

Transportation Management Plan for Planned Skyland Town Center

INTRODUCTION

This document presents a proposed Transportation Management Plan (TMP) for the Skyland Town Center Planned Unit Development. The development site is situated north of Alabama Avenue, and east of Good Hope Road and Naylor Road in Southeast Washington, D.C. The site is currently occupied by a shopping center, and would be redeveloped with a town center consisting of residential and neighborhood-serving retail uses and an anchor retail tenant.

The primary goal of the Skyland TMP is to reduce traffic congestion and related pollution problems in the local and regional areas of the site by influencing traveling choices and patterns towards the use of transportation modes other than single-occupant motor vehicles. The primary objective is to minimize the potential traffic and parking impacts of the proposed development on internal and external roadways, and within the adjacent residential communities. The TMP therefore applies to the peak hour and daily trips that would be generated by all users of the development, including employees, residents, visitors and retail patrons.

This TMP document is in keeping with the requirements of the District Department of Transportation (DDOT), and the City's transit oriented development policies and strategies described in *"Trans-Formation: Recreating Transit-Oriented Neighborhood Centers in Washington, DC"* September 2002. The TMP also follows the guidelines documented in the GSA/MWCOG/NCPC Transportation Management Program Handbook¹. The key components of the Skyland TMP are presented below.

POTENTIAL TMP MEASURES

As indicated above, the primary objective of the Skyland TMP would be to reduce the potential impacts of the proposed development by managing traffic and parking demand. Towards this end, the following potential measures have been identified for consideration by DDOT and the Skyland Development Team:

- **Transportation Services Coordinator**. This task will be the responsibility of the property management group. Responsibilities will include administering the TMP strategies, including the development and distribution of informational and promotional brochures regarding ridesharing and various transit services, and the administration of a ridesharing database and information matching system.

- **Transit Services.**

- **Continuation/Enhancement of Metrobus Services.** Existing Metrobus service on the site will improve with the re-routing of some existing routes and the placement of stops at convenient locations along the Main Street of the proposed development. Metrobus facilities along the adjacent external roadways would be enhanced to improve passenger access and safety. These improvements would be provided through the collaboration of the DDOT Mass Transit Administration, WMATA and the Skyland Development Team. The Town Center would also post information regarding alternative transportation choices on its website to include hotlinks to goDCgo.com and Commuter-Connections.com. Transit information will also be provided to new residents upon move-in and displayed in the lobbies of all buildings.
- **Transit Subsidy.** The property management group will request that retailers provide employees a Metrochek or SmartTrip Card with the value of \$20.00 to encourage the use of transit.

- **Shared Vehicles.** The management group will provide Zipcar parking spaces along the project's Main Street and within the garages.

- **Parking Management.** In accordance with City's requirements for the proposed rezoning of the site, the proposed development would need to provide a minimum of 1,286 parking spaces. The Applicant plans to provide approximately 1,867 spaces and a number of bicycle parking spaces in keeping the DDOT standard of five percent (5%) of the required auto parking.

In keeping with discussions held with DDOT and Office of Planning staff, the Applicant would develop the project in two phases. This would provide an opportunity to assess the parking usage in the first phase to determine if the number of proposed spaces should be reduced in the second phase.

- **Pedestrian and Bicycle Linkages.** Wide shared-pedestrian and bicycle paths with good pedestrian lighting and tree shade will be provided between all key locations and the Metrobus transit stops. This would include a paseo for pedestrian movements between Good Hope Road and the town center's Main Street. A pleasant walking experience between the transit facilities and the shops and residential units would be a substantial inducement for transit use as well as pedestrian and bicycle circulation between the various shops and parts of the site. Additionally, internal site streets will have a number of traffic calming features, including special pavers, sidewalk bump-outs, and street trees that will help to slow vehicle traffic and create a more pleasant walking and cycling environment. Finally, the bicycle parking required by DDOT (i.e., at least five

¹ "Implementing a Successful Transportation Management Program, 2008", General Services Administration (GSA), Metropolitan Washington Council of Governments (MWCOC), National Capital Planning Commission (NCPC).

percent of the required off-street automobile parking spaces) would be provided in convenient locations within the site.

- **Ride-matching/Ridesharing Program**. Employees and residents who wish to carpool would be provided a list of like-minded persons, and will also be referred to other carpool matching services sponsored by the Metropolitan Washington Council of Governments. Carpool parking spaces will be provided in close-in and convenient parking areas.

TMP MONITORING AND EVALUATION

The Skyland TMP will be monitored, evaluated, and restructured as necessary to determine its effectiveness. Specifically, this effort will determine the following:

- The extent to which the program has achieved its stated objectives (e.g., increases in the number of passengers per vehicle, transit riders to and from the site).
- The extent to which the accomplishment of the objectives can be attributed to the program (direct and indirect effects).
- Degree of consistency of program implementation to plan (relationship of planned activities to actual activities).
- The relationship of different strategies to the effectiveness of the program (productivity).

Methods of Evaluation

There are several different methods for collecting the data for evaluation purposes. Some of the most commonly used methods that would be considered include the following:

- Employee, resident and transit ridership surveys.
- Program participation documentation (e.g., registrations for preferential parking, zip car/flex car use, etc).
- Parking demand surveys.

Traffic Impact Study

Skyland Town Center Planned Unit Development

Southeast, Washington, D.C.

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EXECUTIVE SUMMARY

This report presents the results of a traffic impact analysis prepared in support of the Planned Unit Development (PUD) and Zoning Map Amendment application for the redevelopment of the Skyland Shopping Center site. The site is situated north of Alabama Avenue, and east of Good Hope Road and Naylor Road in Southeast Washington, D.C. The site is zoned commercial (C-3-A) and residential (R-5-B and R-1-B). The residentially-zoned sections of the site are currently undeveloped. The commercially-zoned area is improved primarily with shopping center uses and supporting surface parking. The site also serves as a terminus for four (4) bus routes operated by the Washington Metropolitan Area Transit Authority (WMATA). Vehicular access is provided via eleven (11) driveways off the adjacent roadways (Naylor Road, Good Hope Road and Alabama Avenue).

The Applicant plans to rezone the residentially-zoned sections to C-3-A, and develop a Town Center which includes residential and neighborhood-serving retail uses and an anchor retail store. The current development program would include approximately 448 apartment units, 20 townhouses and 315,520 SF retail space. Vehicular access to the site would continue from the adjacent roadways, but would be consolidated from 11 to 6 driveways, three of which would be signalized. The Applicant plans to maintain the provision of some transit services on the site, based primarily on discussions held with staff of WMATA and the DDOT Mass Transit Administration.

The proposed development would have several positive transportation characteristics, in terms of its potential impacts on the local area roadway network. A significant proportion of the trips that would be generated by the proposed development (10% - AM and 27% - PM) is already being generated by the existing shopping center and is part of the existing traffic volumes. The mixed-use nature of the development would provide a more favorable trip generation, since the trip rates for residential uses are lower relative to retail uses. In addition, there would be significant internal walking trips or synergy between the proposed residential and retail uses. These factors would all reduce the volume and impacts of the incremental trips generated by the proposed development.

The potential traffic impacts of the proposed development would be further reduced by existing and planned public transportation services. The site is served by seven Metrobus routes along the adjacent roadways, four of which stop and turn around on the site. These four routes would be re-routed on-and/or off-site to facilitate and serve the new development. Based on discussions held with Office of Planning staff, the project may possibly include a bus station/commuter store within the project to provide information on alternative travel modes including transit, sell tickets and SmarTrip cards, and provide other forms of assistance to the prospective users of the proposed development (residents, patrons and employees) and residents of the adjacent communities. The implementation of this station/store will be based on further discussions with the District and WMATA.



Several Metrorail Stations (Anacostia, Southern Avenue, Congress Heights and Naylor Road) on the WMATA Green Line System are located within an approximate two-mile radius of the site, with the nearest (Naylor Road) being approximately one mile to the south.

In accordance with DDOT requirements, the development team proposes the implementation of a Transportation Management Plan (TMP). The TMP would include the transit improvements noted above and other measures, to reduce peak hour vehicular trips generated by the new development. This Plan is included in Appendix E of this report.

The key findings and conclusions of this traffic impact study are as follows:

- 1) Under Existing Traffic Conditions, the study area intersections operate at acceptable levels of service during the weekday peak hours, except for the Good Hope Road at 25th Street/Naylor Road intersection during the AM peak hour and the Branch Avenue/Alabama Avenue intersection during both the AM and PM peak hours. The latter intersection operates at capacity primarily due to the heavy regional/through commuter traffic served by the roadways involved.
- 2) Under Future Background Traffic Conditions, including approved but not fully built land use developments and regional traffic growth, the study intersections would operate at acceptable levels of service during the peak hours, except for the Good Hope Road and 25th Street/Naylor Road intersection during the AM peak hour and the Branch Avenue/Alabama Avenue intersection during the AM and PM peak hours. The latter intersection would operate at capacity primarily due to the heavy regional/through commuter traffic served by these roadways. The Good Hope Road and 25th Street/Naylor Road intersection can be mitigated with the re-striping of the northbound/25th Street approach to provide a separate left-turn lane and a shared through/right-turn lane. The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints.
- 3) Under Total Future Traffic Conditions, including the proposed development, the study intersections would continue to operate at acceptable levels of service during peak hours, with the exception of the Good Hope Road and 25th Street/Naylor Road intersection during the AM peak hour and the Branch Avenue/Alabama Avenue intersection during both the AM and PM peak hours. The latter situation would be due primarily to the heavy regional/through commuter traffic served by these roadways. The bulk of this traffic originates in Maryland and is oriented toward the downtown area.



