



**County Council of
Beaufort County
Planning Commission
Meeting**

Chairman

ED PAPPAS

Vice Chairman

RANDOLPH STEWART

Commission Members

KEVIN HENNELLY
CAROLINE FERMIN
CECILY MCMILLAN
JASON HINCHER
FRANK DUCEY
ARMIN WAHL
GAIL MURRAY

County Administrator

ERIC GREENWAY

Staff Support

ROBERT MERCHANT

Administration Building

Beaufort County Government
Robert Smalls Complex
100 Ribaut Road

Contact

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Planning Commission Agenda

Monday, December 6, 2021 at 6:00 PM

Council Chambers

County Administration Building, 100 Ribaut Road, Beaufort, SC

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[MEETING LINK:](#)

Meeting number (access code): 161 413 9647

Passcode: PLANNING

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. FOIA – PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
4. APPROVAL OF MINUTES – November 1, 2021
5. APPROVAL OF AGENDA
6. CITIZEN COMMENTS – NON-AGENDA ITEMS
(Comments are limited to 3 minutes.)

ACTION ITEMS

7. **TEXT AMENDMENT TO THE COMMUNITY DEVELOPMENT CODE (CDC):** SECTION A.2.40 (PERMITTED ACTIVITIES) TO ADD “SHORT-TERM RENTALS” AS A SPECIAL USE TO THE LADY’S ISLAND COMMUNITY PRESERVATION DISTRICT; APPLICANT: RALPH MCCARTER
8. **ZONING MAP AMENDMENT/ZONING REQUEST** FOR 6.55 ACRES (R600 041 000 0172 0000) 28 BUCKINGHAM PLANTATION DRIVE FROM T4 HAMLET CENTER OPEN (T4HC-O) TO T4 NEIGHBORHOOD CENTER (T4NC); APPLICANT: CARMEN MIHAI
9. **TEXT AMENDMENT TO THE COMMUNITY DEVELOPMENT CODE (CDC):** APPENDIX C.4.30 (FUTURE SIGNAL LOCATIONS) TO UPDATE THE BUCKWALTER PARKWAY ACCESS MANAGEMENT STANDARDS
10. **TEXT AMENDMENT TO THE COMMUNITY DEVELOPMENT CODE (CDC):** SECTION 4.1.70 (DRIVE-THROUGH FACILITIES) TO ADD SPECIFIC STANDARDS FOR FACILITIES IN TRANSECT ZONES.

DISCUSSION ITEMS

11. CHAIRMAN'S REPORT
12. ADJOURNMENT



COUNTY COUNCIL OF BEAUFORT COUNTY
Beaufort County Planning and Zoning Department

Beaufort County Government Robert Smalls Complex
Physical: Administration Building, Room 115 100 Ribaut Road
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Phone: 843-255-2140 / FAX: 843-255-9432

The regular meeting of the Beaufort County Planning Commission (hereinafter “Commission”) was held in Council Chambers on Monday, November 1, 2021, 6:00 p.m.

Members Present:

Mr. Ed Pappas, Chairman
Ms. Cecily McMillan

Dr. Caroline Fermin
Mr. Frank Ducey

Mr. Kevin Hennelly
Mr. Armin Wahl

Members Absent:

Mr. Randolph Stewart, Vice Chairman Mr. Jason Hinch

Staff Present:

Mr. Robert Merchant, Planning and Zoning Acting Director
Ms. Chris DiJulio-Cook, Senior Administrative Specialist

CALL TO ORDER: Chairman Ed Pappas called the meeting to order at 6:02 p.m.

PLEDGE OF ALLEGIANCE: Chairman Pappas led those assembled in the pledge of allegiance.

REVIEW OF MEETING MINUTES: Chairman Pappas asked for a motion to approve the October 4, 2021 minutes. Ms. Cecily McMillan made a motion, seconded by Mr. Frank Ducey, to accept the minutes as written. There was unanimous support for the motion.

AGENDA REVIEW: Mr. Pappas asked if there were any comments or additions to the agenda. There were none.

CITIZEN COMMENTS: Chairman Pappas asked if there were any non-agenda citizen comments. There were none.

ACTION ITEMS:

Road Name Change Request in the Sheldon Area from Wiley Acres to Jonesland Way; Applicant: Kaffia “Belle” Jones

Mr. Rob Merchant explained that the owners of Wiley Acres, a private roadway, would like to change the name to Jonesland Way. Staff recommended allowing the name change as it met the conditions within the ordinances for street name changes.

Ms. Kaffia “Belle” Jones explained that the road name change request was their way of leaving a legacy for future generations.

Dr. Caroline Fermin made a motion to change the name of the road from Wiley Acres to Jonesland Way. Mr. Ducey seconded the motion. The motion passed unanimously.

Zoning Map Amendment/Rezoning Request for 6.26 Acres (R100 027 000 0387 0000) 186 Cherokee Farms Road from T2 Rural to T4 Neighborhood Center; Applicant: Randall S. Mikals

Mr. Merchant gave background on the rezoning request. He stated the applicant had changed the original rezoning request from T4 Neighborhood Center to requesting a rezoning to T4 Hamlet Center Open. The new rezoning request for T4 Hamlet Center Open was chosen to complement the current Habersham area but not compete with it. He stated staff is more comfortable with the T4 Hamlet Center Open zoning request than they were with the T4 Neighborhood Center. Planning staff received a recommendation from MCAS, who'd just completed their review of the updated application and David Trail, from MCAS, was available to speak on that recommendation.

Mr. Hennelly asked for examples of what could be built on the property based on the proposed zoning.

Mr. Merchant stated that the requested zoning is fairly restrictive. Not only would the owners be restricted by the new zoning, if approved, but by the restrictions of their location within the Air Installation Compatible Use Zone study (AICUZ).

Mr. Pappas asked, if the rezoning were granted, if the military would have any say in what could be built or if that would be a decision solely for the County.

David Trail, MCAS, stated that the military would like to see any approvals be done with caveats that the military would have a say in what was to be built. He said that there were two concepts submitted to MCAS for review. One, a beer garden, was acceptable to the military but the other, an assisted living facility, was not based on the military's allowances within the noise contours of the air station.

Josh Tiller, J.K. Tiller Associates, Land Planner, explained that, based on staff recommendation, the land owners decided to back off of the original request of T4 Neighborhood Center and pursue the T4 Hamlet Center Open zoning.

Randall Mikals, spoke about the process he's undergone and meetings with Habersham and the County staff that led to the current rezoning request and how they hope to develop the property.

Mr. Merchant clarified that the Commissioners were unable to add any conditions to their rezoning approvals. The owners would be restricted by the conditions already built in to the zoning codes and AICUZ.

Mr. Tiller commented that the zoning will require them to be within compliance and is in keeping with what Habersham wants.

Mr. Trail said that without caveats, the Air Station could not consent to the rezoning until an actual plan is developed and can be reviewed by the Air Station.

Mr. Mikals commented that this put them in a catch 22 situation with the military not consenting without a definitive plan and not being able to come up with a definitive plan without the rezoning being approved.

Mr. Tiller suggested that Mr. Trail or another representative of the military be part of the SRT meeting.

Mr. Ducey made a motion to approve the zoning amendment request from T2 Rural to T4 Hamlet Center Open, Mr. Kevin Hennelly seconded. The motion was defeated 3:2 (For: Ducey, Hennelly/Against: Pappas, Fermin, McMillan/Recused: Wahl).

2022 Planning Commission Meeting Schedule

Chairman Pappas asked if everyone had a chance to review the proposed calendar for the 2022 meeting schedule or if anyone had any issues with any of the meeting dates. There were no issues. The schedule was approved.

Chairman's Report

Mr. Pappas formally welcomed Mr. Armin Wahl to the Planning Commission.

ADJOURNMENT: Chairman Pappas, with no further business to discuss, adjourned the meeting at 7:04 p.m.

SUBMITTED BY: Chris DiJulio-Cook
Community Development Senior Administrative Specialist

Ed Pappas
Beaufort County Planning Commission Chairman

Date: _____



To: Beaufort County Planning Commission
From: Juliana Smith, Long Range Planner, Planning and Zoning Department
Subject: Text Amendment to the Community Development Code (CDC): Section A.2.40 (Permitted Activities) to revise the Lady's Island Community Preservation district to include short-term rentals as a special use.
Date: December 6, 2021

STAFF REPORT:

Case No. CDPA-000015-2021
Owner/Applicant: Ralph McCarter
Proposed Text Change: Text Amendment to the Community Development Code (CDC): Section A.2.40 (Permitted Activities) to revise the Lady's Island Community Preservation district to include short-term rentals as a special use.

A. SUMMARY OF REQUEST: The applicant seeks to revise the Lady's Island Community Preservation (LICP) district to include short-term rentals as an allowable special use. The applicant owns 2 Blythewood Road, located in the LICP, and wishes to establish a short-term rental on the property. The property is currently residential with a single-family detached dwelling on site.

B. SUMMARY OF PROPOSED AMENDMENT: The amendment currently under consideration would permit short-term rentals as a special use in the LICP. The purpose of the LICP, a residential district, is to maintain or improve the livability and character of existing residential neighborhoods. It is the express purpose of this district to exclude all commercial buildings and structures, whether operated for profit or otherwise, except home uses specifically provided for, if they conform with the provisions provided in Section A.2.40, or commercial uses permitted in Traditional Community Plans. Currently, two lodging uses are allowed within Traditional Community Plans in the LICP: Bed and Breakfast (5 rooms or less) and Inn (up to 24 rooms).

The LICP is located only on Lady's Island covering largely residential areas and neighborhoods including, but not limited to, Burckmeyer Beach, Captain Blythewood Landings, Tradewinds Plantation, the waterfront on Sunset Boulevard, Celadon, Brindlewood, Academy Estates, Magnolia Court, Deer Run, Royal Pines, Telfair, Christine Place, and Spanish Moss (see attached map). Current conditions in the LICP are primarily residential with the exception of the Beaufort Yacht Club, a veterinary clinic, Marsh Harbor Boat Works, and several home

Division A.2 – Lady’s Island Community Preservation District (LICP)

occupation businesses.

Per Ordinance 2020-32, robust short-term rental standards were established in the Community Development Code. At the time of adoption, the short-term rental use was added as a special use to all transect zones except T1 Natural Preserve. It is a permitted use in conventional zones except C3 Neighborhood Mixed Use, where it is a special use. It is not allowed in S1 Industrial. The special use was not added to any of the Community Preservation districts; however, it is being considered for the Lady’s Island Expanded Home Business District (LIEHB). The LICP district is similar to primarily residential transect zone districts, like T3 Edge, T3 Hamlet Neighborhood, and T3 Neighborhood, that allow short-term rentals.

Considering the intent of the LICP and its consistency with primarily residential transect zones that allow short-term rentals as a special use, the addition of a short-term rental special use to the LICP is appropriate.

During their November 15, 2021 meeting, the Lady’s Island Community Preservation Committee reviewed the proposed amendment to the LICP to include short-term rentals as a special use and were not opposed. If adopted, any property owner in the LICP seeking to use the short-term rental use will have to apply to the Zoning Board of Appeals for approval.

C. TEXT AMENDMENT REVIEW STANDARDS: In determining whether to adopt or deny a proposed Text Amendment, the County Council shall weigh the relevance of and consider whether, and the extent to which, the proposed amendment:

1. Is consistent with the goals, objectives, and policies of the Comprehensive Plan;

The proposed text amendment is consistent with the Comprehensive Plan, which envisions this district’s area to be Neighborhood Mixed Use.

2. Is not in conflict with any provision of this Development Code, or the Code of Ordinances;

The LICP is primarily a residential district with intentions of maintaining or improving the livability and character of existing residential neighborhoods, encouraging infill of available lands, providing a choice of housing types, and accommodating housing types which relate well with existing neighborhood character, scale, and density. Commercial buildings and structures are expressly excluded, except for some select home uses and for Traditional Community Plans. Only limited non-residential uses are allowed and are generally subject to the special use process. If adopted, the short-term rental use would only be allowed through a special use process.

