22386	19:00- 21819	20:00- 21336	21:00- 21167	22:00- 21034	23:00- 20639	24:00- 20038

Monday 04/05/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
93	54	60	112	610	3302	5577	4656	3021	1933	1839	1793	1654	1672	2084	2573	3316	2467	1420	896	727	554	387	218	41018
31	14	12	14	70	490	1341	1243	917	532	447	468	409	384	518	563	779	724	452	242	193	141	71	82	
23	12	16	23	122	732	1419	1230	820	501	445	432	436	406	518	654	901	700	383	237	188	180	95	62	
25	21	11	26	106	928	1459	1130	667	441	475	451	424	442	501	653	809	559	314	228	185	114	114	41	
14	7	21	49	312	1152	1358	1053	617	459	472	442	385	440	547	703	827	484	271	189	161	119	107	33	

AM Peak Hour ..... 06:00 to 07:00 (5577 vehicles)
AM Peak Hour Factor 95.6%
PM Peak Hour ..... 16:00 to 17:00 (3316 vehicles)
PM Peak Hour Factor 92.0%

24-Hour Moving Total

01:00- 19780	02:00- 19644	03:00- 19569	04:00- 19586	05:00- 20079	06:00- 23046	07:00- 28238	08:00- 32243
09:00- 34218	10:00- 34847	11:00- 35081	12:00- 35168	13:00- 35105	14:00- 35161	15:00- 35745	16:00- 36925
17:00- 38957	18:00- 40224	19:00- 40710	20:00- 40838	21:00- 40910	22:00- 40931	23:00- 40975	24:00- 41018

Tuesday 04/06/93 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
98	60	57	117	682	3288	5572	4838	3125	1978	1981	1907	2099	1860	2071	2601	3348	2669	1557	1072	774	549	411	233	42947
34	24	12	18	65	508	1269	1358	970	529	445	504	472	549	444	549	779	762	512	303	196	152	109	70	
24	16	9	18	122	700	1485	1268	838	488	505	501	526	414	526	658	881	713	423	262	175	160	123	70	
20	11	16	28	197	939	1446	1108	714	483	506	453	552	443	552	652	834	602	341	263	207	131	100	53	
20	9	20	53	298	1141	1372	1104	603	478	525	449	549	454	549	742	854	592	281	244	196	106	79	40	

AM Peak Hour ..... 06:15 to 07:15 (5661 vehicles)
AM Peak Hour Factor 95.3%
PM Peak Hour ..... 16:00 to 17:00 (3348 vehicles)
PM Peak Hour Factor 95.0%

24-Hour Moving Total

01:00- 41023	02:00- 41029	03:00- 41026	04:00- 41031	05:00- 41103	06:00- 41089	07:00- 41084	08:00- 41266
09:00- 41370	10:00- 41415	11:00- 41557	12:00- 41671	13:00- 42116	14:00- 42304	15:00- 42291	16:00- 42319
17:00- 42351	18:00- 42553	19:00- 42690	20:00- 42866	21:00- 42913	22:00- 42908	23:00- 42932	24:00- 42947

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Location ..... Dulles Toll Rd, East of Trap Rd, WB
Location Code ..... Dul WB
County ..... Fairfax County, VA
Recorder Set 04/01/93 12:38
Recording Start ... 04/01/93 13:00
Recording End 04/10/93 15:15
Sample Time ..... 15 Minutes
Operator Number ... 7
Machine Number 39
Channel 1
Divide By 1
Summation ..... No
Two-Way ..... No

Thursday 04/01/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
														1942	2113	3104	4566	5945	4472	2310	1516	1422	1122	626	29138
													439	488	658	956	1424	1418	661	421	381	342	167	
													487	507	784	1070	1518	1169	649	408	368	311	176	
													514	561	803	1227	1567	1029	534	346	357	243	150	
													502	557	859	1313	1436	856	466	341	316	226	133	

AM Peak Hour ..... Unavailable
AM Peak Hour Factor ..... Unavailable
PM Peak Hour ..... 17:00 to 18:00 (5945 vehicles)
PM Peak Hour Factor 94.8%

Friday 04/02/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
337	167	154	90	126	474	1449	2804	3118	2139	1564	1643	1881	2087	2376	3198	4577	5515	4112	2367	1449	1323	1019	849	44818
95	45	41	20	22	58	232	557	754	645	362	334	451	495	550	655	1041	1416	1219	722	408	311	286	225	
95	36	44	22	37	98	350	638	825	582	402	439	463	507	576	861	1112	1389	1105	609	384	342	250	238	
91	47	36	26	29	140	406	781	767	469	417	426	473	548	602	783	1148	1403	991	540	317	373	258	191	
56	39	33	22	38	178	461	828	772	443	383	444	494	537	648	899	1276	1307	797	496	340	297	225	195	

AM Peak Hour ..... 07:30 to 08:30 (3188 vehicles)
AM Peak Hour Factor 96.3%
PM Peak Hour ..... 17:00 to 18:00 (5515 vehicles)
PM Peak Hour Factor 97.4%

24-Hour Moving Total

01:00-	N/A	02:00-	N/A	03:00-	N/A	04:00-	N/A	05:00-	N/A	06:00-	N/A	07:00-	N/A	08:00-	N/A
09:00-	N/A	10:00-	N/A	11:00-	N/A	12:00-	N/A	13:00-	N/A	14:00-	45084	15:00-	45229	16:00-	45492
17:00-	45586	18:00-	45597	19:00-	45167	20:00-	44807	21:00-	44864	22:00-	44797	23:00-	44698	24:00-	44595