The impact at the Good Hope Road and 25th Street/Naylor Road intersection would be mitigated with the improvements identified under background conditions (Item 2 above), as well as the provision of an additional left-turn lane along the southbound/Naylor Road approach.

The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints. The proposed project would not adversely impact intersection levels of service or significantly increase average delay beyond what would occur in the future without the development.

The Naylor Road at “Main Street” intersection would operate at unacceptable levels of service during the afternoon peak hour. This result would be due to heavy volumes along Naylor Road and the intersection’s proximity to the Good Hope Road/25th Street intersection. An abbreviated signal warrant analysis indicates that a traffic signal would be advantageous, and if coordinated with the Good Hope Road/25th Street signal, would serve to improve the operational efficiency of both intersections and the connecting roadway link. Geometric improvements have also been identified, and these are presented below.

The existing site generates significant pedestrian crossings along the adjacent roadways. The crossings include residential trips, trips from bus stops along the south side of Good Hope Road, and multi-purpose trips from other retail uses such as the Good Hope Market Place. It is anticipated that pedestrian crossing activity would increase upon build-out of the proposed land uses. Improved crosswalks and signage should therefore be provided to enhance pedestrian safety along the adjacent roadways.

- 4) In accordance with City’s requirements for the proposed rezoning of the site, the proposed development would need to provide a minimum of 1,286 parking spaces. The current development program includes approximately 1,867 spaces and a number of bicycle parking spaces in keeping the DDOT standard of five percent (5%) of the required auto parking. Therefore, the proposed parking would satisfy the zoning requirements and would prevent spill over from the site to the adjacent residential and commercial properties, and neighborhood streets.
- 5) In keeping with discussions held with DDOT and Office of Planning staff, the Applicant will develop the project in two phases. This would provide an opportunity to assess the parking usage in the first phase to determine if the number of proposed spaces should be reduced in the second phase.

- 6) The proposed development would also satisfy the off-street loading requirements of the City's Municipal Regulations. Adequate turning radii and other physical features would be provided to facilitate efficient truck access and circulation and eliminate potential adverse impacts to other users within the site and along the adjacent streets.

Based on above, this study concludes that the proposed Skyland Town Center could be approved as planned, with the implementation of identified roadway improvements and a Transportation Management Plan (included as Appendix E). The recommended roadway improvements are as follows:

Recommended Improvements

- ***Naylor Road at Garage Ramp Entrance***
 - Provide signage to prohibit left-turn outbound movements from the ramp.
- ***Naylor Road at Main Street Entrance***
 - Install a traffic signal and coordinate its operations with the signal at the Good Hope Road/25th Street intersection.
 - Provide two 10 ft-wide outbound lanes (a shared right-turn/left-turn lane and an exclusive left-turn lane) along the Main Street approach.
 - Provide pavement re-striping to delineate two travel lanes along Naylor Road southbound along the site frontage. Provide signage permitting traffic flow along both lanes during the period 3:00 – 7:00 PM on weekdays, and the use of the inner lane only during other weekday periods and weekends. This would allow the inner lane to serve as a de facto left-turn lane. [An alternative recommendation is the all-time use of the lanes for traffic movements by eliminating the existing curb-side parking (on the west side) which is prohibited during the period 4:00 – 6:30 PM.]
- ***Naylor Road/Good Hope Road at 25th Street***
 - Provide pavement markings to delineate a separate left-turn lane and a shared through/right-turn lane along the northbound (25th Street) approach.
 - Widen the southbound approach (Naylor Road) to provide double left-turn lanes and a shared through/right-turn lane.
 - Provide signalization, pavement marking and other improvements to accommodate the above-noted lane configuration improvements.
- ***Good Hope Road to Naylor Road Connector***
 - Provide a continuous right-turn lane and a through lane along this roadway.



- ***Alabama Avenue at Main Street Entrance***

- Provide signalization and pavement marking improvements to accommodate Main Street as the fifth leg to Alabama Avenue/Good Hope Road intersection.

- ***Alabama Avenue at Eastern Entrance***

- Install a traffic signal and coordinate its operations with adjacent signals.

- ***Other***

- Provide high visibility crosswalks and other pedestrian and transit amenities to encourage and facilitate safe and convenient use of the public roadway realm by alternative travel modes (walking, biking and transit).

These improvements are illustrated in Appendix F. With these mitigation measures in place, the proposed development would not have any appreciable objectionable impacts on the surrounding roadway network and adjacent communities, from the perspectives of traffic and parking.



INTRODUCTION

This report presents the results of a traffic impact analysis prepared in support of a Planned Unit Development (PUD) application for the redevelopment of the Skyland Shopping Center site. This site is located in Ward 7, in the Anacostia area of Southeast, Washington, D.C., as shown in Figure 1. The site is zoned for commercial (C-3-A) and residential (R-5-B and R-1-B) uses; and is currently improved primarily with shopping center uses. The site also serves as a terminus for four (4) bus routes operated by the Washington Metropolitan Area Transit Authority (WMATA). There are eleven (11) entrances to the site, and several are poorly defined and integrated with on-site parking. This situation creates unsafe and inefficient access/circulation operations (with significant multi-modal conflicts) along the adjacent roadways and within the center.

The Applicant plans to rezone the entire site to C-3-A, and develop a Town Center which includes residential and neighborhood-serving retail uses and an anchor retail tenant. The current development program proposes approximately 448 apartment units, 20 townhouses and 315,520 SF retail space. Vehicular access to the site would continue from the adjacent roadways, but would be consolidated from 11 to 6 driveways, three of which would be signalized. The Applicant plans to maintain the provision of some transit services on the site. This is based primarily on discussions held with staff of WMATA and the DDOT Mass Transit Administration, and the results of a preliminary bus re-routing feasibility study undertaken by Grove Slade Associates.

The primary purpose of this study is to evaluate the local traffic impacts of the proposed redevelopment, focusing on key intersections near the development, and to identify transportation improvements needed to mitigate any potential impacts. Grove/Slade Associates undertook the following key tasks while preparing this study:

- Conducted field reconnaissance of existing study area roadway and intersection geometrics, traffic controls, speed limits and operations;
- Held discussions and corresponded with District Department of Transportation (DDOT) staff regarding the study scope and methodology;
- Performed morning and afternoon peak period turning movement counts at the study intersections;
- Determined the existing levels of service at the study intersections.
- Developed background traffic forecasts for project build-out in 2011 based on existing counts, traffic generated by other pending/future developments, and traffic pattern changes as a result of roadway improvements (where applicable);

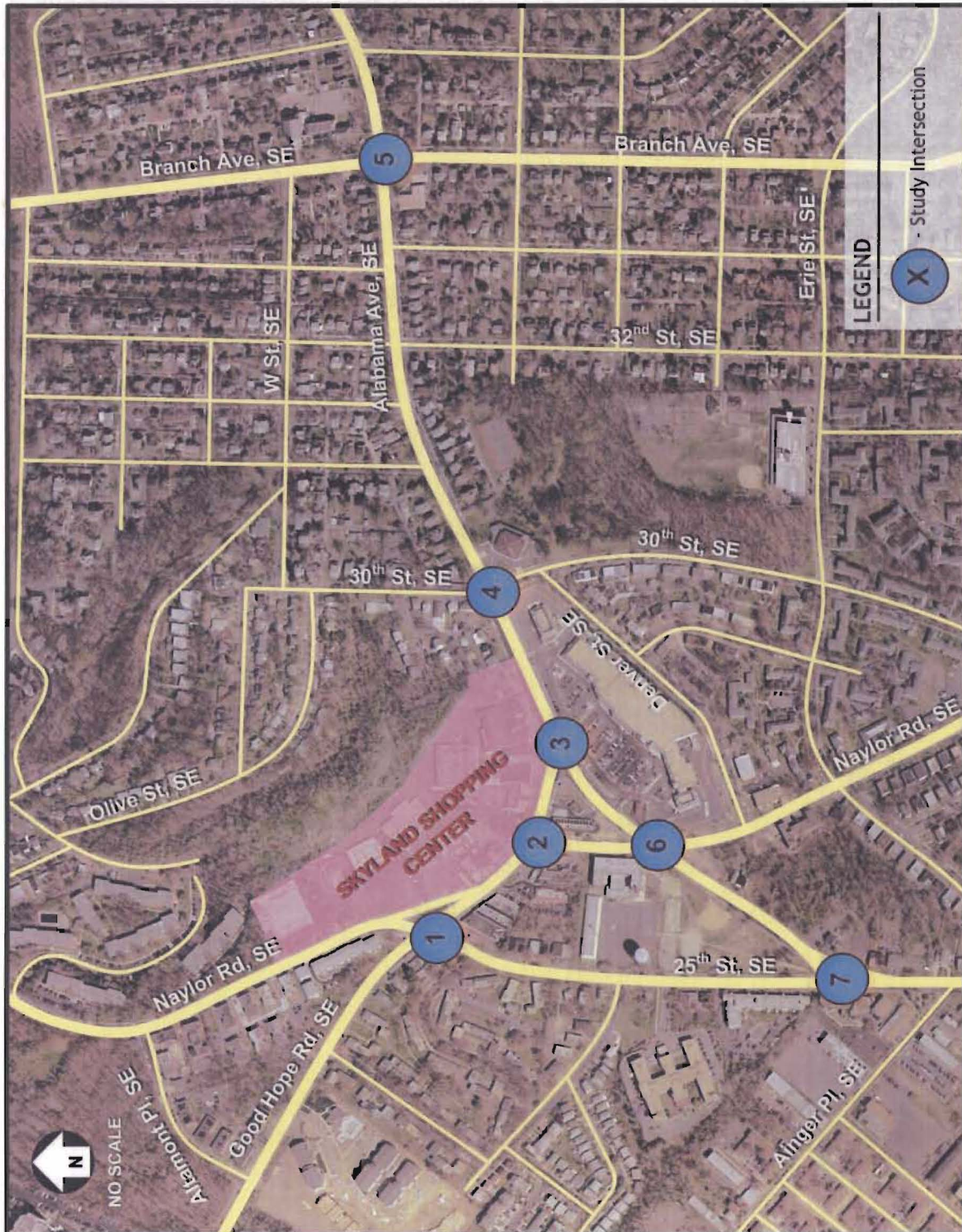


Figure 1 – Site Location Map



- Determined background levels of service for the study intersections based on background traffic forecasts and existing traffic controls;
- Estimated the AM and PM peak hour and daily trips that would be generated by the proposed development, including mode split assumptions;
- Projected the total future traffic volumes for project build-out in 2011 based on background future traffic forecasts and site traffic assignments; and
- Calculated total future (2012) levels of service at the study intersections based on total future traffic forecasts, existing and future traffic controls, and existing and future intersection geometrics.