3. Is required by changed conditions;

Per Ordinance 2020-32, short-term rental standards were established as a special use in the Community Development Code within transect and conventional zones. These standards were not added to Community Preservation Districts, though the Lady’s Island Expanded Home Business District is currently being considered for inclusion of the short-term rental use.

4. Addresses a demonstrated community need;

N/A

5. Is consistent with the purpose and intent of the zones in this Development Code, or would improve compatibility among uses and ensure efficient development within the County;

Division A.2 – Lady’s Island Community Preservation District (LICP)

See 2 above.

6. Would result in logical and orderly development pattern;

As a special use, each applicant seeking to establish a short-term rental property in the LICP will be required to apply to the Zoning Board of Appeals for approval. Upon application, their property will be posted and neighboring property owners will be notified of the application so they may weigh in. In addition to typical considerations, the Zoning Board of Appeals (ZBOA) may also establish an appropriate rental limit as a condition of approval after conducting the public hearing and finding that conditions exist making such a limitation necessary for short-term rental applications.

7. Would not result in adverse impacts on the natural environment, including but not limited to water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment;

See 6 above.

D. RECOMMENDATION: Staff recommends approval. Staff also recommends that short-term rentals be added as a special use to the two remaining Lady’s Island Community Preservation districts, which are both mixed-use districts and are consistent with transect zones that already include the use: Lady’s Island Neighborhood Activity Center and Lady’s Island Professional Office

E. ATTACHMENTS:

- Revised LICP district use table.
- Map of LICP district

Division A.2 – Lady’s Island Community Preservation District (LICP)

Division A.2: Lady s Island Community Preservation District (LICP)

Sections:

- A.2.10 Purpose
- A.2.20 Applicability
- A.2.30 District Boundaries
- A.2.40 Permitted Activities
- A.2.50 Conditional and Special Use Standards
- A.2.60 Development Standards

A.2.10 Purpose

The purpose of the Lady s Island Community Preservation District (LICP) is to maintain or improve the livability and character of existing residential neighborhoods; to encourage infill of available lands; to provide a choice of housing types and to accommodate housing types which will relate well with existing neighborhood character, scale and density. The intent of the LICP is to guide residential development in such a manner as to encourage and plan for the availability of public services and infrastructure. Certain structures and uses serving governmental, religious or recreational needs of such areas are permitted by special use subject to restrictions and requirements intended to preserve and protect residential neighborhood. It is the express purpose of this district to exclude all commercial buildings and structures, whether operated for profit or otherwise, except home uses specifically provided for, if they conform to the provisions of this section. Multifamily and higher density development shall be located so that the provision of appropriate urban services will be physically and economically facilitated.

A.2.20 Applicability

The LICP District requirements apply to all uses within the LICP boundaries. The Beaufort County Community Development Code shall apply to all development within the LICP District, unless expressly exempted or otherwise provided for in this section.

A.2.30 District Boundaries

The LICP District standards apply only to the LICP. The delineation of areas, which fall under the LICP zoning designation, is outlined on the official zoning map of Beaufort County.

A.2.40 Permitted Activities

The permitted uses are primarily residential. Limited nonresidential uses are allowed generally subject to the special use process. Uses not listed are prohibited. The following are descriptions of permitted uses, permitted accessory uses and structures for the LICP District:

Table A.2.40.A: Lady s Island Community Preservation Land Uses

Land Use	Use Definition	Use Permission
Residential		
Single-family detached	Detached dwelling unit intended for only one family. Includes any one family dwelling unit, which complies with the Beaufort County Building Code.	C

Division A.2: Lady s Island Community Preservation District (LICP)

Table A.2.40.A: Lady s Island Community Preservation Land Uses		
Land Use	Use Definition	Use Permission
Residential		
Single-family cluster	Two or more single-family detached residential uses in a subdivision, or on an individual lot that include, as part of the subdivision or lot design, significant common open space that meets the standards in Article 2, Division 2.8.	C
Traditional Community Plan	See Article 2, Division 2.3 (Traditional Community Plans)	C
Multifamily	A building containing two or more dwelling units, specifically permitting duplexes, mansion apartments, and apartment houses.	C
Accessory dwelling unit	A second dwelling unit, clearly subordinate to the principal unit, either in or added to an existing single-family detached dwelling, or in a separate accessory structure on the same lot as the main dwelling, for use as a complete independent living facility. Maximum building size shall not exceed 50% of the principal unit s floor area.	C
Family compound	Form of traditional rural development which provides affordable housing for family members allowing additional family dwelling units on, and/or subdivisions of, a single lot owned by the same family for at least 50 years (see Article 2, Section 2.7.40). TcC	
Group home	Residential facility for nine or fewer mentally or physically handicapped persons providing care on a 24-hour basis and licensed by a state agency or department, or is under contract with a state agency or department, for that purpose.	C
Home occupation	A business, profession, occupation or trade located entirely within a residential dwelling, which does not change the essential character of the residential use.	C
Home business	A business operated out of a single-family residence and accessory structures that permits the employment of up to three unrelated individuals. This includes independent contractors operating from the facility. Farm workers are not included. Uses shall be limited to office and service types, carpentry, upholstery, woodworking, potteries, glasswork and other similar uses; wholesale or retail sales are prohibited on-premises.	C
Community Residence (dorms, convents, assisted living, temporary shelters)	See definition in Article 8, Table 3.1.70	S
Offices and Services		
Day care, family	A facility in a private home that is operated by one or more persons duly licensed or qualified to be licensed by the state for the purpose of providing child day care for one to not more than eight children at any one time, who are not relatives of the day care provider. (NAICS 62441)	P
Lodging: Short-Term Housing Rental (STHR)	A property with a residential dwelling where lodging is offered, advertised, or provided to Short-Term Rental Tenants (excluding family members) for a fee or any form of compensation with individual rental terms not exceeding 29 consecutive days. See specific use regulations in Article 4.1.360	S
Recreation, Education, Safety, Public Assembly		
Public services	These uses include emergency service, buildings, or garages, (e.g., ambulance, fire, police, rescue, and public works) or other garages or areas where vehicles are stored and dispatched. (NAICS 62191, 92212, 92216, see Office uses, below)	P
Religious establishments (large)	Establishments engaged in operating religious organizations, such as churches, religious temples and /or establishments primarily engaged in administering an organized religion or promoting religious activities with or without schools (except Sunday schools occupying no more than 50% of the floor area) as part of the complex and having 15,000 or greater square feet of floor area (NAICS 813110).	S
Religious establishments (small)	Establishments engaged in operating religious organizations, such as churches, religious temples and /or establishments primarily engaged in administering an organized religion or promoting religious activities with no schools (except Sunday schools occupying no more than 50% of the floor area) as part of the complex and having less than 15,000 square feet of floor area.	S
Local utility	Utility substations or transmission and local distribution facilities, including telephone, and all government-owned utilities. Not included are generation facilities, storage of combustibles, regional facilities, and landfills or mining operations. (NAICS 221122, 22121)	S

Division A.2: Lady s Island Community Preservation District (LICP)

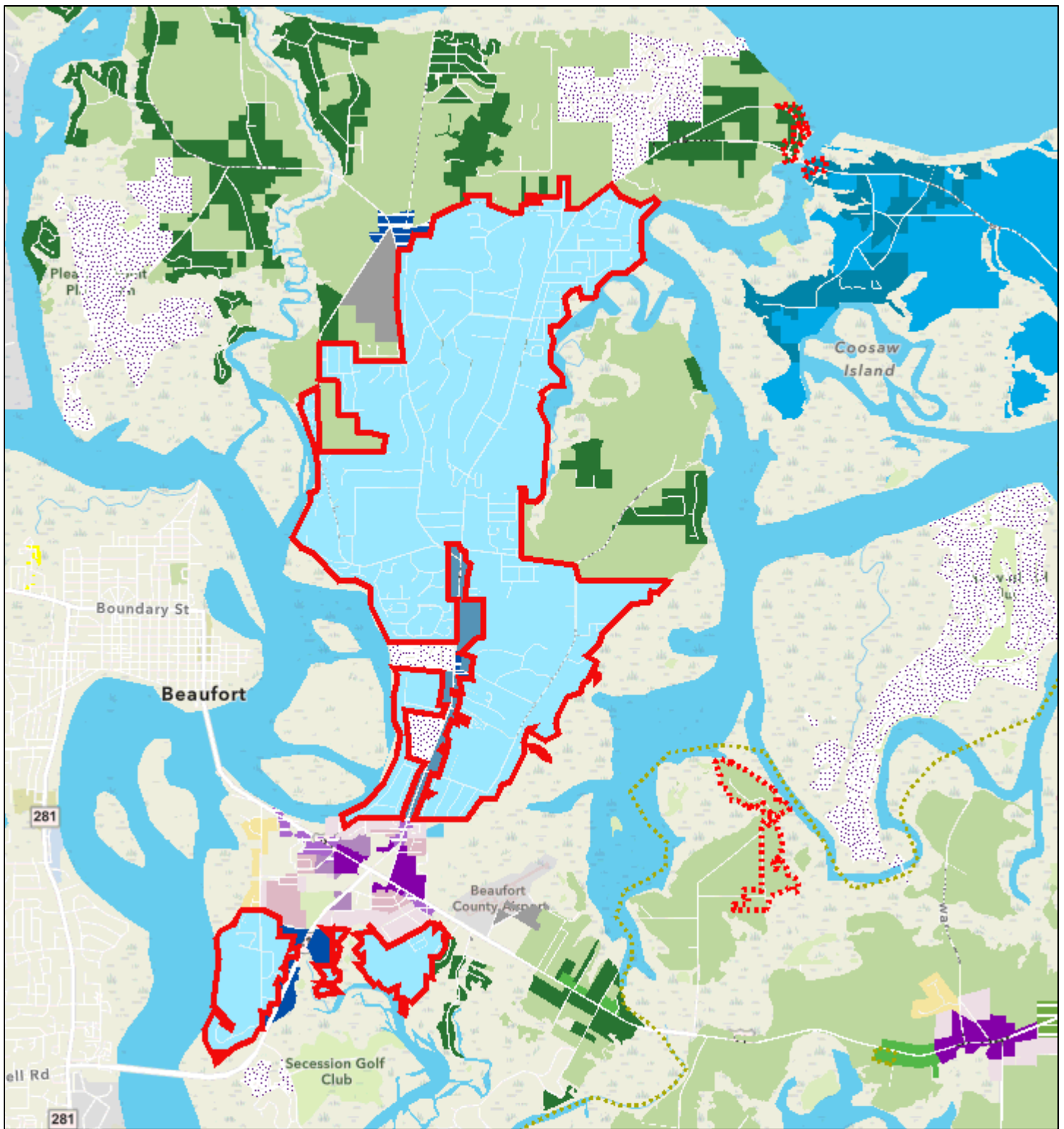
Table A.2.40.A: Lady s Island Community Preservation Land Uses		
Land Use	Use Definition	Use Permission
Residential		
Outdoor recreation	<ol style="list-style-type: none"> Active recreational activities and supporting services including, but not limited to: jogging, cycling, tot lots, playing fields, playgrounds, outdoor swimming pools, and tennis courts (NAICS 7113); fishing clubs; marinas. Passive recreational uses including, but not limited to: arboretums, wildlife sanctuaries, forests, areas for hiking, nature areas, and other passive recreation-oriented parks Picnic areas, garden plots, and beaches. 	C
Schools, neighborhood (elementary and middle school) and community (high schools)	Institutions of learning or instruction primarily catering to minors, whether public or private, which are licensed by either the county or the State of South Carolina. The definition includes nursery schools, kindergarten, elementary schools, middle schools, senior high schools or any special institution of learning under the jurisdiction of the state department of education catering to those age groups. This does not include charm schools, dancing schools, music schools or similar limited schools. (NAICS 6111)	S
Infrastructure, Transportation, Communications		
Commercial communications towers	A tower, pole or similar structure, which supports a telecommunications antenna, operated for commercial purposes above ground in a fixed location, freestanding or guyed, or atop a structure. This does not include television antennas or satellite dishes. Towers for radio or television station use are regulated as regional utilities.	S
Temporary Uses		
Construction staging or plant	A concrete or asphalt batch plant, or metal forming and cutting facility assembled on the site or located no more than one mile from the site where the construction of a particular road, infrastructure or building is to take place. Such facilities shall be removed within one year.	S
Contractor s office	Security guard buildings and structures, construction equipment sheds, contractor s trailers and similar uses incidental to a construction project. Limited sleeping and/or cooking facilities may also be permitted.	P
Model homes sales office	A dwelling unit or modular unit in a subdivision used as a sales office for that subdivision.	P
Traditional Community Plan Uses		
Single-Family attached	A structure containing one dwelling unit on a single lot and connected along a property line to another dwelling unit on an adjoining lot by a common wall or other integral part of the principal building such as a breezeway or carport.	TCP
Live/Work	An integrated housing unit and working space, occupied and utilized by a single household in a structure that has been designed or structurally modified to accommodate joint residential occupancy and work activity, and which includes: complete kitchen, living, and sleeping space and sanitary facilities in compliance with the Building Code, and working space reserved for and regularly used by one or more occupants of the unit. Workspace is limited to a maximum fifty percent (50%) of the structure and located on the first floor with living space located to the rear or above. Activities are limited to those uses permitted in the underlying Zone in which the Live/Work unit is located.	TCP
General Retail 3,500 SF or less	Stores and shops that sell and/or rent goods and merchandise to the general public. This category does not include Open Air Retail, Vehicle Sales and Rental, or Gas Stations/Fuel Sales.	TCP
Gas Stations/Fuel Sales	An establishment where petroleum products are dispensed for retail sale. This use may include a retail convenience store and/or a single bay carwash. It does not include towing, vehicle body or engine repair (see Vehicle Services), or overnight vehicle storage.	TCP
Restaurant, Café, Coffee Shop	A retail business selling ready-to-eat food and/or beverages for on- or off-premise consumption. These include eating establishments where customers are served from a walk-up ordering counter for either on- or off-premise consumption; and establishments where customers are served food at their tables for on-premise consumption, which may also provide food for take-out, but does not include drive-through services, which are separately defined and regulated. This use includes all mobile kitchens.	TCP