Saturday 04/03/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
523	351	238	171	93	172	370	635	815	975	1270	1395	1500	1597	1749	1796	1899	1892	1674	1374	962	980	942	805	24178
158	99	67	48	22	27	74	114	159	213	273	322	381	400	390	423	443	492	442	369	269	223	200	217	
128	102	74	49	25	30	80	121	203	228	280	357	379	384	444	445	484	484	411	358	242	278	231	202	
130	81	50	35	20	58	110	186	216	266	356	354	351	427	442	433	455	492	430	320	245	220	243	203	
107	69	47	39	26	57	106	214	237	268	361	362	389	386	473	495	517	424	391	327	206	259	268	183	

AM Peak Hour ..... 10:30 to 11:30 (1396 vehicles)
AM Peak Hour Factor 96.7%
PM Peak Hour ..... 16:45 to 17:45 (1985 vehicles)
PM Peak Hour Factor 96.0%

24-Hour Moving Total

01:00- 45004	02:00- 45188	03:00- 45272	04:00- 45353	05:00- 45320	06:00- 45018	07:00- 43939	08:00- 41770
09:00- 39467	10:00- 38303	11:00- 38009	12:00- 37761	13:00- 37380	14:00- 36890	15:00- 36263	16:00- 34861
17:00- 32183	18:00- 28560	19:00- 26122	20:00- 25129	21:00- 24642	22:00- 24299	23:00- 24222	24:00- 24178

Sunday 04/04/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
545	338	253	180	147	176	336	395	546	705	877	1191	1392	1470	1514	1641	1664	1506	1130	1007	888	731	433	247	19312
161	89	78	56	33	28	66	92	115	147	208	243	351	345	379	413	428	437	285	251	219	218	124	83	
152	79	56	48	38	48	85	109	139	165	217	309	335	377	331	406	425	390	295	247	219	184	115	72	
123	96	76	41	35	51	86	98	138	196	220	319	328	358	399	417	423	367	279	276	233	179	95	49	
109	74	43	35	41	49	99	96	154	197	232	320	378	390	405	405	388	312	271	233	217	150	99	43	

AM Peak Hour ..... 11:00 to 12:00 (1191 vehicles)
AM Peak Hour Factor 93.0%
PM Peak Hour ..... 15:45 to 16:45 (1681 vehicles)
PM Peak Hour Factor 98.2%

24-Hour Moving Total

01:00- 24200	02:00- 24187	03:00- 24202	04:00- 24211	05:00- 24265	06:00- 24269	07:00- 24235	08:00- 23995
09:00- 23726	10:00- 23456	11:00- 23063	12:00- 22859	13:00- 22751	14:00- 22624	15:00- 22389	16:00- 22234
17:00- 21999	18:00- 21613	19:00- 21069	20:00- 20702	21:00- 20628	22:00- 20379	23:00- 19870	24:00- 19312

Monday 04/05/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
160	107	79	86	411	1269	2387	2914	1846	1371	1381	1557	1774	1829	2671	4004	5309	3928	2011	1355	1225	860	551	282	39367
43	33	22	14	48	200	413	738	550	364	313	394	430	420	505	845	1193	1172	626	355	324	229	141	92	
45	31	22	24	93	297	532	766	474	362	319	369	396	439	644	832	1391	1048	549	338	298	246	136	81	
41	22	19	23	110	366	717	714	437	327	372	386	467	462	700	1116	1360	944	446	334	292	220	141	62	
31	21	16	25	160	406	725	696	385	318	377	408	481	508	822	1211	1365	764	390	328	311	165	133	47	

AM Peak Hour ..... 06:30 to 07:30 (2946 vehicles)
AM Peak Hour Factor 96.1%
PM Peak Hour ..... 16:00 to 17:00 (5309 vehicles)
PM Peak Hour Factor 95.4%

24-Hour Moving Total

01:00- 18927	02:00- 18696	03:00- 18522	04:00- 18428	05:00- 18692	06:00- 19785	07:00- 21836	08:00- 24355
09:00- 25655	10:00- 26321	11:00- 26825	12:00- 27191	13:00- 27573	14:00- 27932	15:00- 29089	16:00- 31452
17:00- 35097	18:00- 37519	19:00- 38400	20:00- 38748	21:00- 39085	22:00- 39214	23:00- 39332	24:00- 39367

Tuesday 04/06/93 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
140	94	61	93	410	1331	2517	3099	1891	1499	1393	1663	1828	1981	2736	4325	5525	3967	2157	1506	1365	1135	655	313	41684
43	32	20	18	48	209	485	803	560	360	302	373	442	468	575	920	1329	1216	673	397	388	342	204	98	
35	31	13	18	94	275	550	812	497	406	336	428	476	484	645	1052	1453	1038	544	398	331	298	179	64	
29	14	11	24	110	397	729	773	449	384	367	453	442	503	665	1130	1415	951	502	374	330	265	165	66	
33	17	17	33	158	450	753	711	385	349	388	409	468	526	851	1223	1328	762	438	337	316	230	107	85	

AM Peak Hour ..... 06:45 to 07:45 (3141 vehicles)
AM Peak Hour Factor 96.7%
PM Peak Hour ..... 16:00 to 17:00 (5525 vehicles)
PM Peak Hour Factor 95.1%

24-Hour Moving Total

01:00- 39347	02:00- 39334	03:00- 39316	04:00- 39323	05:00- 39322	06:00- 39384	07:00- 39514	08:00- 39699
09:00- 39744	10:00- 39872	11:00- 39884	12:00- 39990	13:00- 40044	14:00- 40196	15:00- 40261	16:00- 40582
17:00- 40798	18:00- 40837	19:00- 40983	20:00- 41134	21:00- 41274	22:00- 41549	23:00- 41653	24:00- 41684