Sources of information for this study include traffic counts conducted by Gorove/Slade, ITE's *Trip Generation*, 7th Edition, conceptual site plans prepared by Torti Gallas and Partners along with Michael Marshall Architecture, the District Department of Transportation (DDOT), Census 2000 journey-to-work data and the files/library of Gorove/Slade.

Project Scope

This traffic impact study was conducted in general accordance with parameters agreed to in a scoping letter to DDOT staff dated Tuesday, December 19, 2006, and subsequent email correspondence. A copy of these documents is included as Appendix A.

The following intersections (shown in Figure 1) are included in this study:

- 1) Good Hope Road/Naylor Road/25th Street, SE;
- 2) Good Hope Road/Naylor Road, SE;
- 3) Alabama Avenue/Good Hope Road, SE;
- 4) Alabama Avenue/30th Street, SE;
- 5) Branch Avenue/Alabama Avenue, SE;
- 6) Alabama Avenue/Naylor Road, SE; and
- 7) Alabama Avenue/25th Street, SE.

For purposes of this study, it was assumed that the proposed development would be completed and occupied by the year 2012.



EXISTING CONDITIONS

Site Access and Existing Road Network

Regional site access is provided primarily by the I-295/I-395 freeway system, Suitland Parkway, Branch Avenue and Pennsylvania Avenue. Local access is provided primarily by Good Hope Road, Naylor Road, Alabama Avenue and 25th Street.

The physical and service characteristics of the key roadways providing immediate site access are as follows:

- *Good Hope Road*

Good Hope Road is a two- to four-lane bi-directional roadway that runs east/west through the study area. This roadway is classified as a minor arterial on the City Roadway Functional Classification System and serves an Average Daily Traffic (ADT) volume of approximately 11,500 vehicles just west of the site.

- *Naylor Road*

Naylor Road is a two-lane, bi-directional roadway that runs generally north/south through the study area. This roadway is classified as a minor arterial and serves an ADT consisting of approximately 14,800 vehicles just west of the site.

- *Alabama Avenue*

Alabama Avenue is a two- to four-lane bi-directional roadway that runs generally east-west through the study area. This roadway is classified as a minor arterial and serves an ADT consisting of approximately 11,800 vehicles just east of the site.

- *25th Street and*

25th Street is a bi-directional two-lane roadway that runs north-south through the study area. This roadway is classified as a minor arterial and serves an ADT consisting of approximately 8,600 vehicles.

- *30th Street*

30th Street is a local bi-directional two-lane roadway that runs north/south through the study area.

- *Branch Avenue*

Branch Avenue is a four-lane bi-directional roadway that runs north-south through the study area. This roadway is classified as a principal arterial and carries an ADT consisting of approximately 20,100 vehicles south of Alabama Avenue.

Gorove/Slade conducted field reconnaissance to obtain the existing lane usage and traffic controls at the intersections within the study area. Figure 2 presents the roadway lane configurations and traffic control devices provided at the intersections.

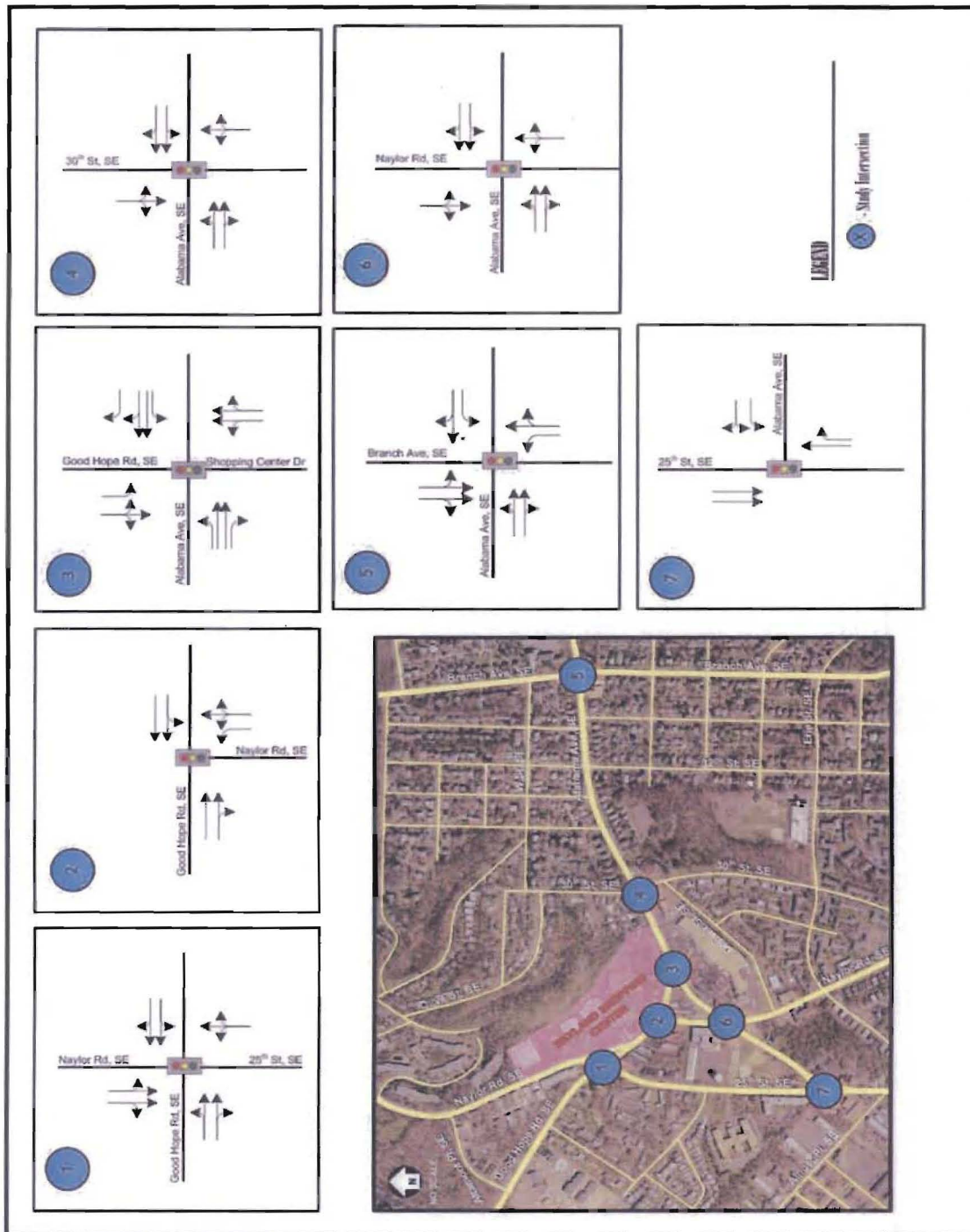


Figure 2 – Existing Lane Configuration and Traffic Control

Existing Transit

The subject site is served by the Green Line of the WMATA Metrorail System. The nearest stop is at the Naylor Road Station which is situated approximately a mile to the south, just inside Prince George's County. The site is also served by seven (7) WMATA Metrobus routes, with connections to adjacent Metrorail stations. Four (4) of those Metrobus routes include two stop locations within the site. These transit facilities and services are illustrated in Figure 3.

Existing Volumes

Traffic counts were conducted at the key study intersections between the hours of 6:00 to 9:00 AM and 4:00 to 7:00 PM on typical weekdays. The results of the traffic counts are included in Appendix B and summarized on Figure 4. The morning and afternoon peak hours for the system of intersections being studied occur between 7:45 - 8:45 AM and 5:00 - 6:00 PM, respectively. The counts were used to determine the general traffic distribution patterns on the study area roadway network. These patterns are illustrated on Figure 8.

Existing Capacity Analysis

Capacity analyses were performed to determine the existing Level of Service (LOS) for the AM and PM peak hours for the study intersections. A LOS grade is a letter grade based on the average delay (in seconds) experienced by motorists traveling through an intersection. LOS results range from "A" being the best to "F" being the worst. LOS D is typically used as the acceptable LOS threshold in the District; although LOS E and F are sometimes accepted in certain highly urbanized areas. The *Highway Capacity Manual 2000* (HCM) methodology was used for all analyses. Detailed LOS descriptions for signalized intersections are provided in Appendix C.

The existing LOS capacity analyses were based on: (1) the existing lane use and traffic controls shown on Figure 2; (2) the peak hour turning movement volumes shown on Figure 4; and (3) the *Highway Capacity Manual 2000* (HCM) methodologies (using Synchro 6 software). Copies of the LOS calculation worksheets are included in Appendix D. Table 1 shows the results of the capacity analyses, including LOS and average delay per vehicle (in seconds). Figure 5 graphically shows LOS per overall intersection and approach.