Table A.2.40.A: Lady s Island Community Preservation Land Uses

Land Use	Use Definition	Use Permission
Residential		
General Offices & Services: 3,500 SF or less	<ol style="list-style-type: none"> 1. Bank/Financial Services. Financial institutions, including, but not limited to: banks, credit agencies, investment companies, security and commodity exchanges, ATM facilities. 2. Business Services. Establishments providing direct services to consumers, including, but not limited to: employment agencies, insurance agent offices, real estate offices, travel agencies, landscaping and tree removal companies, exterminators, carpet cleaners, and contractors offices without exterior storage. 3. Business Support Services. Establishments providing services to other businesses, including, but not limited to: computer rental and repair, copying, quick printing, mailing and mailbox services. 4. Personal Services. Establishments providing non-medical services to individuals, including, but not limited to: barber and beauty shops, dry cleaners, small appliance repair, laundromats, massage therapists, pet grooming with no boarding, shoe repair shops, tanning salons, funeral homes. These uses may include incidental retail sales related to the services they provide. 5. Professional and Administrative Services. Office-type facilities occupied by businesses or agencies that provide professional or government services, or are engaged in the production of intellectual property. 	TCP
Animal Services: Clinic/Hospital	An establishment used by a veterinarian where animals are treated. This use may include boarding and grooming as accessory uses.	TCP
Day Care: Commercial Center (9 or more clients)	A state-licensed facility that provides non-medical care and supervision for more than 8 adults or children, typically for periods of less than 24 hours per day for any client. Facilities include, but are not limited to: nursery schools, preschools, after-school care facilities, and daycare centers.	TCP
Lodging: Bed & Breakfast (5 rooms or less)	The use of a single residential structure for commercial lodging purposes, with up to 5 guest rooms used for the lodging of transient guests and in which meals may be prepared for them, provided that no meals may be sold to persons other than such guests, and where the owner resides on the property as his/her principal place of residence.	TCP
Lodging: Bed & Breakfast (5 rooms or less)	The use of a single residential structure for commercial lodging purposes, with up to 5 guest rooms used for the purpose of lodging transient guests and in which meals may be prepared for them, provided that no meals may be sold to persons other than such guests, and where the owner resides on the property as his/her principal place of residence.	TCP
Lodging: Inn (up to 24 rooms)	A building or group of buildings used as a commercial lodging establishment having up to 24 guest rooms providing lodging accommodations to the general public. This includes the use of any dwelling unit for lodging accommodations on a daily or weekly rate to the general public.	TCP
Medical Service: Clinics/Offices	See definition in Article 8, Table 3.1.70	TCP
Community Oriented Cultural Facility (less than 15,000 SF)	Public or non-profit facilities that provide educational and cultural experiences for the general public, examples of which include: aquariums, arboretums, art galleries, botanical gardens, libraries, museums, planetariums, civic centers and theaters predominantly used for live performances, and zoos. May also include accessory retail uses such as a gift/book shop, restaurant, etc.	TCP
Community Residence (dorms, convents, assisted living, temporary shelters)	See definition in Article 8, Table 3.1.70	TCP
<p>P indicates a Use that is Permitted By Right. C indicates a Use that is Permitted with Conditions. S indicates a Use that is Permitted as a Special Use. TCP indicates a Use that is permitted only as part of a Traditional Community Plan under the requirements in Division 2.3</p>		

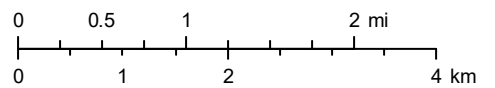
(Ord. No. 2017/24, 10-9-17)

Lady's Island Community Preservation District



11/3/2021, 3:30:12 PM

1:72,224





MEMORANDUM

TO: Beaufort County Planning Commission
FROM: Juliana Smith, Long Range Planner, Planning and Zoning Department
DATE: December 6, 2021
SUBJECT: Zoning Map Amendment/Rezoning Request for 6.55 acres (R600 041 000 0172 0000) at 28 Buckingham Plantation Drive from T4 Hamlet Center Open (T4HC-O) to T4 Neighborhood Center (T4NC); Applicant: Carmen Mihai

STAFF REPORT:

A. BACKGROUND:

Case No. CDPA-000016-2021
Owner/Applicant: Carmen Mihai
Property Location: Located at 28 Buckingham Plantation Drive
District/Map/Parcel: R600 041 000 0172 0000
Property Size: 6.55 acres
Current Future Land Use Designation: Urban Mixed Use
Current Zoning District: T4 Hamlet Center Open
Proposed Zoning District: T4 Neighborhood Center

B. SUMMARY OF REQUEST: The applicant seeks to change the zoning of a 6.55-acre lot at 28 Buckingham Plantation Drive from T4 Hamlet Center Open (T4HC-O) to T4 Neighborhood Center (T4NC) (see attached map). The property is undeveloped and fronts Bluffton Parkway. The applicant also owns the neighboring 5.44-acre property (R600 040 000 0825 0000) to the northwest, which is zoned T4 Neighborhood Center. The applicant plans to develop a mixed-use community using both parcels and is seeking consistent zoning to avoid a split-zoning.

C. EXISTING ZONING: The lot is currently zoned T4HC-O, which is a Sub-Zone of T4 Hamlet Center. T4 Hamlet Center is intended to integrate appropriate, medium-density residential building types in an environment conducive to walking and bicycling. It is a zoning district that is appropriate for more rural areas. The T4HC-O Sub-Zone provides for neighborhoods with a broader amount of retail and service uses in the scale and character of the T4 Hamlet Center zone.

D. PROPOSED ZONING: The T4NC district is intended to integrate vibrant main-street commercial and retail environments into neighborhoods, providing access to day-to-day amenities within walking distance, creating potential for a transit stop, and serving as a focal point for the neighborhood. This district is intended to create areas of higher intensity residential and commercial uses.

E. COMPREHENSIVE PLAN FUTURE LAND USE MAP: This 6.55-acre lot is designated Urban Mixed Use on the Future Land Use Map. The Comprehensive Plan states that future development in Urban Mixed Use should be compatible with the type and mix of land use currently found in the municipalities with an emphasis on infill and redevelopment, as well as walkable, mixed-use communities. Gross residential densities are between two and four dwelling units per acre with some denser pockets of development.

F. ZONING MAP AMENDMENT REVIEW STANDARDS: In determining whether to adopt or deny a proposed Zoning Map Amendment, the County Council shall weigh the relevance of and consider whether and the extent to which the proposed amendment:

1. Is consistent with and furthers the goals and policies of the Comprehensive Plan, and the purposes of this Development Code;

The 2040 Comprehensive Plan designates this area as Urban Mixed Use. The development concept proposed is consistent with this designation and achieves the comprehensive plan goal of infill and redevelopment within Urban Mixed Use areas.

2. Is not in conflict with any provision of this Development Code, or the Code of Ordinances;

The proposed rezoning is consistent with the neighboring parcel to the west, which is zoned T4 Neighborhood Center. The rezoning request is not in conflict with the Development Code or the Code of Ordinances.

3. Addresses a demonstrated community need;

N/A.

4. Is required by changed conditions;

N/A.

5. Is compatible with existing and proposed uses surrounding the land subject to the application, and is the appropriate zone and uses for the land;

Overall, this portion of the Bluffton Parkway corridor is a mixed-use corridor including multifamily and commercial uses on the northern side of Bluffton parkway, and undeveloped land abutting the Old South PUD on the southern side of Bluffton parkway. The property to the south of the applicant's property is the Old South golf course included in an existing PUD. The properties directly across Bluffton Parkway are primarily comprised of the Edgewater apartment complex, zoned T4 Hamlet Center Open. On either side of Edgewater are C5 Regional Center Mixed-Use zoning districts comprised of commercial uses such as Tanger Outlets to the west and

a variety of shops, restaurants, and services uses to the east. The proposed rezoning is consistent with the surrounding land.

6. Would not adversely affect nearby lands;

This rezoning would be consistent with the character of nearby lands and would not adversely affect them.

7. Would result in a logical and orderly development pattern;

See 5 and 6 above.

8. Would not result in adverse impacts on the natural environment – including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment:

Any development on the site would be required to adhere to the natural resource protection, tree protection, wetland protection, and stormwater standards in the Community Development Code and the Stormwater BMP Manual.

9. Would result in development that is adequately served by public facilities (e.g. streets, potable water, sewerage, stormwater management, solid waste collection and disposal, schools, parks, police, and fire and emergency medical facilities):

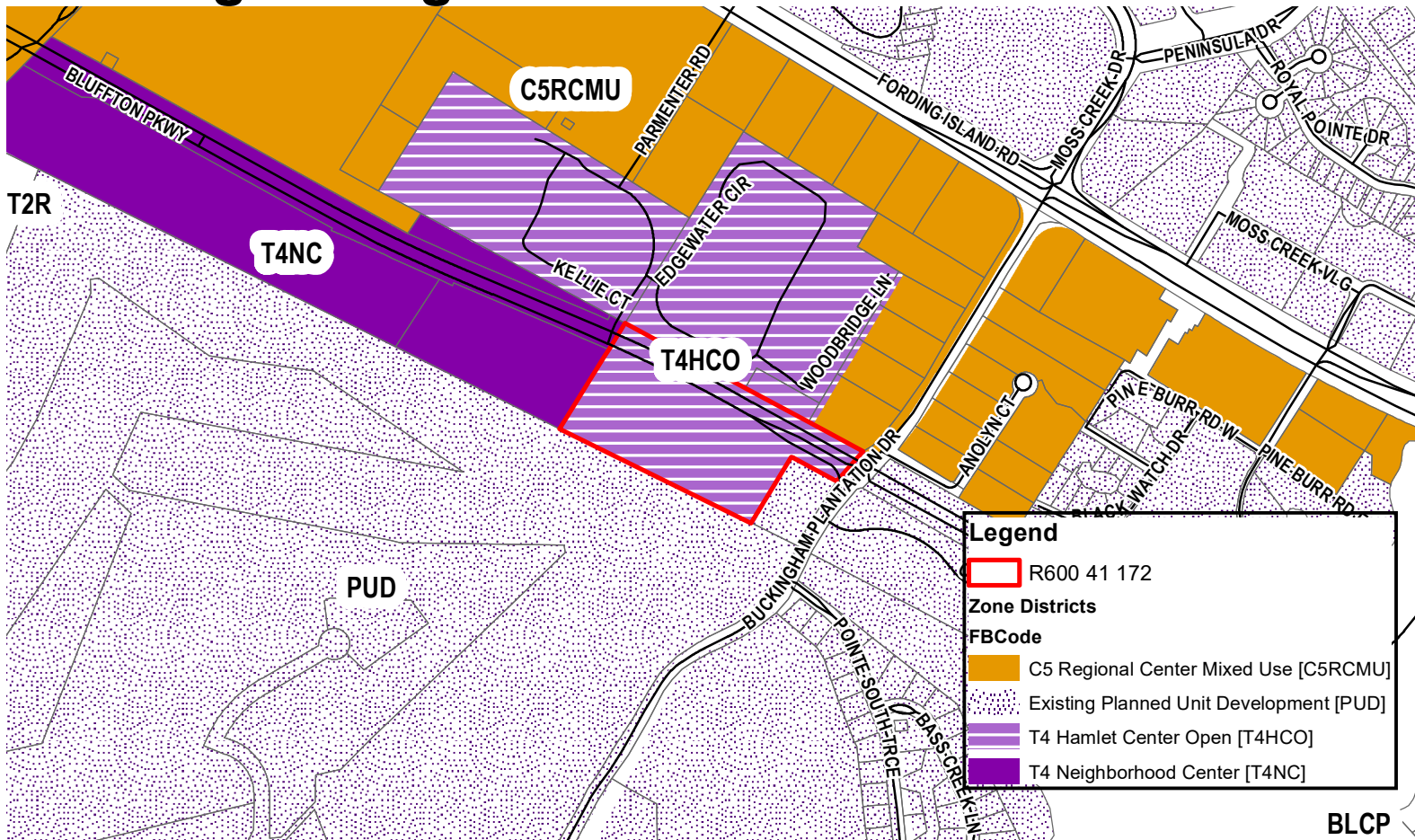
Water and sewer are available to service the property. Per the applicant’s narrative, the property will initially be served by septic systems with the intention to connect into sewer at “a future date to be determined.” EMS and Fire facilities are located within a half-mile of the site.

G. STAFF RECOMMENDATION: The proposed zoning change from T4HCO to T4NC is consistent with the Future Land Uses laid out in the 2040 Comprehensive Plan and the surrounding character of the area. Staff recommends approval.

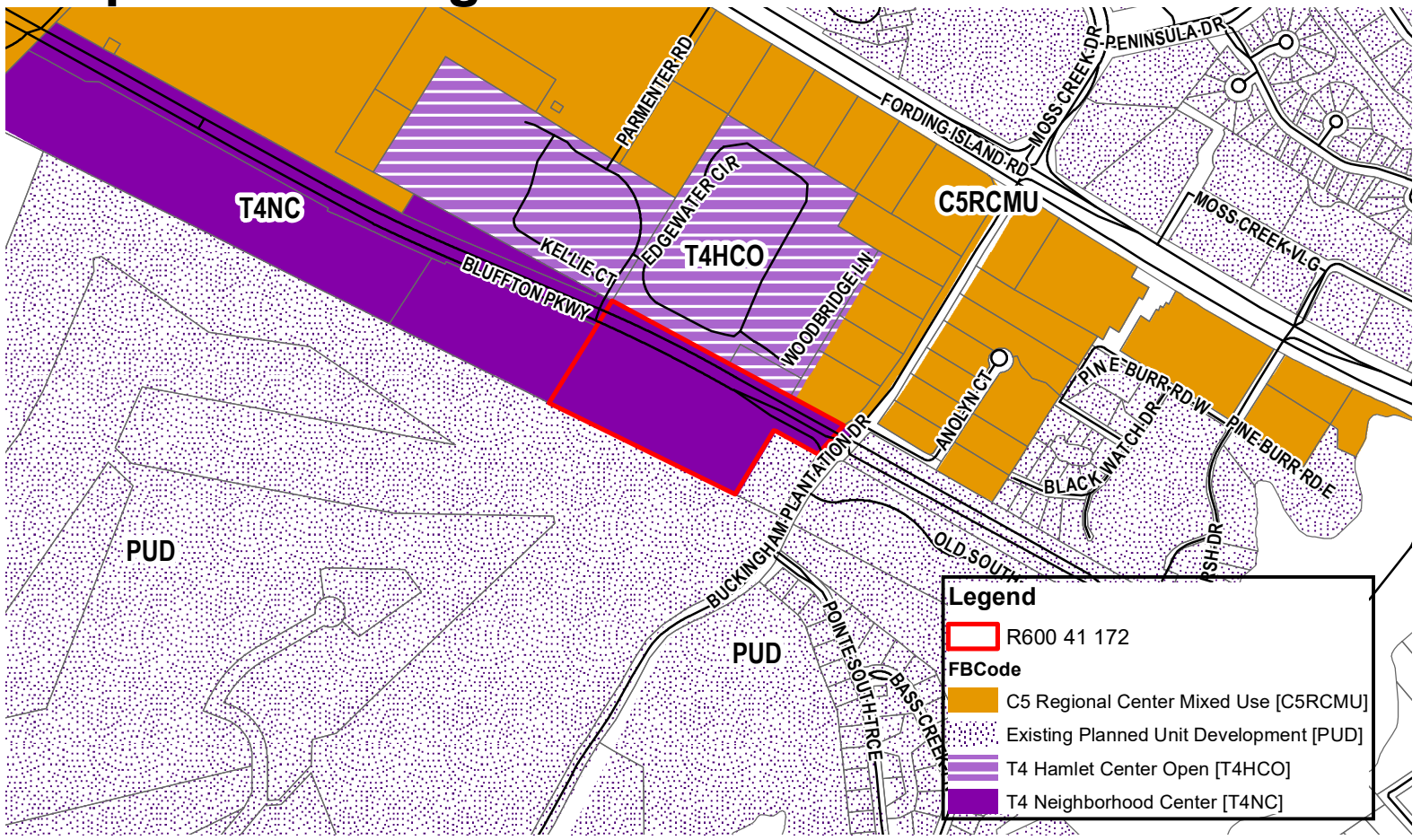
H. ATTACHMENTS

- Zoning Map (existing and proposed)
- Location Map

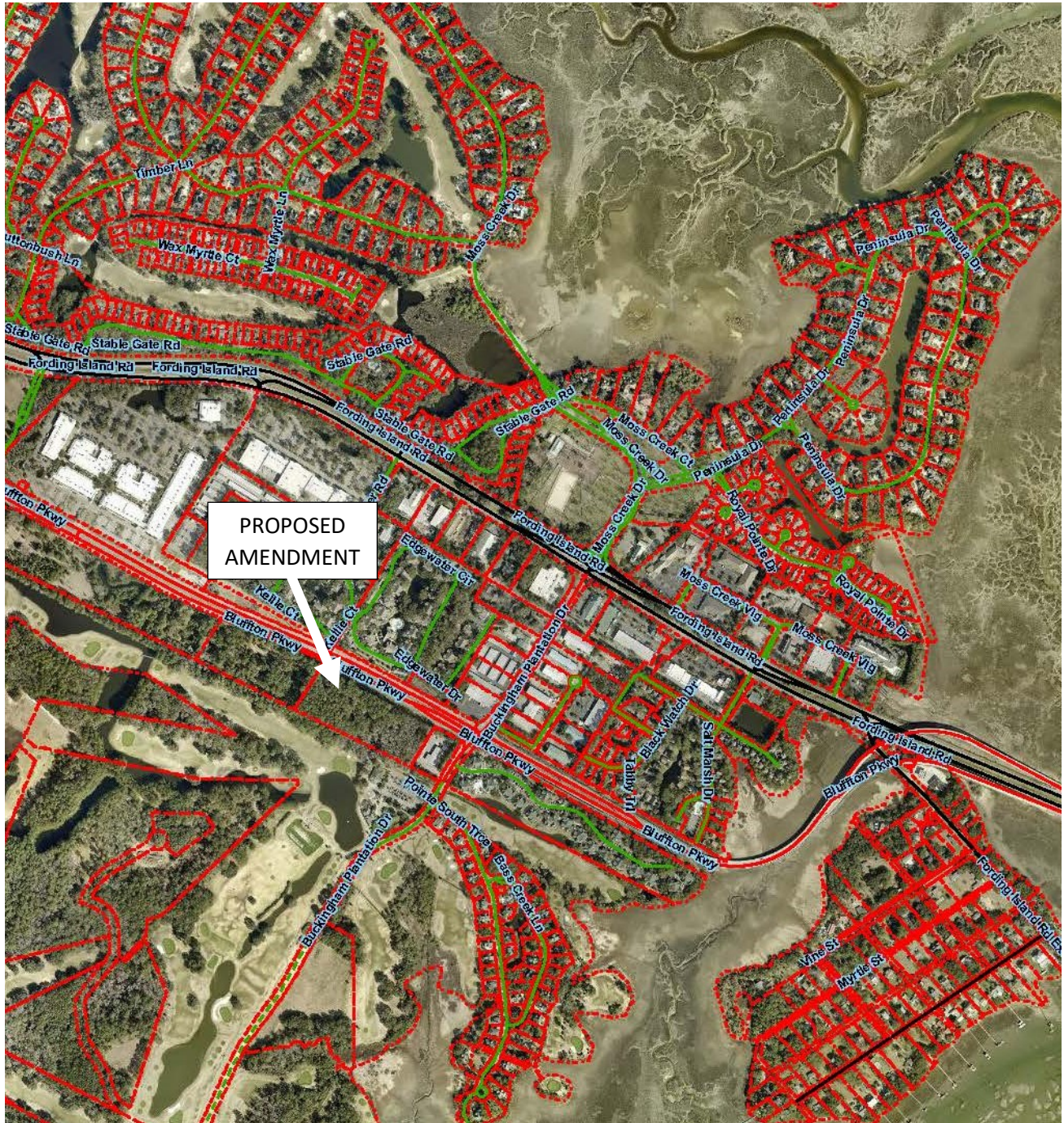
Existing Zoning



Proposed Zoning



Location Map for 28 Buckingham Plantation Drive





To: Beaufort County Planning Commission
From: Juliana Smith, Long Range Planner, Planning and Zoning Department
Subject: Text Amendments to the Community Development Code (CDC): Appendix C.4.30 (Future Signal Locations) to update the Buckwalter Parkway Access Management Standards
Date: December 6, 2021

A. BACKGROUND: The Transportation Engineering Department has contracted Bihl Engineering to analyze Buckwalter Parkway from US 278 to Bluffton Parkway to update the County’s access management standards for this corridor. This is an update to the 2007 study conducted by SRS Engineering, LLC. The updated analysis takes into consideration the significant development that has occurred on the corridor since the 2007 study. Bihl Engineering’s analysis revealed necessary updates to the access management plan for this corridor based upon review of existing and planned developments, existing and future traffic patterns, and crash history.