The capacity analyses show that all study area intersections operate at acceptable levels-of-service, with the exception of the intersection of Good Hope Road and Naylor Road/25th Street during the AM peak hour, and the Branch Avenue/Alabama Avenue intersection during the AM and PM peak hours. The unacceptable levels of service are due primarily to heavy through/commuter volumes oriented toward the downtown area, and not to traffic generators within the study area. This is confirmed by field observations which also show that the bulk of the through movements originate in Maryland.

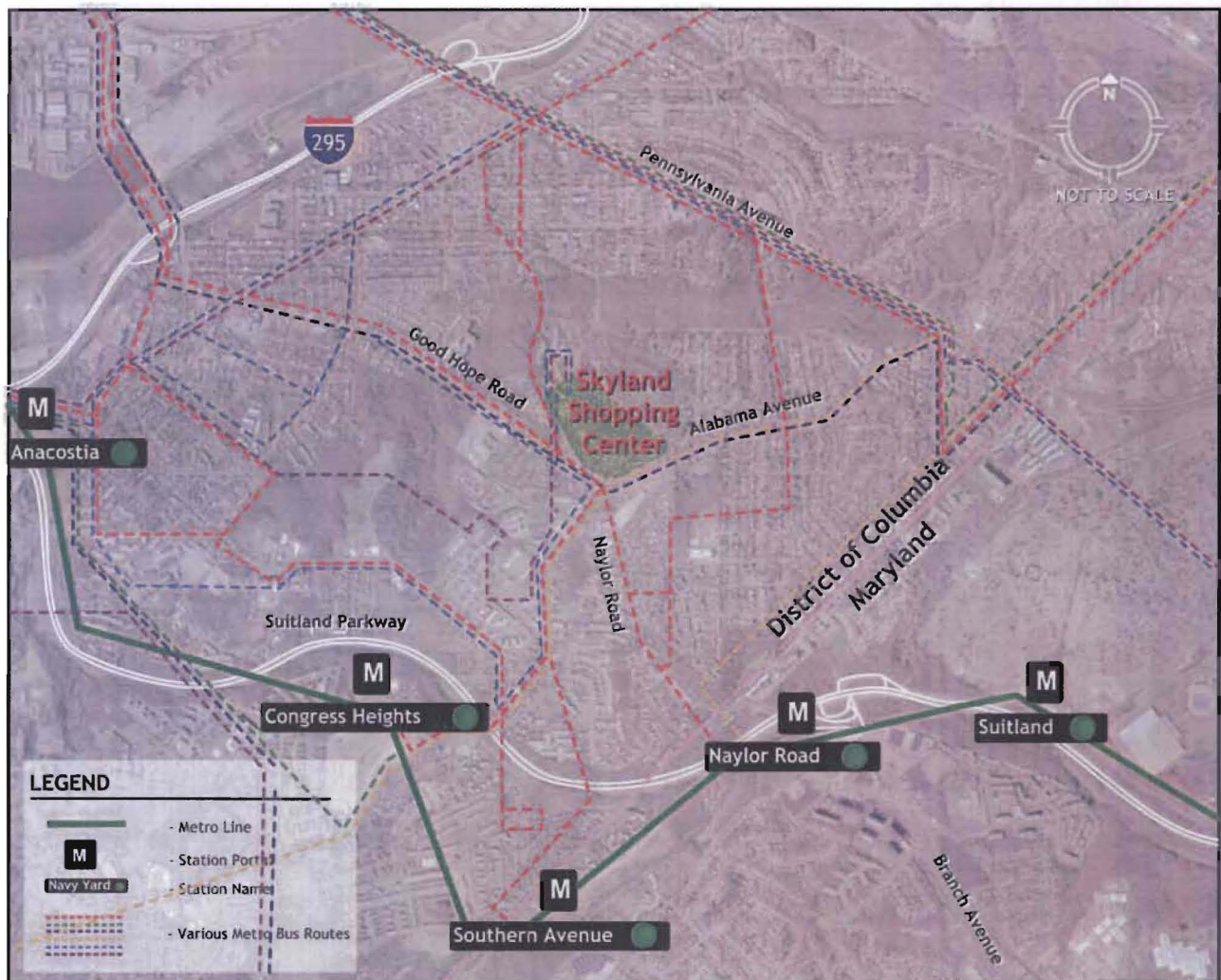


Figure 3 – Public Transportation

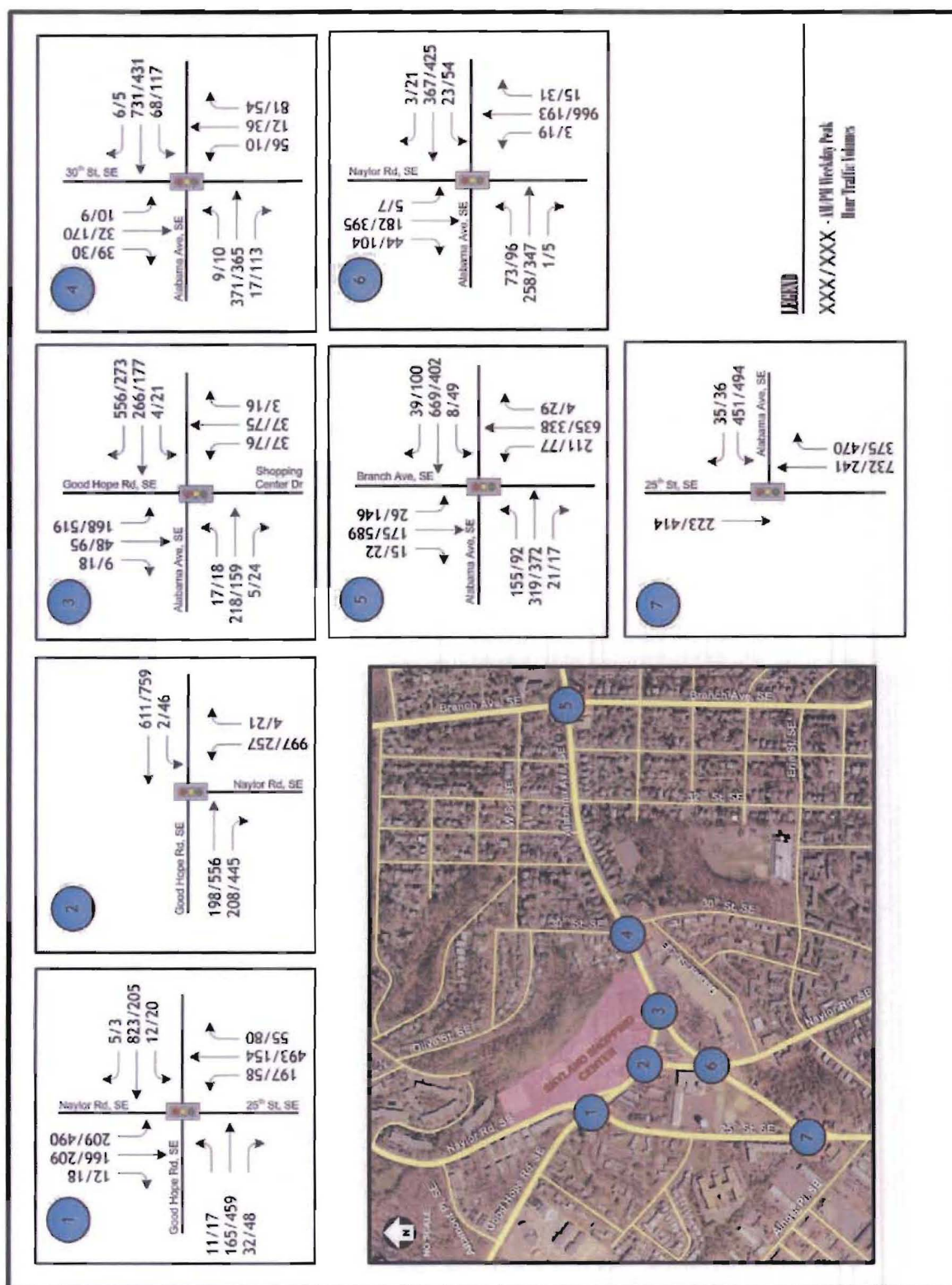


Figure 4 – Existing Peak Hour Traffic Volumes

**Table 1 – Existing Levels of Service**

Intersection (Approach)	Existing Conditions	
	AM Peak Hour	PM Peak Hour
	Level of Service	Level of Service
Good Hope Road & Naylor Road/25th Street SE		
Overall	E (60.2)	C (22.8)
Eastbound	C (23.1)	C (27.1)
Westbound	C (34.1)	C (23.4)
Northbound	F (123.3)	C (27.7)
Southbound	B (15.0)	C (17.5)
Alabama Avenue & Naylor Road SE		
Overall	D (39.1)	C (24.2)
Eastbound	C (25.9)	C (29.1)
Westbound	D (33.2)	D (32.6)
Northbound	D (51.9)	B (12.2)
Southbound	B (13.7)	B (18.7)
Alabama Avenue & 30th Street SE		
Overall	B (12.8)	B (14.1)
Eastbound	B (13.1)	A (5.3)
Westbound	A (5.2)	A (6.1)
Northbound	D (41.9)	D (35.5)
Southbound	D (36.1)	D (45.2)
25th Street & Alabama Avenue SE		
Overall	C (34.4)	B (17.3)
Eastbound	..	..
Westbound	B (18.5)	B (19.5)
Northbound	D (49.6)	B (16.6)
Southbound	B (16.1)	B (14.8)
Good Hope Road/Naylor Road SE		
Overall	B (19.2)	B (11.6)
Eastbound	C (23.4)	A (6.7)
Westbound	C (31.9)	A (6.3)
Northbound	A (9.7)	C (32.7)
Southbound	A (9.9)	D (45.5)
Good Hope Road/Skyland Entrance & Alabama Avenue SE		
Overall	C (30.6)	C (21.3)
Eastbound	B (19.8)	C (20.9)
Westbound	C (22.4)	C (25.0)
Northbound	C (20.9)	B (15.1)
Southbound	D (37.2)	C (34.6)
Branch Avenue/Alabama Avenue SE		
Overall	F (111.5)	F (221.1)
Eastbound	E (61.0)	F (81.5)
Westbound	D (48.6)	F (96.6)
Northbound	F (209.5)	C (29.1)
Southbound	D (50.0)	F (510.4)



Figure 5 – Existing Levels of Service



FUTURE BACKGROUND CONDITIONS

Future background conditions represent the projected future traffic levels without the proposed development. These conditions are a basis for comparison with the total future conditions, which include the proposed development.

For the purposes of this study, it was assumed that the proposed development would be completed by 2012. A composite of existing traffic, regional growth and traffic from other planned area developments was used to develop the background traffic forecasts.

Regional Traffic Growth

Previous studies have shown that regional traffic growth within the study area has been relatively stable over the past five years. To maintain conservatism as well as consistency with rates used in studies conducted in the area, a 1% growth was applied to the through movements of all study intersections.

Future Background Developments

Several background developments are planned for the immediate area of the site. These developments and their projected peak hour trip productions are shown in the Table 2. These trips were distributed on the study area network based on existing travel patterns and on our knowledge of the area.

Table 2 – Background Developments Trip Generation

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Homes at Woodmont (Phase II)	210	18 Units	6	16	22	15	8	23
Henson Ridge Community (Phases III & IV)	220	324 Units	32	130	162	127	69	196
Total			38	146	184	142	77	219

Future Transportation Improvements

DC Transit Future

The current DC Transit Future Plan (2006) identifies seven corridors for the implementation of various mass transportation services. One of these is the “American University to Skyland Corridor” which is described below:

American University to Skyland SE. Beginning at Ward Circle, this transit route would go southeast down Massachusetts Avenue NW, turn east on Garfield Street NW, south on 29th Street NW, and east on Calvert Street NW across Rock Creek Park. At Adams Morgan, the alignment would turn south down 18th Street NW, east on U Street NW, southeast onto Florida Avenue NW/NE, and south onto 8th



Street NE/SE. Finally, the route would turn east on M Street SE, cross the 11th Street Bridge, and turn east on Good Hope Road, terminating at Skyland Place SE.

Future Background Traffic Forecast

Background traffic forecasts were developed based on a composite of existing traffic counts shown in Figure 4 and traffic growth discussed earlier. Figure 6 shows the future background traffic volumes.

Future Background Analyses

Background peak hour levels of service (without the subject PUD) were calculated based on: (1) existing lane use and traffic controls shown on Figure 2; (2) the background traffic volumes shown on Figure 6 and; (3) the *Highway Capacity Manual 2000* (HCM) methodologies (using Synchro 6 software). Copies of LOS calculation worksheets are included in Appendix D. Table 3 displays the results of the capacity analyses, including LOS and average delay per vehicle (in seconds). Figure 7 graphically shows the overall LOS results.

The background capacity analyses show that all study area intersections would continue to operate with acceptable conditions, except for the Good Hope Road at 25th Street/Naylor Road intersection during the PM peak hour and the Branch Avenue/Alabama Avenue intersection during the AM and PM peak periods. The latter intersections would operate unacceptably due to the heavy regional/through commuter traffic. The Good Hope Road and 25th Street/Naylor Road intersection can be mitigated with the re-striping of the northbound/25th Street approach to provide a separate left-turn lane and a shared through/right-turn lane. The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints.

**Table 3 – Background Levels of Service**

Intersection (Approach)	Background Conditions		Background Conditions with Improvements	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
	Level of Service	Level of Service	Level of Service	Level of Service
Good Hope Road/Naylor Road/25th Street				
Overall	F (110.3)	C (30.7)	D (42.8)	C (20.2)
Eastbound	C (28.4)	C (23.9)	C (28.4)	C (23.9)
Westbound	D (48.2)	B (18.6)	C (24.0)	B (13.2)
Northbound	F (288.1)	F (87.0)	D (50.4)	C (30.9)
Southbound	C (27.6)	C (21.1)	D (48.2)	B (18.6)
Alabama Avenue/Naylor Road				
Overall	D (39.8)	C (23.5)	D (39.8)	C (23.5)
Eastbound	E (70.2)	C (33.0)	E (70.2)	C (33.0)
Westbound	C (29.7)	C (22.2)	C (29.7)	C (22.2)
Northbound	D (36.0)	B (11.2)	D (36.0)	B (11.2)
Southbound	A (8.5)	C (21.4)	A (8.5)	C (21.4)
Alabama Avenue/30th Street				
Overall	C (21.1)	B (13.8)	C (21.1)	B (13.8)
Eastbound	A (9.7)	A (5.4)	A (9.7)	A (5.4)
Westbound	C (22.2)	A (6.4)	C (22.2)	A (6.4)
Northbound	D (42.0)	D (35.6)	D (42.0)	D (35.6)
Southbound	D (36.2)	D (45.7)	D (36.2)	D (45.7)
25th Street SE/Alabama Avenue				
Overall	C (30.6)	B (19.5)	C (30.6)	B (19.5)
Eastbound	..	..	..	..
Westbound	B (19.1)	C (22.1)	B (19.1)	C (22.1)
Northbound	D (43.8)	B (18.0)	D (43.8)	B (18.0)
Southbound	B (15.3)	B (17.0)	B (15.3)	B (17.0)
Good Hope Road SE & Naylor Road SE				
Overall	C (22.8)	B(13.7)	C (22.8)	B(13.7)
Eastbound	C (23.9)	A (7.4)	C (23.9)	A (7.4)
Westbound	C (31.0)	A (7.3)	C (31.0)	A (7.3)
Northbound	B (17.4)	D (42.4)	B (17.4)	D (42.4)
Southbound	A (9.9)	D (50.2)	A (9.9)	D (50.2)
Good Hope Road SE/Skyland Entrance & Alabama Avenue SE				
Overall	D (39.3)	C (24.7)	D (39.3)	C (24.7)
Eastbound	B (19.8)	C (33.3)	B (19.8)	C (33.3)
Westbound	C (22.4)	C (29.6)	C (22.4)	C (29.6)
Northbound	C (22.1)	B (15.1)	C (22.1)	B (15.1)
Southbound	D (52.3)	C (34.6)	D (52.3)	C (34.6)
Branch Avenue/Alabama Avenue				
Overall	F (120.2)	F (155.9)	F (120.2)	F (155.9)
Eastbound	D (54.5)	D (54.9)	D (54.5)	D (54.9)
Westbound	F (161.0)	F (305.9)	F (161.0)	F (305.9)
Northbound	F (142.8)	C (22.0)	F (142.8)	C (22.0)
Southbound	D (45.6)	F (189.5)	D (45.6)	F (189.5)

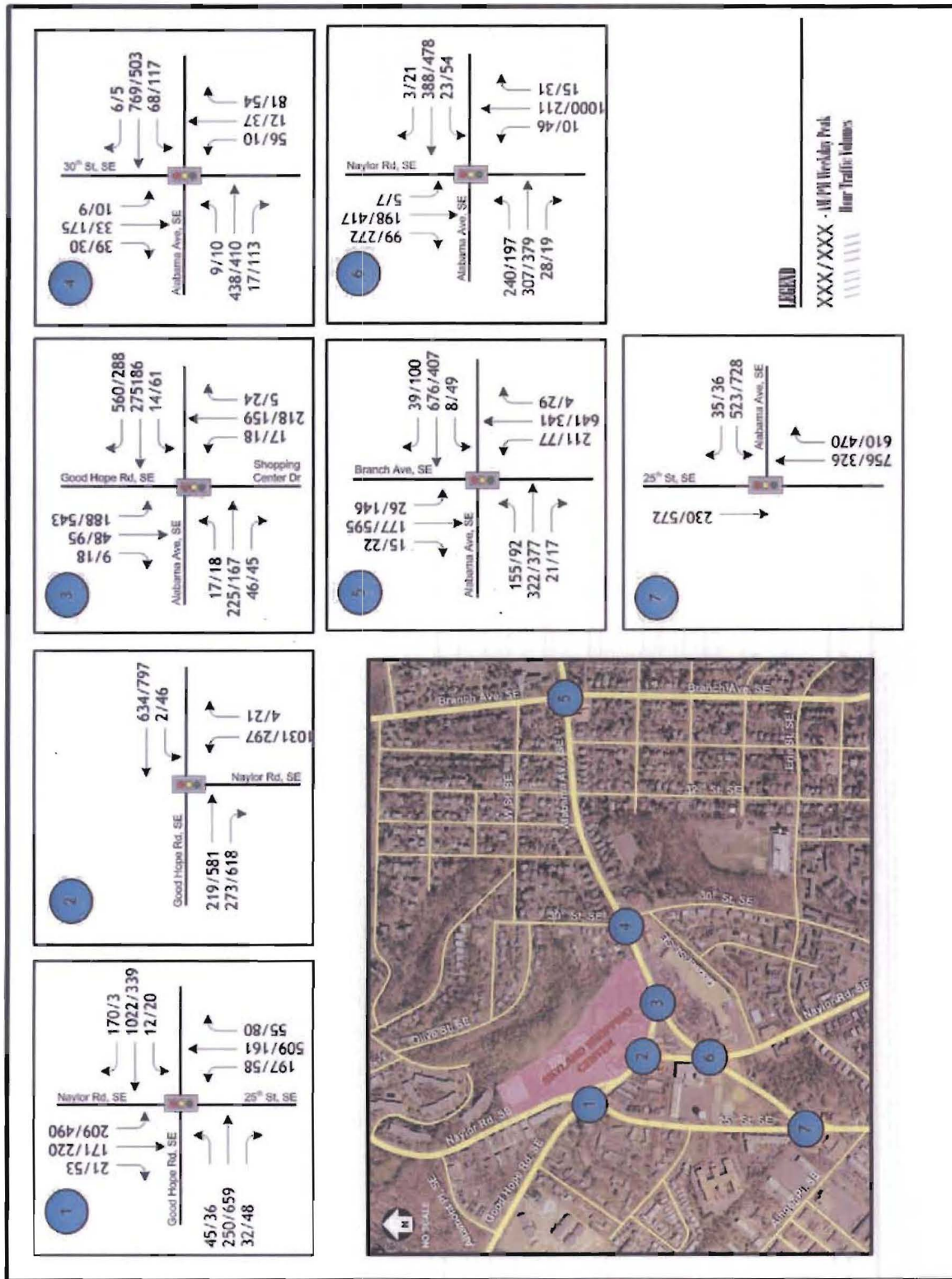


Figure 6 – Background Traffic Forecasts



Figure 7 – Background Levels of Service



TOTAL FUTURE TRAFFIC CONDITIONS

Total future traffic conditions represent future traffic in the study area including existing traffic, background growth factors, and traffic generated by the proposed development.