B. SUMMARY OF PROPOSED AMENDMENTS: The updated review of Buckwalter Parkway from US 278 to Bluffton Parkway revealed a need to update the future signal location recommendations. The recommended changes are:

- Replacing the previous recommendation of a signalized intersection at Buckwalter Parkway and Cinema South with a signalized intersection at Buckwalter Parkway and Cinema North.
- Replacing the previous recommendation of a signalized intersection at Buckwalter Parkway and Ludlow Street (previously called “Sea Turtle South”) with a signalized intersection at Buckwalter Parkway and Mott Street/Parkside Drive.
- Adding a new signalized intersection at Buckwalter Parkway and Kroger Fuel Drive.
- Adding the existing signalized intersection at Buckwalter Parkway and Lake Point Drive/Parker’s Driveway.

Additionally, the amendments will update the distances in feet between each planned or existing signalized intersection. The amendments will also replace the references to Appendix 10-D of the 2010 Comprehensive Plan in the Section C.4.30 with references to the *Buckwalter Access Management Study Update* (2021).

C. BEAUFORT COUNTY PUBLIC FACILITIES COMMITTEE: During their October 18, 2021 meeting, the Public Facilities Committee voted to approve adopting the *Buckwalter Access Management Study Update* and updating the Community Development Code in accordance with the updated study.

Division C.4 – Buckwalter Parkway

D. BEAUFORT COUNTY COUNCIL: During their October 25, 2021 meeting, the Beaufort County Council held first reading to consider adopting the *Buckwalter Access Management Study Update* and updating the Community Development Code in accordance with the updated study. It was unanimously approved on first reading.

E. ATTACHMENTS:

- Revised Section C.4.30 (Future Signal Locations)
- Buckwalter Parkway Access Management Plan Update

Division C.4 – Buckwalter Parkway

Division C.4: - Buckwalter Parkway

C.4.10 - Application

The following access management standards apply to all properties within Beaufort County's jurisdiction on Buckwalter Parkway between the intersection of US 278 and SC 46 (May River Road).

C.4.20 - Signal Spacing

The recommended spacing between full-signalized accesses is 2,000 feet.

C.4.30 - Future Signal Locations

The specific signalized access locations shall correspond to the ~~programmed~~ **planned** signal locations provided in ~~Figure 5 in Appendix 10-D: Buckwalter Parkway Access Management Plan of the Beaufort County Comprehensive Plan~~ **Buckwalter Access Management Study Update (2021)** and the existing traffic signal locations. Existing and planned intersection locations are subject to change to better meet the spacing guidelines. If a modification of the defined signal locations is desired to meet the demands of a specific development **or to better meet prescribed spacing goals noted above**, the following conditions shall be satisfied:

- A. The modified location must meet the warrants for signalization with the proposed development as defined in the Manual on Uniform Traffic Control Devices (MUTCD) by the Federal Highway Administration (FHWA) with the analysis and specific application of traffic signal warrants to be approved by the Beaufort County traffic engineer.
- B. The modified location must provide adequate spacing (as defined in the spacing standards indicated above) from existing traffic signals, ~~programmed~~ **and planned** traffic signals, ~~and future signalization of primary roadway intersections~~, including: **(note that the distances shown should be considered approximate):**
 1. Buckwalter Parkway at US 278
 2. **Planned location -** Buckwalter Parkway at Cinema South ~~North~~ **(2,800** ~~2,026~~ **feet south of US 278)**
 3. **Planned location -** Buckwalter Parkway at ~~Sea Turtle South~~ **Mott Street/Parkside Drive (2,050** ~~1,788~~ **feet south of Cinema South** ~~North~~)
 4. **Planned location –** Buckwalter Parkway at Kroger Fuel Drive (2,176 feet south of Mott Street/Parkside Drive)
 5. ~~Buckwalter Parkway at Buckwalter Town Center South (2,550~~ **1,496** ~~feet south of Cinema South~~ **Kroger Fuel Drive)**
 5. ~~6.~~ **Buckwalter Parkway at Bluffton Parkway and the Townes of Buckwalter (this signal will be relocated once Phase 5b of the Bluffton Parkway is completed)(1,077 feet south of Buckwalter Town Center South) *Intersection location is subject to change to better reflect the access management goals stated above for the corridor as the current location is less than the desired spacing of 2,000 feet from location 5.**
 7. **Buckwalter Parkway at Lake Point Drive/Parker's Driveway (1,585 feet south of Bluffton Parkway). *Intersection location is subject to change to better reflect the access management goals stated above for the corridor as the current location is less than the desired spacing of 2,000 feet from location 6.**
 6. ~~8.~~ **Buckwalter Parkway at Bluffton Parkway and Hampton Hall (3,958 feet south of Lake Point Drive/Parker's Driveway)**
 7. ~~9.~~ **Buckwalter Parkway at H.E. McCracken Circle and Old Bridge Drive (4,500 feet south of Hampton Hall)**

Division C.4 – Buckwalter Parkway

8-10. Buckwalter Parkway at SC 46 (May River Road)

- C. The future signalized intersection location shall not have an adverse impact on existing or future LOS based on comparative analysis of conditions with the recommended signal locations indicated in ~~Appendix 10-D: Buckwalter Parkway Access Management Plan of the Beaufort County Comprehensive Plan~~ above **Buckwalter Access Management Study Update (2021)**. The developer shall be required to conduct LOS and signal system progression analysis to demonstrate compatibility of the proposed signal location with operation of the remainder of the signal system.

C.4.40 - Driveways

- A. **Spacing:** Additional access points above the full accesses indicated in subsection C.4.30.B may be granted for right-in/right-out or other controlled movement access with a minimum spacing of 500 feet. Single parcel access is strongly discouraged and connectivity to adjacent parcels should be provided. Joint access driveways are encouraged for small parcels to adhere to the 500-foot spacing. Driveways should be limited to the number needed to provide adequate access to a development. Factors such as alignment with opposing driveways and minimum spacing requirements will have a bearing on the location and number of driveways approved. For parcels/developments that have frontage on Buckwalter Parkway and have access to a signalized intersection location recommended in the Buckwalter Parkway Access Management Plan, minimum spacing shall be 800 feet unless specified in Figure 5 of the Buckwalter Parkway Access Management Plan.
- B. **Driveway design:** Driveway width and turning radii shall conform to SCDOT's Access and Roadside Management Standards.
- C. **Driveway linkages:** See Article VI, Section 6.3.10.D for driveway linkage requirements for non-residential development.
- D. **Retrofitting existing driveways:** As changes are made to previously developed property or to the roadway, driveways will be evaluated for the need to be relocated, consolidated, or eliminated if they do not meet the access management standards.

C.4.10 - Deceleration Lanes

Deceleration lanes shall be required when the volume of traffic turning at a site is high enough in relation to the through traffic to constitute the potential for disruption as indicated in the traffic impact analysis.

Access Management Plan Update

**Buckwalter Parkway
(US 278 to Bluffton Parkway)
Beaufort County, SC**

Prepared for:
Beaufort County

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**Access Management Plan Update – Buckwalter Parkway (US 278 to Bluffton Parkway)
Beaufort County, South Carolina**

**Prepared for:
Beaufort County**

**Prepared by:
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October 2021

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1.0 Executive Summary

An access management plan was established in 2007 and further codified in Beaufort County’s *Community Development Code* for the Buckwalter Parkway corridor in the Town of Bluffton, located in Beaufort County, South Carolina. Since the establishment of that plan, significant development has occurred along the Buckwalter Parkway corridor. As noted in the *Community Development Code*, there was a need to review and update the 2007 plan based on the current conditions of the corridor and to determine the most appropriate access management plan for the corridor intersections based on the existing and planned developments, existing and future traffic patterns, and crash history.

The corridor for this access management plan update extends from US 278 to Bluffton Parkway. The location of the corridor is shown in **Figure 1 (Appendix)**. The municipal boundaries for the Town of Bluffton along the corridor are shown in **Figure 2 (Appendix)** based on Beaufort County GIS.

Two scenarios were reviewed: the access points recommended in the 2007 plan (Scenario 1) and an updated access management plan (Scenario 2) which adjusts the access points to better fit intersection spacing goals and current development patterns.

The following key points and assumptions, which are based on coordination with Town and County staff, were applied in the analysis:

- It is unlikely that an eastern connection from Ludlow Street to the Woodside neighborhood shown in the 2007 Access Management Plan is feasible based on the current development patterns and the locations of wetlands
- Approximately 2,000 foot spacing between signalized intersections is desired along the corridor
- North-south connectivity is desired between parcels along Buckwalter Parkway
- Future connections to the Willow Run development and the new north-south roadway that connects to US 278 at Eagles Point should be included in the study

Based on a review of the corridor and the associated data, the recommended access management plan is shown in **Figures 3A and 3B (Appendix)** and the access locations are listed below by type of access.

- Signalized Intersection Access
 - Buckwalter Place Boulevard/Lord of Life Driveway (existing)
- Signalized Intersection Access (when warranted)
 - Berkeley Place Driveway #1/Pinellas Drive North (roadway improvements will be required)
 - Mott Street/Parkside Drive
 - Kroger Fuel Driveway
- Full Unsignalized Intersection Access
 - Cassidy Drive (existing)

- Right-in, right-out Intersection Access
 - Berkeley Place Driveway #2/Pinellas Drive South
 - Ludlow Street
 - Innovation Drive
 - Progressive Street (existing)
- Right-in only Intersection Access
 - Buckwalter Place Driveway (existing)

Table 1 shows a comparison of the access management between the two scenarios.

Table 1: Comparison of Traffic Control by Scenario¹		
Location	Scenario 1 – 2007 Plan	Scenario 2 – 2021 Proposed Plan
US 278	Existing Signal	Existing Signal
Cassidy Drive	Undefined Unsignalized Access	Right-in, Right-out
Pinellas Drive N	Undefined Unsignalized Access	Proposed Signalization, when warranted
Pinellas Drive S	Proposed Signalization, when warranted	Right-in, Right-out
Mott St./Parkside Dr.	Undefined Unsignalized Access	Proposed Signalization, when warranted
Ludlow St.	Proposed Signalization, when warranted	Right-in, Right-out
Kroger Fuel Driveway	Right-in, Right-out	Proposed Signalization, when warranted
Innovation Dr.	Proposed Signalization, when warranted	Right-in, Right-out
Progressive Dr.	Right-in, Right-out	Right-in, Right-out
Buckwalter Place Blvd./Lord of Life Dwy.	Existing Signal	Existing Signal
Buckwalter Place Dwy.	Right-in Only	Right-in Only

¹Roadway improvements may be required at all locations in both scenarios

In the proposed access management plan update (Scenario 2), all intersections are projected to operate at LOS D or better (assuming the planned intersections are signalized). Signalization implementation would be based on the intersections meeting traffic signal warrants.

In addition, this plan recommends the previously planned and new roadway connection improvements along the corridor. These are shown in **Figures 3A and 3B (Appendix)** as dashed lines. The exact location and design of these connection are conceptual in nature and are expected to be refined in the design process.

- New roadway between US 278 and Berkeley Place Driveway 1 on the west side of Buckwalter Parkway
- New east-west roadway from Cassidy Drive to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle’s Pointe
- New north-south roadway between Cassidy Drive and Pinellas Drive North
- New east-west roadway from Pinellas Drive North to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle’s Pointe
- Realignment and installation of new Berkeley Place Driveway 1, connecting to the Berkeley Place parking area further west and removing the existing curve and parking lot connection
- New east-west roadway from Pinellas Drive South to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle’s Pointe
- New north-south roadway between Pinellas Drive South and Parkside Drive
- Complete north-south connection between Berkeley Place and Bluffton Commons
- New north-south roadway between Innovation Drive and Bluffton Commons
- Conversion of Kroger Fuel Center Drive to full access intersection and installation of a new east-west roadway connecting to the new north-south access roads parallel to Buckwalter Parkway
- New north-south access roadway on the east side of Buckwalter Parkway, connecting the new Kroger Fuel Center Drive intersection and Buckwalter Towne Boulevard
- New connector between Lord of Life Church Road and new north-south access road
- Relocation of intersection of Bluffton Parkway at Buckwalter Parkway intersection (by others)

This study area on Buckwalter Parkway extends to just before Bluffton Parkway (north) signalized intersection. The recommended signalized intersection spacing goal of approximately 2,000 feet between signalized intersections should be applied for the remainder of Buckwalter Parkway to SC 46, as appropriate, to maximize the efficiency of the corridor. This spacing should be reviewed, and the exact locations of these signalized intersections should be studied further as projects develop in the remaining section of the Buckwalter Parkway corridor.