Parking

Table 4 shows the off-street parking required by the City's Municipal Regulations and the proposed parking supply. The proposed development would need to provide a minimum of 1,286 off-street parking spaces. The Applicant plans to provide approximately 1,867 spaces and a number of bicycle parking spaces in keeping the DDOT standard of five percent (5%) of the required auto parking. It is therefore anticipated that the proposed parking would satisfy the zoning requirements and would prevent spill over from the site to the adjacent residential and commercial properties, and neighborhood streets.

In keeping with discussions held with DDOT and Office of Planning staff, the Applicant would develop the project in two phases. This would provide an opportunity to assess the parking usage in the first phase to determine if the number of proposed spaces should be reduced in the second phase.

Table 4 – Parking Requirements and Provisions

Land Use	Required Parking Per C-3-A Zoning		Proposed Parking
	Ratio	Required	
· Retail (315,520 GSF)	1 per 300 SF in excess of 3,000 SF	1,042	1,246
· Townhouses (20 Units)	1 per Unit	20	36
· Apartments (448 Units)	1 per 2 Units	224	585
Total		1,286	1,867

Loading Berths and Truck Movements

The required and proposed loading requirements are compared in Table 5. The proposed loading facilities would be adequate to satisfy the loading needs of the project. The project would be designed to prevent front loading by providing rear service access for all retailers. The Applicant would also collaborate with DDOT in the provision of signs prohibiting loading operations along the adjacent streets. Adequate turning radii and maneuvering space would be provided to ensure that delivery trucks enter the site, maneuver into loading areas and exit the site efficiently without adverse impacts on automobile and pedestrian traffic movements on the site and along the adjacent public streets.

Table 5 – Loading Requirements and Provisions

Loading Facility	No. Required	No. Provided
· 20 ft deep berth	7	4
· 30 ft deep berth with 100 SF Platform	4	4
· 55 ft deep berth with 200 SF Platform	8	8

Projected Site Trip Generation

The number of anticipated vehicle trips generated by the proposed development was estimated based on data provided in the ITE's Trip Generation, 7th Edition. The ITE trip generation rates were derived from surveys conducted at single-use developments where virtually all access was by private automobile (Source- *ITE Trip Generation, 2nd Edition, Appendix B*). The trip generation rates do not account for the potential effects of Transit Demand Management (TDM) programs, transit availability, pass-by trips, and interaction between various on-site uses (synergy), particularly when these uses are within walking distance of each other.

Passer-by Trips. According to ITE's *Trip Generation Handbook, 2nd Edition*, retail-oriented developments such as shopping centers are often located adjacent to busy streets in order to attract the motorists already on the street. These sites attract a portion of their trips from existing traffic passing the site on the way from an origin to an ultimate destination. The attracted/passer-by trips would therefore not constitute new trips generated by the proposed development. Based on information provided in ITE's *Trip Generation Handbook, 2nd Edition*, a 25% reduction in weekday retail trips was therefore considered as shown in Table 6.

Synergy Reductions. According to ITE, some trips between various land uses in multi-use developments are made internally by walking or driving on interior roadways and do not affect the major street system. This relates to the proposed development as residents may be employees or patrons of the retail uses. For these reasons, the total trips generated by the site would be reduced, and this is also considered in Table 6.

Alternate Mode Reduction. According to the WMATA 2005 *Development-Related Ridership Survey II*, the mode choice for trips is significantly influenced by the location of the site within Metropolitan Washington and the proximity to the Metrorail station. This study was prepared to model the travel patterns of persons traveling to and from office buildings, residential developments and commercial entities close to Metrorail stations, "and to establish relationships among travel characteristics, distance, and the nature of development at each site." Using the models provided in the study and given the distance of the site from the Naylor Road Metrorail, a 30% reduction was applied to the residential and commercial trips.

Based on the above considerations, the proposed development would generate a total of 384 AM peak hour trips and 783 PM trips as shown in Table 6. Table 6 also shows the incremental trips (317-AM, 569-PM) that would be generated by the proposed development, compared with the trips currently accessing the existing uses on the site. The total and incremental trips would be further reduced with the planned implementation of a Transportation Management Plan which is included as Appendix E.

Table 6 – Projected Site Trip Generation

Skyland Component	ITE Code	Amount	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<u>Residential</u>								
Apartment	220	448 Units	45	178	223	172	92	264
Retail Synergy			-	-	-	-46	-42	-88
Residential Subtotal			45	178	223	126	50	176
Alternate Mode red. (30%)			-14	-53	-67	-38	-15	-53
Residential Total			32	125	156	88	35	123
<u>Residential</u>								
Townhouse	230	20 Units	2	12	14	11	5	16
Retail Synergy			-	-	-	-3	-3	-6
Residential Subtotal			2	12	14	8	2	10
Alternate Mode red. (30%)			-1	-4	-4	-2	-1	-3
Residential Total			1	8	10	6	1	7
<u>Retail</u>								
Retail	820	315,520 SF	190	122	312	641	695	1,336
Residential Synergy			-	-	-	-45	-49	-94
Retail Subtotal			190	122	312	596	646	1,242
Alternate Mode red. (30%)			-57	-37	-94	-179	-194	-373
Retail Subtotal			133	85	218	417	452	869
Retail Pass-by Trips (25%)			-	-	-	-104	-113	-217
Retail Total			133	85	218	313	339	652
Total Future Site Trips (with reductions)			166	218	384	407	376	783
Existing Site Trips			39	28	67	125	89	214
Net New Site Trips			127	190	317	282	287	569

Projected Site Trip Distribution

The site-generated traffic volumes reflected in Table 6 were assigned to the public road network based on existing travel patterns identified during data collection, our familiarity with traffic conditions within the general area, as well as the site layout and access. With respect to the site layout, it is noted that the proposed development would be provided with the following automobile access points:

- An unsignalized bifurcated entrance off Naylor Road (adjacent to the north property line), which would provide access to the loading area and parking for the retail anchor store;
- A signalized entrance off Naylor Road at the “Main Street” for the proposed development ;
- An unsignalized right-in/right-out entrance off the Good Hope Road to Naylor Road spur;
- An entrance off Alabama Avenue to the “Main Street”, which would become the fifth leg of the signalized Alabama Avenue/ Good Hope Road intersection; and
- An unsignalized entrance off Alabama Avenue adjacent to the eastern property line.

The assumed trip distributions (based primarily on field observations related to the existing shopping center) are shown in Figure 8. The resulting trip assignments are shown in Figure 9.

Total Future Traffic Forecast

The site-generated traffic assignments depicted on Figure 9 were combined with the background traffic forecasts shown on Figure 6 to yield the total future traffic forecasts associated with the build-out of the proposed development. The total traffic situation is shown on Figure 10.

Total Future Traffic Analyses

Total future peak hour levels of service (including the build out of the subject PUD) were calculated based on: (1) existing lane use and traffic controls shown on Figure 2; (2) the total future traffic volumes shown on Figure 10; and (3) the *Highway Capacity Manual 2000* (HCM) methodologies (using Synchro 6 software). Copies of LOS calculation worksheets are included in Appendix D. Table 7 displays the results of the capacity analyses, including LOS and average delay per vehicle (in seconds). Figure 11 graphically shows LOS per overall intersection.

The total future capacity analyses show that all intersections in the study area would continue to operate with acceptable LOS conditions, except the intersection of Naylor Road/Good Hope Road during the PM peak hour and the Branch Avenue/Alabama Avenue intersection during the AM and PM peak hours. The latter situation would be due primarily to the heavy regional/through commuter traffic served by these roadways.

Pedestrian Level of Service

The existing site generates significant pedestrian crossings along the adjacent roadways. The crossings are part of residential trips, trips from bus stops along the south side of Good Hope Road, and multi-purpose trips from other retail uses such as the Good Hope Market Place. It is anticipated that pedestrian crossing activity would increase upon build-out of the proposed land uses. The project will be provided with 12 - 20 ft wide sidewalks along the perimeter streets, 11 - 18 ft wide sidewalks along the internal streets, and a paseo with 11 ft and 17 ft wide walking areas between Good Hope Road and the internal Main Street. The Applicant will provide 15 ft or 20 ft wide crosswalks along the perimeter streets in collaboration with DDOT and 15-ft wide crosswalks along the internal streets. The traffic signals along the perimeter streets will include enhanced count-down timing intervals.

Pedestrian Levels of Service (LOS) were analyzed for the projected future (2012) traffic conditions along the site perimeter and internal roadways. The results indicate that all pedestrian movements would occur under safe and comfortable conditions. Therefore, the proposed town center would not adversely affect the perceived "quality of life" of community residents and prospective patrons and residents of the town center.



Figure 8 – Directional Trip Distributions

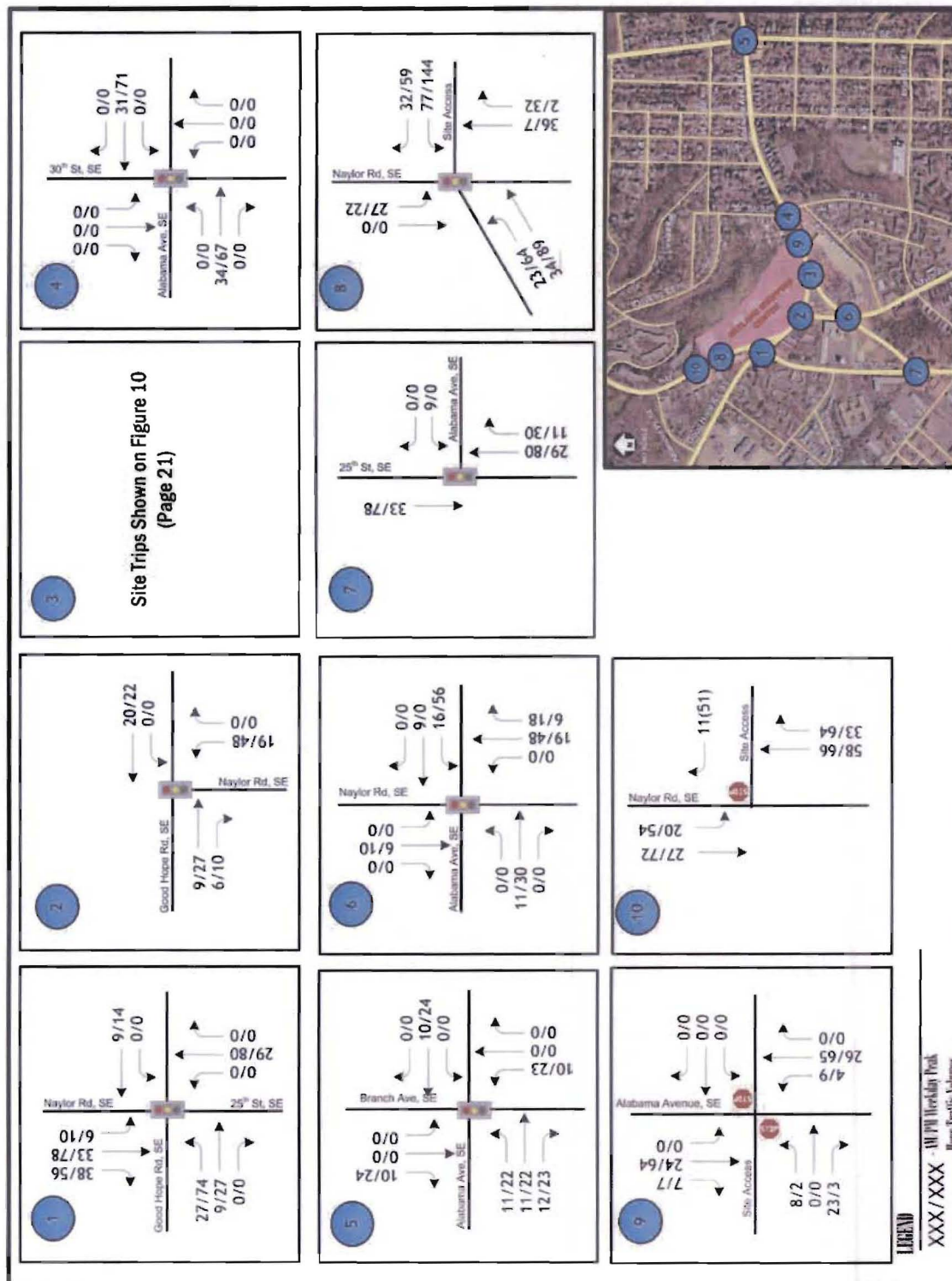


Figure 9 – Skyland Mixed Use Redevelopment Trip Assignments

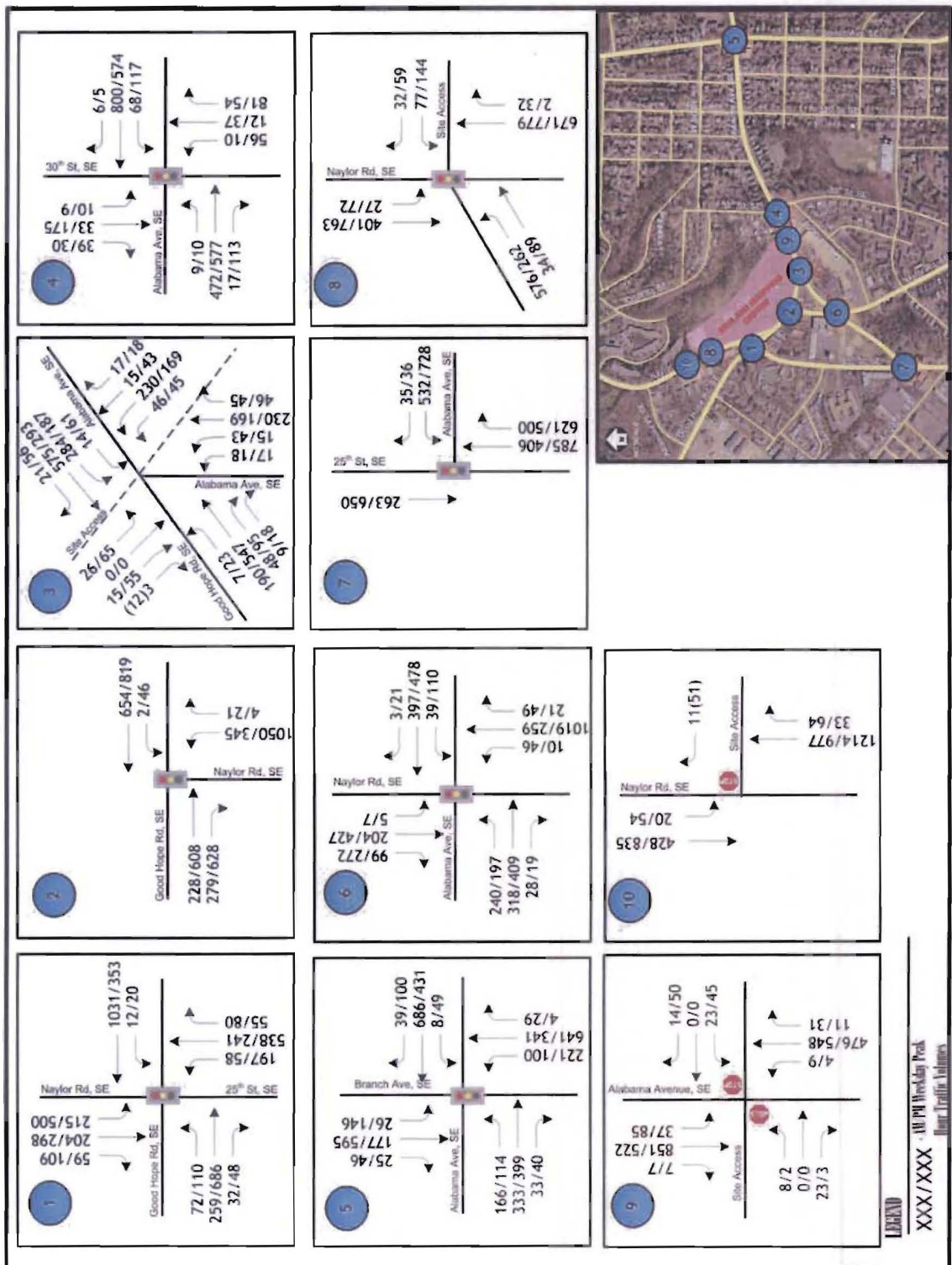


Figure 10 – Total Future Traffic Forecasts

**Table 7 – Total Future Levels of Service**

Intersection (Approach)	Total Future Conditions		Total Future Conditions with Improvements	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
	Level of Service	Level of Service	Level of Service	Level of Service
Good Hope Road/Naylor Road/25th Street				
Overall	F (128.5)	D (48.0)	D (40.5)	C (27.0)
Eastbound	C (27.8)	D (35.2)	C (34.7)	C (34.4)
Westbound	E (60.3)	B (19.3)	D (49.6)	C (21.3)
Northbound	F (334.3)	F (158.2)	E (57.6)	D (48.0)
Southbound	B (13.8)	C (25.5)	B (13.8)	B (13.7)
Alabama Avenue/ Naylor Road				
Overall	D (44.1)	C (25.0)	D (44.1)	C (25.0)
Eastbound	C (29.1)	D (38.9)	C (29.1)	D (38.9)
Westbound	E (57.0)	B (18.5)	E (57.0)	B (18.5)
Northbound	D (53.3)	B (15.1)	D (53.3)	B (15.1)
Southbound	A (9.6)	C (23.0)	A (9.6)	C (23.0)
Alabama Avenue /30th Street				
Overall	B (11.5)	B (11.3)	B (11.5)	B (11.3)
Eastbound	A (6.9)	B (10.9)	A (6.9)	B (10.9)
Westbound	B (15.0)	B (11.6)	B (15.0)	B (11.6)
Northbound	A (8.4)	B (10.2)	A (8.4)	B (10.2)
Southbound	A (7.8)	B (12.1)	A (7.8)	B (12.1)
25th Street/Alabama Avenue				
Overall	C (33.8)	B (11.8)	C (33.8)	B (11.8)
Eastbound	..	..	..	..
Westbound	B (19.2)	B (13.8)	B (19.2)	B (13.8)
Northbound	D (50.6)	B (11.5)	D (50.6)	B (11.5)
Southbound	B (15.5)	B (9.6)	B (15.5)	B (9.6)
Naylor Road/Good Hope Road				
Overall	D (37.2)	B (11.7)	D (37.2)	B (11.7)
Eastbound	C (34.7)	A (7.6)	C (34.7)	A (7.6)
Westbound	D (49.6)	A (5.2)	D (49.6)	A (5.2)
Northbound	C (30.8)	D (40.9)	C (30.8)	D (40.9)
Southbound	..	..	..	..
Good Hope Road /Alabama Avenue/Site Main Street				
Overall	D (43.9)	C (25.6)	D (43.9)	C (25.6)
Eastbound	C (25.4)	C (30.5)	C (25.4)	C (30.5)
Westbound	D (54.7)	C (25.2)	D (54.7)	C (25.2)
Southbound	D (40.6)	B (12.1)	D (40.6)	B (12.1)
Northbound	C (30.3)	D (50.5)	C (30.3)	D (50.5)
Branch Avenue/Alabama Avenue SE				
Overall	F (114.7)	F (160.9)	F (114.7)	F (160.9)
Eastbound	E (66.8)	F (185.9)	E (66.8)	F (185.9)
Westbound	F (168.2)	F (190.7)	F (168.2)	F (190.7)
Northbound	F (115.1)	D (48.4)	F (115.1)	D (48.4)
Southbound	D (52.7)	F (184.1)	D (52.7)	F (184.1)
Alabama Avenue /Site Entrance				
Eastbound Left	B (13.9)	C (19.2)	B (13.9)	C (19.2)
Westbound Left	C (21.6)	C (23.9)	C (21.6)	C (23.9)
Naylor Road/Site Entrance				
Overall	D (46.1)	D (45.1)	C (34.8)	D (41.4)
Eastbound	D (49.2)	D (42.0)	B (10.4)	B (19.7)
Westbound	E (75.1)	F (88.7)	D (49.2)	D (40.8)
Northbound	B (10.9)	B (13.6)	E (75.1)	F (89.4)
Southbound	D (38.1)	C (32.6)	A (2.4)	A (4.1)
Naylor Road/Site Entrance				
Westbound Left	n/a	n/a	D (32.3)	D (26.6)



Figure 11 – Total Future Levels of Service



The impact at the Good Hope Road and 25th Street/Naylor Road intersection would be mitigated with the improvements identified under background conditions (Item 2 above), as well as the provision of an additional left-turn lane along the southbound/Naylor Road approach and the prohibition of right-turns from the westbound/Good Hope Road approach.

The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints. In addition, the proposed development would add only 57 and 16 trips to this intersection during the AM and PM peak hour, respectively. These additional trips would not degrade intersection levels of service or significantly increase average delay beyond what would occur in the future without the development.

The Naylor Road at “Main Street” intersection would operate at unacceptable levels of service during the afternoon peak hour. This result would be due to heavy traffic volumes along Naylor Road and the intersection’s proximity to the Good Hope Road/25th Street intersection. An abbreviated signal warrant analysis indicates that a traffic signal would be advantageous, and if coordinated with the Good Hope Road/25th Street signal, would serve to improve the operational efficiency of both intersections and the intervening roadway link. Geometric improvements have also been identified, and these are presented below.

Recommended Improvements

- ***Naylor Road at Garage Ramp Entrance***
 - Provide signage to prohibit left-turn outbound movements from the ramp.
- ***Naylor Road at Main Street Entrance***
 - Install a traffic signal and coordinate its operations with the signal at the Good Hope Road/25th Street intersection.
 - Provide two 10 ft-wide outbound lanes (a shared right-turn/left-turn lane and an exclusive left-turn lane) along the Main Street approach.
 - Provide pavement re-striping to delineate two travel lanes along Naylor Road southbound along the site frontage. Provide signage permitting traffic flow along both lanes during the period 3:00 – 7:00 PM on weekdays, and the use of the inner lane only during other weekday periods and weekends. This would allow the inner lane to serve as a de facto left-turn lane. [An alternative recommendation is the all-time use of the lanes for traffic movements by eliminating the existing curb-side parking (on the west side) which is prohibited during the period 4:00 – 6:30 PM.]



- ***Naylor Road/Good Hope Road at 25th Street***
 - Provide pavement markings to delineate a separate left-turn lane and a shared through/right-turn lane along the northbound (25th Street) approach.
 - Widen the southbound approach (Naylor Road) to provide double left-turn lanes and a shared through/right-turn lane.
 - Provide signalization, pavement marking and other improvements to accommodate the above noted lane configuration improvements.
- ***Good Hope Road to Naylor Road Connector***
 - Provide a continuous right-turn lane and a through lane along this roadway.
- ***Alabama Avenue at Main Street Entrance***