2.0 Introduction

An access management plan was established in 2007 for the Buckwalter Parkway corridor in the town of Bluffton, located in Beaufort County, South Carolina. This plan was further codified in the Beaufort County *Community Development Code*. Since the establishment of the access management plan, significant development has occurred along the Buckwalter Parkway corridor. There was a need to review and update the 2007 plan based on the current conditions of the corridor and determine the most appropriate access management plan for the corridor intersections based on the existing and planned developments, existing and future traffic patterns, and crash history.

The corridor extends from US 278 to Bluffton Parkway. The location of the corridor is shown in **Figure 1 (Appendix)**. The municipal boundaries for the Town of Bluffton along the corridor are shown in **Figure 2 (Appendix)** based on Beaufort County GIS.

3.0 Existing Conditions

The following section discusses the study area, existing roadway conditions, annual average daily traffic (AADT) data, turning movement counts, previous studies, area roadway projects, and crash analysis for the access management plan.

3.1 Study Area

The access management plan study area includes the following existing intersections.

- Buckwalter Parkway at Cassidy Drive
- Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1
- Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2
- Buckwalter Parkway at Parkside Drive/Mott Street
- Buckwalter Parkway at Ludlow Street
- Buckwalter Parkway at Kroger Fuel Center Drive
- Buckwalter Parkway at Innovation Drive
- Buckwalter Parkway at Progressive Street
- Buckwalter Parkway at Buckwalter Place Boulevard/Lord of Life Church Driveway
- Buckwalter Parkway at Buckwalter Place Driveway

Existing laneage at the study area intersections is shown in **Figure 4 (Appendix)**.

3.2 Existing Roadway Conditions

The study area includes South Carolina Department of Transportation (SCDOT), Beaufort County, Town of Bluffton, and privately owned roadways/driveways.

3.2.1 Study Area Roadways

The following section provides descriptions of the roadways in the study area.

US 278 (Fording Island Road) – US 278 is a six-lane, divided, principal arterial roadway with a grass median and a posted speed limit of 55 miles per hour (mph). Per SCDOT counts, US 278 had a 2019 Annual Average Daily Traffic (AADT) of 48,000 vehicles per day (vpd) within the study area.

Buckwalter Parkway – Buckwalter Parkway is a four-lane, divided, minor arterial with a landscaped median and a posted speed limit of 45 mph. Per SCDOT counts, Buckwalter Parkway had a 2019 AADT of 15,600 vpd between US 278 and Bluffton Parkway and a 2019 AADT of 19,100 vpd south of Bluffton Parkway.

Bluffton Parkway – Bluffton Parkway is a four-lane, divided, minor arterial with a landscaped median and a posted speed limit of 45 mph. Per SCDOT counts, Bluffton Parkway had a 2019 AADT of 17,400 vpd within the study area.

Cassidy Drive – Cassidy Drive is a three-lane, undivided roadway that provides access to the Vineyard Assisted Living & Memory Care facility.

Pinellas Drive – Pinellas Drive is a two-lane roadway that provides access to commercial development. Pinellas Drive intersects Buckwalter Parkway in two locations: once across from Berkeley Place Driveway #1 and again across from Berkeley Place Driveway #2.

Berkeley Place Driveway #1 – Berkeley Place Driveway #1 is a two-lane driveway providing access to the Berkeley Place shopping center. Berkeley Place Driveway #1 is across from Pinellas Drive North at its intersection with Buckwalter Parkway. The throat distance of the existing intersection is 30 feet between the stop bar and the beginning of the sharp curve into the Berkeley Place Shopping Center.

Berkeley Place Driveway #2 – Berkeley Place Driveway #2 is a two-lane driveway providing access to the Berkeley Place shopping center. Berkeley Place Driveway #2 is across from Pinellas Drive South at its intersection with Buckwalter Parkway.

Mott Street – Mott Street is a two-lane, divided roadway for the Bluffton Commons development.

Parkside Drive – Parkside Drive is a two-lane roadway with a posted speed limit of 25 mph that provides access for the Woodbridge community. Parkside Drive is across from Mott Street at its intersection with Buckwalter Parkway.

Ludlow Street – Ludlow Street is a two-lane, divided roadway for the Bluffton Commons development. Due to adjacent wetlands on the east side of the road where Ludlow Street would cross Buckwalter Parkway in the future. The new approach to this intersection would have a short throat distance.

Kroger Fuel Driveway – The Kroger Fuel Driveway is a two-lane driveway with right-in right-out (RIRO) access at its intersection with Buckwalter Parkway.

Innovation Drive – Innovation Drive is a two-lane driveway for the Buckwalter Place shopping center.

Progressive Street – Progressive Street is a two-lane driveway for the Buckwalter Place shopping center. Progressive Street is a RIRO access point at its intersection with Buckwalter Parkway.

Buckwalter Place Boulevard – Buckwalter Place Boulevard is a four-lane, divided roadway with a landscaped median. Buckwalter Place Boulevard is the main entrance for the Buckwalter Place shopping center and is signalized at its intersection with Buckwalter Parkway.

Lord of Life Church Driveway – Lord of Life Church Driveway is a two-lane driveway for the Lord of Life Lutheran Church. Lord of Life Church Driveway is across from Buckwalter Place Boulevard at its intersection with Buckwalter Parkway.

Buckwalter Place Driveway – Buckwalter Place Driveway is a one-lane, one-way entrance driveway for the Buckwalter Place shopping center.

3.3 AADT Data

Table 2 shows the SCDOT annual average daily traffic (AADT) volumes and percent growth per year on the study area roadways from 2011-2019.

The 8-year historic growth rates along the corridor ranged from 1.5% to 6% per year. The 3-year growth rate along the corridor was approximately 0% to 4% per year.

3.4 Turning Movement Counts

Peak hour intersection turning movement counts including vehicular, pedestrian, and heavy vehicle traffic were performed in May 2021 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following intersections:

- Buckwalter Parkway at Cassidy Street
- Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1
- Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2
- Buckwalter Parkway at Innovation Drive
- Buckwalter Parkway at Progressive Street
- Buckwalter Parkway at Buckwalter Place Boulevard

Table 2: SCDOT Average Annual Daily Traffic (AADT) Counts by Year												
Roadway	Road Section		Year									% Growth /Year
	Start	End	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Buckwalter Parkway	US 278	Buckwalter Towne Boulevard	9,800	8,700	8,900	8,100	12,200	13,900	13,400	14,100	15,600	6.0%
Buckwalter Parkway	Buckwalter Towne Boulevard	Bluffton Parkway	16,900	16,600	16,900	15,300	17,700	19,400	20,000	21,000	19,100	1.5%

Source: SCDOT traffic count data

Due to the COVID-19 pandemic, traffic volumes and travel patterns have been impacted. All turning movements collected in May 2021 were adjusted using adjustment factors of 1.15 and 1.02 for the AM and PM peak hours, respectively, as stated in the SCDOT District 6 *Traffic Impact Analyses during COVID-19 Pandemic (Update)* memorandum (February 5, 2021). These adjusted traffic volumes were used in the Existing conditions analysis.

Existing peak hour intersection turning movement volumes are shown on **Figure 5 (Appendix)**. The turning movement count data is included in the **Appendix**.

Additional turning movement counts were collected in January 2021 at the following intersections:

- Buckwalter Parkway at Parkside Drive/Mott Street
- Buckwalter Parkway at Ludlow Street

Due to the COVID-19 pandemic, traffic volumes and travel patterns have been impacted. All turning movements collected in January 2021 were adjusted using adjustment factors of 1.19 and 1.13 for the AM and PM peak hours, respectively, as stated in the SCDOT District 6 *Traffic Impact Analyses during COVID-19 Pandemic* memorandum (September 28, 2020). These adjusted traffic volumes were used in the Existing conditions analysis.

3.5 Wetlands

Based on the available data in the Beaufort County GIS, **Figure 6 (Appendix)** shows the wetlands along the corridor. The locations of the wetlands should be considered when reviewing potential connectivity of developments along the corridor.

3.6 Previous Access Management Study (2007)

The *Access Management Plan: Buckwalter Parkway (Appendix)* was performed by SRS Engineering in 2007 and is incorporated into the *2010 Beaufort County Comprehensive Plan*. The results of that study are shown in **Figure 7**. The study area for the report was the northern segment of Buckwalter Parkway from US 278 to Bluffton Parkway. The purpose of the report was to review the future developments that were planned to access Buckwalter Parkway and to determine appropriate locations for signalized access points based on these future developments and the Bluffton Parkway Phase 4 roadway project.

The report looked at a future year of 2025 and analyzed the level of service for signalized intersections for two different alternatives. It was recommended that signalized intersections be located at Cinema South (now Pinellas Drive South/Berkeley Place Driveway #2), Sea Turtle South (now Ludlow Street), and Buckwalter Town Center North (now Innovation Drive).

The following additional connections were recommended in the plan:

- New roadway connecting US 278 and the west side of Buckwalter Parkway in the vicinity of Pinellas Drive North
- Connection between the Berkeley Place development and Bluffton Commons development
- New roadway from Pinellas Drive North to the future Willow Run development and the new north/south roadway planned by others connecting future Bluffton Parkway to US 278 in the vicinity of Eagle’s Point
- New roadway from Pinellas Drive South to the future Willow Run development and the new north/south roadway planned by others connecting future Bluffton Parkway to US 278 in the vicinity of Eagle’s Point

3.7 Community Development Code

The *Community Development Code* further identifies the access management along Buckwalter Parkway from US 278 to SC 46.

The intersection spacing along the Buckwalter Parkway corridor is recommended to be 2,000 feet between signalized intersections.

The *Community Development Code* outlines three conditions that shall be satisfied if the signalized access locations are desired to be changed.

- “The modified location must meet the warrants for signalization with the proposed development as defined in the Manual on Uniform Traffic Control Devices (MUTCD) by the Federal Highway Administration (FHWA) with the analysis and specific application of traffic signal warrants to be approved by the Beaufort County traffic engineer.”
- “The modified location must provide adequate spacing (as defined in the spacing standards indicated above) from existing traffic signals, programmed traffic signals, and future signalization of primary roadway intersections, including:
 - Buckwalter Parkway at US 278
 - Buckwalter Parkway at Cinema South (2,800 feet south of US 278)
 - Buckwalter Parkway at Sea Turtle South (2,050 feet south of Cinema South)
 - Buckwalter Parkway at Buckwalter Town Center South (2,550 feet south of Cinema South)
 - Buckwalter Parkway at Bluffton Parkway and the Townes of Buckwalter (this signal will be relocated once Phase 5b of the Bluffton Parkway is completed)
 - Buckwalter Parkway at Bluffton Parkway and Hampton Hall
 - Buckwalter Parkway at H.E. McCracken Circle and Old Bridge Drive
 - Buckwalter Parkway at SC 46 (May River Road)”
- “The future signalized intersection location shall not have an adverse impact on existing or future LOS based on comparative analysis of conditions with the recommended signal locations indicated in Appendix 10-D: Buckwalter Parkway Access Management Plan of the Beaufort County

Comprehensive Plan above. The developer shall be required to conduct LOS and signal system progression analysis to demonstrate compatibility of the proposed signal location with operation of the remainder of the signal system.”

For other intersections along the corridor, right-in, right-out operations are desired. The minimum spacing is noted as a minimum of 500 feet with joint access driveways recommended. Single parcel access is “strongly discouraged.” Cross connections between parcels shall be provided. “Driveways should be limited to the number needed to provide adequate access to a development. Factors such as alignment with opposing driveways and minimum spacing requirements will have a bearing on the location and number of driveways approved.”