 - Provide signalization and pavement marking improvements to accommodate Main Street as the fifth leg to Alabama Avenue/Good Hope Road intersection.
- ***Other***
 - Provide high visibility crosswalks and other pedestrian and transit amenities to encourage and facilitate safe and convenient use of the public roadway realm by alternative travel modes (walking, biking and transit).

These improvements are illustrated in Appendix F. With these mitigation measures in place, the proposed development would not have any appreciable objectionable impacts on the surrounding roadway network and adjacent communities, from the perspectives of traffic and parking.

CONCLUSION

The capacity analyses contained in this report provided the following results:

- 1) Under Existing Traffic Conditions, the study area intersections operate at acceptable levels of service during the weekday peak hours, except for the Good Hope Road at 25th Street/Naylor Road intersection during the AM peak hour and the Branch Avenue/Alabama Avenue intersection during both the AM and PM peak hours.
- 2) Under Future Background Traffic Conditions, including approved but not fully built land use developments and regional traffic growth, the study intersections would operate at acceptable levels of service during the peak hours, except for the Good Hope Road and 25th Street/Naylor Road intersection during the PM peak hour and the Branch Avenue/Alabama Avenue intersection during the AM and PM peak hours. The latter level-of-service situation would be due primarily to the heavy regional/through commuter traffic served by these roadways.

The Good Hope Road and 25th Street/Naylor Road intersection can be mitigated with the re-striping of the northbound/25th Street approach to provide a separate left-turn lane and a shared through/right-turn lane. The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints.

- 3) Under Total Future Traffic Conditions, including the proposed development, the study intersections would continue to operate at acceptable levels of service during peak hours, with the exception of the Good Hope Road and 25th Street/Naylor Road intersection during the PM peak hour and the Branch Avenue/Alabama Avenue intersection during both the AM and PM peak hours. The latter situation would be due primarily to the heavy regional/through commuter traffic served by these roadways.

The impact at the Good Hope Road and 25th Street/Naylor Road intersection would be mitigated with the improvements identified under background conditions (Item 2 above), as well as the provision of an additional left-turn lane along the southbound/Naylor Road approach.

The Branch Avenue at Alabama Avenue intersection would require major geometric improvements (such as an additional through lane along Branch Avenue) which would be difficult to implement primarily due to right-of-way constraints. These additional trips would not degrade intersection levels of service or significantly increase average delay beyond what would occur in the future without the development.

The Naylor Road at "Main Street" intersection would operate at unacceptable levels of service during the afternoon peak hour. This result would be due to heavy volumes along Naylor Road and the intersection's proximity to the Good Hope Road/25th Street intersection. An

abbreviated signal warrant analysis indicates that a traffic signal would be advantageous, and if coordinated with the Good Hope Road/25th Street signal, would serve to improve the operational efficiency of both intersections and the intervening roadway link. The intersection would also require geometric improvements, and these were listed on pages 24 and 25.

- 4) The existing site generates significant pedestrian crossings along the adjacent roadways. The crossings are part of residential trips, trips from bus stops along the south side of Good Hope Road, and multi-purpose trips from other retail uses such as the Good Hope Market Place. It is anticipated that pedestrian crossing activity would increase upon build-out of the proposed land uses. Improved crosswalks and signage should therefore be provided to enhance pedestrian safety along the adjacent roadways.
- 7) The proposed town center is required to provide 1,286 off-street parking spaces. This requirement would be satisfied by the proposed parking supply (1,867 spaces) which includes 600 anchor store spaces and 60 visitor spaces. The development would also provide a number of bicycle parking spaces in keeping the DDOT standard of five percent (5%) of the required auto parking. It is therefore anticipated that the proposed parking would satisfy the zoning requirements and would prevent spill over from the site to the adjacent residential and commercial properties, and neighborhood streets.
- 8) In keeping with discussions held with DDOT and Office of Planning staff, the Applicant would develop the project in two phases. This would provide an opportunity to assess the parking usage in the first phase to determine if the number of proposed spaces should be reduced in the second phase.
- 9) The proposed development would include sufficient loading facilities to satisfy the zoning requirements. Further analyses indicate that truck movements would occur without adverse operational impacts on the site and along the adjacent streets.

Based on above, this study concludes that the proposed Skyland Town Center could be approved as planned, with the implementation of identified roadway improvements (listed on pages 25 and 26) and a Transportation Management Plan (included as Appendix E). Existing Metrobus services would be continued on the site. Pending the outcome of discussions with the District and WMATA, the proposed development may also include a dedicated bus station/commuter store to provide information on alternative travel modes including transit, sell tickets and SmarTrip cards, and provide other forms of assistance to the prospective users of the proposed development (residents, patrons and employees) and residents of the adjacent communities.

It is therefore concluded that the proposed development would not have any objectionable impacts on the surrounding roadway network and adjacent communities, from the perspectives of traffic and parking.