If a parcel has access to a signalized intersection location, any additional access points shall have a minimum spacing of 800 feet.

The *Community Development Code* also noted that “as changes are made to previously developed property or to the roadway, driveways will be evaluated for the need to be relocated, consolidated, or eliminated if they do not meet the access management standards.”

3.8 Crash Analysis

Crash data obtained from the Town of Bluffton was reviewed for the Buckwalter Parkway corridor from US 278 to Bluffton Parkway. From June 9, 2018, thru June 9, 2021, there were 41 crashes on the corridor. Of these 41 crashes, it was found that 20 crashes, or approximately 50%, were angle crashes. **Table 3** summarizes the location along the corridor and the number of angle crashes experienced between June 9, 2013 and June 9, 2021.

Based on the existing intersection configurations, the two Pinellas Drive/Buckwalter Place driveways experienced the greatest number of angle crashes. If a traffic signal is installed, it is expected that many of the left turns or through movements at both locations would favor the signalized intersection due to their close proximity and connectivity. With installation of a signal, the number of angled crashes would likely be reduced.

Table 3: Angle Crashes by Location June 9, 2018 – June 9, 2021	
Intersection	# of Angle Crashes
Cassidy Drive	1
Pinellas Drive North	6
Pinellas Drive South	8
Mott Drive/Parkside Drive	2
Innovation Drive	2
Buckwalter Place Drive	1
Total	20

Source: Bluffton PD crash data

3.9 Existing Level of Service Analysis - Intersections

Capacity analyses were performed for the AM and PM peak hours in the Existing conditions using the Synchro, Version 10, software to determine the operating characteristics of the adjacent roadway network and the impacts of the proposed project. The analyses were conducted with methodologies contained in the Highway Capacity Manual, 6th Edition (HCM 6) (Transportation Research Board, 2016). The Synchro analysis worksheets are provided in the Appendix.

Capacity of an intersection is defined as the maximum number of vehicles that can pass through an intersection during a specified time, typically an hour. Capacity is described by level of service (LOS) for the operating characteristics of an intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. HCM 6 defines six levels of service, LOS A through LOS F, with A being the best and F being the worst.

LOS for signalized intersections is determined by the overall intersection operations and is reflected in average delay per vehicle. LOS D or better is typically considered acceptable for signalized intersections.

LOS for a two-way stop-controlled (TWSC) intersection is determined by the delay of the poorest performing minor approach, as LOS is not defined for TWSC intersections as a whole. It is not unusual for minor stop-controlled side streets and driveways on major streets to experience longer delays at LOS E and LOS F during peak hours while the majority of the traffic moving through the corridor typically experiences little or no delay.

Capacity analyses were performed for the Existing AM and PM peak hour conditions for the following intersections:

- Buckwalter Parkway at Cassidy Street
- Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1
- Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2
- Buckwalter Parkway at Parkside Drive/Mott Street
- Buckwalter Parkway at Ludlow Street
- Buckwalter Parkway at Kroger Gas Driveway
- Buckwalter Parkway at Innovation Drive
- Buckwalter Parkway at Progressive Street
- Buckwalter Parkway at Buckwalter Place Boulevard

Table 4 summarizes LOS and control delay (average seconds of delay per vehicle) for the Existing AM and PM peak hour conditions at the study area unsignalized intersections.

Based on the results of the analysis shown in **Table 4**, the following intersection approaches are currently operating with elevated delay: Buckwalter Parkway at Berkeley Place Driveway #1 (AM and PM peak hour conditions), Buckwalter Parkway at Pinellas Drive South (AM and PM peak hour conditions), Buckwalter Parkway at Parkside Drive (AM and PM peak hour conditions), and Buckwalter Parkway at Innovation Drive (PM peak hour conditions).

**Table 4:
2021 Level of Service and delay (average seconds per vehicle)**

Intersection	Traffic Control ¹	Approach Direction	Existing Conditions	
			AM Peak Hour	PM Peak Hour
Buckwalter Parkway at Cassidy Drive	U	WB	C (19.1)	C (16.9)
Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1	U	EB	E (42.3)	F (60.5)
		WB	C (20.2)	D (26.8)
Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2	U	EB	C (19.5)	D (33.9)
		WB	F (50.5)	F (*)
Buckwalter Parkway at Parkside Drive/Mott Street	U	EB	A (0.0)	A (0.0)
		WB	F (156.2)	F (298.1)
Buckwalter Parkway at Ludlow Street	U	EB	D (25.5)	C (24.6)
Buckwalter Parkway at Kroger Fuel Driveway ³	U	EB	B (11.1)	B (11.4)
Buckwalter Parkway at Innovation Drive	U	EB	D (29.8)	F (120.0)
Buckwalter Parkway at Progressive Street	U	EB	B (11.3)	B (12.6)

1. U= Unsignalized, S= Signalized
2. * = Estimated delay exceeds 300 seconds per vehicle
3. Estimated traffic volumes based on calculated trip generation and adjacent intersection traffic volumes

4.0 Future/Planned Conditions

Future traffic volumes were based on a combination of historic data, approved developments, and regional travel demand model data.

4.1 LATS Model – LRTP and 2040 Daily Traffic Volumes

The Lowcountry Area Transportation Study (LATS) travel demand model projected future traffic volumes along this corridor as part of the Long Range Transportation Plan (LRTP) for the metropolitan planning organization (MPO).

The 2010 AADT for this segment of Buckwalter Parkway in the LATS model was 10,600 vpd. The 2040 loaded network AADT for this segment was approximately 15,000 vpd with a volume to capacity ratio of 0.67, resulting in a level of service B.

The annual growth rate based on the traffic model volumes from year 2010 and year 2040 was 1.5% per year.

4.2 Planned Developments

There are two developments that have been approved along the corridor but have not yet been constructed, Willow Run and Bluffton Commons. **Figure 8** shows the current planned unit developments along the corridor per Town of Bluffton GIS.

Willow Run is a planned unit development in the Town of Bluffton that encompasses the area on the east side of the corridor east of the development on Pinellas Drive generally between US 278 and the existing neighborhoods. This development will be accessed on Buckwalter Parkway via Cassidy Drive, Pinellas Drive North and Pinellas Drive South.

Bluffton Commons is located west of Buckwalter Parkway between Mott Street and Ludlow Street. The proposed development is planned to include 100,000 square feet (sf) of retail space, a 100-room hotel, a 100-bed assisted living facility, and 100 mid-rise apartments. Bluffton Commons will access Buckwalter Parkway at Mott Street and Ludlow Street.

4.3 Developments Submitted for Consideration

The May River Marketplace is a development under consideration east of Buckwalter Parkway between Parkside Drive and Ludlow Street. The site is currently planned to have approximately 42,000 square feet of retail space and 6,000 square feet of retail space. Access for this project would be via Parkside Drive and a new access point across from Ludlow Street.

4.4 Year 2030 Projected Traffic Volumes

Year 2030 projected traffic volumes for the corridor were determined using a combination of historic growth for the non-specific growth and specific development traffic for the Bluffton Commons and May River Marketplace projects. For non-specific growth, a 2%/year growth rate was used for the Buckwalter Parkway corridor while a 1%/year growth rate was used for side street traffic volumes.

Table 5 summarizes LOS and control delay (average seconds of delay per vehicle) for the projected Year 2030 AM and PM peak hour conditions at the study area intersections.

Table 5: Level of Service and delay (average seconds per vehicle) 2030 Scenario 2 Conditions				
Intersection	Traffic Control ¹	Approach Direction	Existing Conditions	
			AM Peak Hour	PM Peak Hour
Buckwalter Parkway at Cassidy Drive	U	WB	D (31.1)	D (27.4)
Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1	S	N/A	A (5.5)	A (9.5)
Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2	U	EB	B (11.9)	B (14.8)
		WB	C (15.3)	B (14.8)
Buckwalter Parkway at Parkside Drive/Mott Street	S	N/A	A (9.4)	B (10.7)
Buckwalter Parkway at Ludlow Street	U	EB	B (12.4)	D (29.7)
		WB	B (12.9)	B (13.0)
Buckwalter Parkway at Kroger Fuel Driveway ²	S	N/A	A (3.4)	A (6.6)
Buckwalter Parkway at Innovation Drive	U	EB	B (12.4)	B (14.9)
Buckwalter Parkway at Progressive Street	U	EB	B (11.2)	C (16.3)

1. U= Unsignalized, S= Signalized
2. Estimated traffic volumes based on calculated trip generation and adjacent intersection traffic volumes
3. N/A = Average delay per vehicle shown for overall intersection

The 2030 analysis assumed that the three planned intersections are signalized for the purposes of the study. These traffic signals would need to be warranted prior to installation.

Based on the 2030 analysis shown in **Table 5**, all intersections in Scenario 2 are projected to operate at LOS D or better.

5.0 Benefits of Access Management

Based on information provided by the Federal Highway Administration (FHWA) in “What is Access Management?”, access management is the proactive management of vehicular access points to land parcels adjacent to all manner of roadways. In general, as the number of vehicular access points increases, the number of conflict points along a roadway also increases, which causes a decrease in mobility. **Figure 9** shows the relationship between mobility and access within the Roadway Functional Hierarchy.

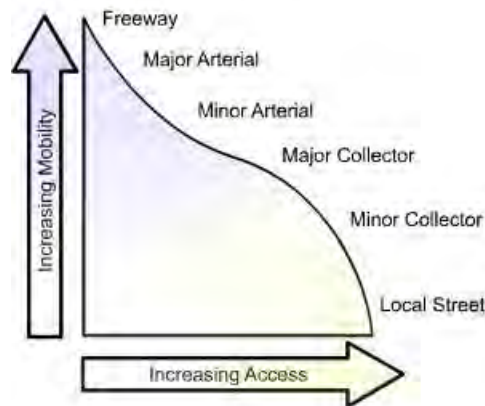


Figure 9: Conceptual Roadway Functional Hierarchy

Source: Figure 1 “What is Access Management?”, FHWA. https://ops.fhwa.dot.gov/access_mgmt/what_is_accsmgmt.htm

FHWA identifies the following five main types of access management that can be applied to the transportation system: signalized intersection spacing (signal density), driveway spacing, turning lanes (implementation of designated left- and right-turn lanes at intersections), median treatments, and right-of-way management. Implementation of access management has been found to increase roadway capacity, reduce crashes, and provide economic benefit.

Guide for the Analysis of Multimodal Corridor Access Management (National Cooperative Highway Research Program (NCHRP) Research Report 900, 2018) found that travel speeds increase by two to three miles per hour (mph) for each one-signal-per-mile reduction. This report also shows that as the number of signals per mile decreases, the crash rate (in crashes per million vehicle miles) decreases as well. **Table 6** shows the average crash rate by signal density.

This report also found that providing left-and right-turn lanes increases free-flow and travel speeds along a corridor by a few miles per hour and decreases crash rates. The installation of left-turn lanes has a more significant impact on the reduction of crash rates than right-turn lanes.

Table 6: Average crash rates by different ranges of traffic signal densities	
Signals Per Mile	Crash Rate (crashes per million vehicle miles)
≤ 2	3.5
2.01 – 4	6.9
4.01 – 6	7.5
> 6	9.1

Source: Table 21 *Guide for the Analysis of Multimodal Corridor Access Management*, NCHRP Research Report 900, 2018)

Installing an access management plan that uses techniques such as installing non-traversable medians or restricting driveway spacing can often create some concern from business owners along a corridor due to there being limited access to their property. However, based on multiple studies compiled by FHWA in “Intersection Proven Safety Countermeasure”, access management plans were shown to have little to no negative impact on business operations across many parts of the United States. In some cases, businesses reported sales increases or property value increases after access management plans were completed.

Access management plans are created to improve the efficiency and the safety of a roadway. Studies have shown that implementing access management techniques along a roadway can increase free-flow and travel speeds as well as decrease the number of accidents that can occur. Access management plans have also shown in some cases to be economically beneficial for businesses as well.

6.0 Access Management Plan

Based on the principles outlined in Section 5.0, the existing conditions and building on the previous 2007 Access Management Plan, an updated Access Management Plan was developed for the Buckwalter Parkway corridor for the study area.

Figures 3A and 3B show each intersection along the corridor, the distance of each intersection from US 278 and the spacing between each of the intersections.

6.1 Signalized Intersection Spacing

The existing intersections on the Buckwalter Parkway corridor are approximately 1,000 feet apart.

The goal for this corridor from the 2007 plan is 1,500 to 1,700 feet spacing between signalized intersections to “allow progression speeds along Buckwalter Parkway that are in the 30 mph range.” The SCDOT Access and Roadside Management Standards (ARMS) Manual (2012) guidelines for intersection spacing is 1,320 feet between signalized intersections in urban areas and 2,640 feet between signalized intersection in rural areas.

Therefore, based on the preferred spacing of the signalized access points, two scenarios for proposed future signalized intersections were found to be feasible:

- Scenario 1: Consistent with existing access management plan - Signalized intersections at Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2, Buckwalter Parkway at Ludlow Street, Buckwalter Parkway at Innovation Drive and Buckwalter Parkway at Buckwalter Place Boulevard
- Scenario 2: Signalized intersections at Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1, Buckwalter Parkway at Parkside Drive/Mott Street, Buckwalter Parkway at Kroger Fuel Center Drive, and Buckwalter Parkway at Buckwalter Place Boulevard

Table 7 shows the signalized intersection spacing for each Scenario.

Table 7: Signalized Intersection Spacing by Scenario		
Segment Start	Segment End	Approximate Distance between Intersections (feet)
Scenario 1		
US 278	Pinellas Drive South/Berkeley Place Driveway #2	2,946
Pinellas Drive South/Berkeley Place Driveway #2	Ludlow Street	1,960
Ludlow Street	Innovation Drive	1,585
Innovation Drive	Buckwalter Place Boulevard	995
Buckwalter Place Boulevard	Bluffton Parkway	1,077
Scenario 2		
US 278	Pinellas Drive North/Berkeley Place Driveway #1	2,026
Pinellas Drive South/Berkeley Place Driveway #1	Mott Street/Parkside Drive	1,788
Mott Street/Parkside Drive	Kroger Fuel Center Drive	2,176
Kroger Fuel Center Drive	Buckwalter Place Boulevard	1,496
Buckwalter Place Boulevard	Bluffton Parkway	1,077

This study area on Buckwalter Parkway extends to just before Bluffton Parkway (north) signalized intersection. The recommended signalized intersection spacing goal of approximately 2,000 feet between signalized intersections should be applied for the remainder of Buckwalter Parkway to SC 46, as appropriate, to maximize the efficiency of the corridor. This spacing should be reviewed, and the exact locations of these signalized intersections should be studied further as projects develop in the remaining section of the Buckwalter Parkway corridor.

6.2 Scenario Advantages

The advantages of the two scenarios are summarized below.

Advantages for Scenario 1:

- Consistent with planning based on 2007 Access Management Plan for corridor
- Existing geometric configuration of the intersection of Buckwalter Parkway at Pinellas Drive South/Berkeley Place Driveway #2 is more conducive for future signalization with fewer improvements required than signalization of the intersection of Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1 in Scenario 2

Advantages for Scenario 2:

- A connection to Woodbridge community across from Ludlow Street as shown in the 2007 access management plan is not feasible based on the current development layout; the plan allows for planned signalization for Washington Square and Parkside Drive at an adjusted location
- Increased minimum traffic signal spacing on corridor
- Remove all unsignalized full access intersections

Both scenarios include:

- Improved connectivity along corridor and to adjacent properties

6.3 Connections and Cross Access Opportunities

Cross access and connectivity allow for travel between the parcels along Buckwalter Parkway. This reduces travel along Buckwalter Parkway and reduces the number of access and egress movements at intersections along the corridor.

The following new roadway connections continue to be recommended along the corridor:

- New roadway between US 278 and Berkeley Place Driveway 1 on the west side of Buckwalter Parkway
- New east-west roadway from Cassidy Drive to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- New north-south roadway between Cassidy Drive and Pinellas Drive North

- New east-west roadway from Pinellas Drive North to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- Realignment and installation of new Berkeley Place Driveway 1, connecting to the Berkeley Place parking area further west and removing the existing curve and parking lot connection
- New east-west roadway from Pinellas Drive South to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- New north-south roadway between Pinellas Drive South and Parkside Drive
- Complete north-south connection between Berkeley Place and Bluffton Commons
- New north-south roadway between Innovation Drive and Bluffton Commons
- Conversion of Kroger Fuel Center Drive to full access intersection and installation of a new east-west roadway connecting to the new north-south access roads parallel to Buckwalter Parkway
- New north-south access roadway on the east side of Buckwalter Parkway, connecting the new Kroger Fuel Center Drive intersection and Buckwalter Towne Boulevard
- New connector between Lord of Life Church Road and new north-south access road
- Relocation of intersection of Bluffton Parkway at Buckwalter Parkway intersection (by others)

As recommended in the 2007 plan, cross access between the Berkeley Place development and Bluffton Commons development is recommended. It is our understanding that the Bluffton Commons' portion of the connection has been constructed.

Additional cross access connectivity is recommended as feasible.

6.4 Summary

Based on a review of the corridor and the associated data, the recommended access management plan is shown in **Figures 3A and 3B (Appendix)** and the access locations are listed below by type of access. Existing intersection types are noted.

- Signalized Intersection Access
 - Buckwalter Place Boulevard/Lord of Life Driveway (existing)
- Signalized Intersection Access (when warranted)
 - Berkeley Place Driveway #1/Pinellas Drive North (roadway improvements will be required)
 - Mott Street/Parkside Drive
 - Kroger Fuel Driveway
- Full Unsignalized Intersection Access
 - Cassidy Drive
- Right-in, right-out Intersection Access
 - Berkeley Place Driveway #2/Pinellas Drive South
 - Ludlow Street

- Innovation Drive
- Progressive Street (existing)
- Right-in only Intersection Access
 - Buckwalter Place Driveway (existing)

With the implementation of the access management plan, the intersection of Berkeley Place Driveway #1/Pinellas Drive North will require improvements on both side street approaches prior to redesign and signalization of the intersection. These improvements would include but are not limited to increase in throat distance, installation of turn lanes, and sight distance improvements. All improvements should be based on Beaufort County and SCDOT standards.

In addition, this plan recommends the previously planned and new roadway connection improvements along the corridor. These are shown in **Figures 3A and 3B (Appendix)** as dashed lines. The exact location and design of these connection are conceptual in nature and are expected to be refined in the design process.

- New roadway between US 278 and Berkeley Place Driveway 1 on the west side of Buckwalter Parkway
- New east-west roadway from Cassidy Drive to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- New north-south roadway between Cassidy Drive and Pinellas Drive North
- New east-west roadway from Pinellas Drive North to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- Realignment and installation of new Berkeley Place Driveway 1, connecting to the Berkeley Place parking area further west and removing the existing curve and parking lot connection
- New east-west roadway from Pinellas Drive South to the future Willow Run development and the planned north/south roadway that will connect future Bluffton Parkway to US 278 near Eagle's Pointe
- New north-south roadway between Pinellas Drive South and Parkside Drive
- Complete north-south connection between Berkeley Place and Bluffton Commons
- New north-south roadway between Innovation Drive and Bluffton Commons
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- New north-south access roadway on the east side of Buckwalter Parkway, connecting the new Kroger Fuel Center Drive intersection and Buckwalter Towne Boulevard
- New connector between Lord of Life Church Road and new north-south access road
- Relocation of intersection of Bluffton Parkway at Buckwalter Parkway intersection (by others)

This study area on Buckwalter Parkway extends to just before Bluffton Parkway (north) signalized intersection. The recommended signalized intersection spacing goal of approximately 2,000 feet between

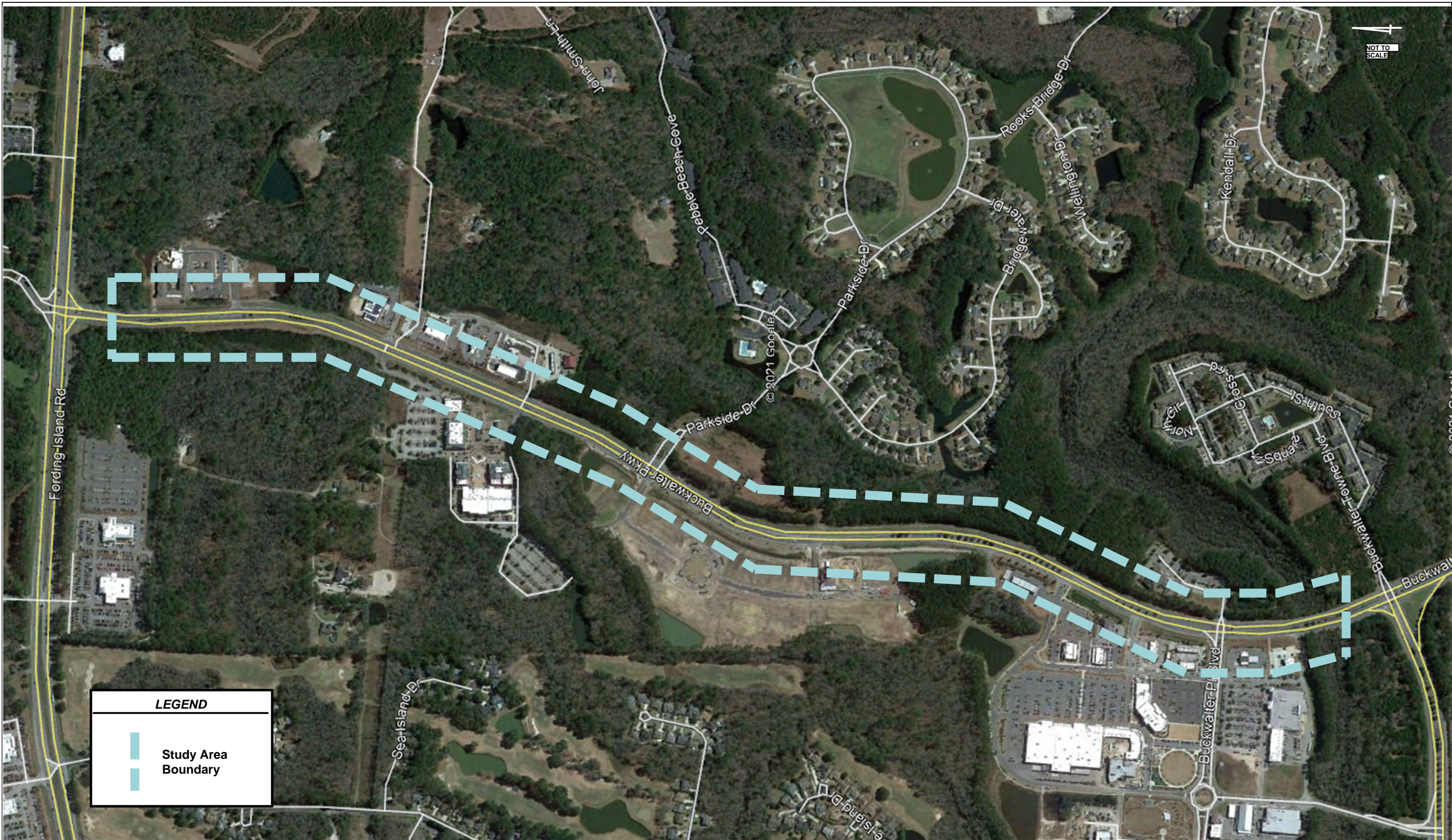
signalized intersections should be applied for the remainder of Buckwalter Parkway to SC 46, as appropriate, to maximize the efficiency of the corridor. This spacing should be reviewed, and the exact locations of these signalized intersections should be studied further as projects develop in the remaining section of the Buckwalter Parkway corridor.

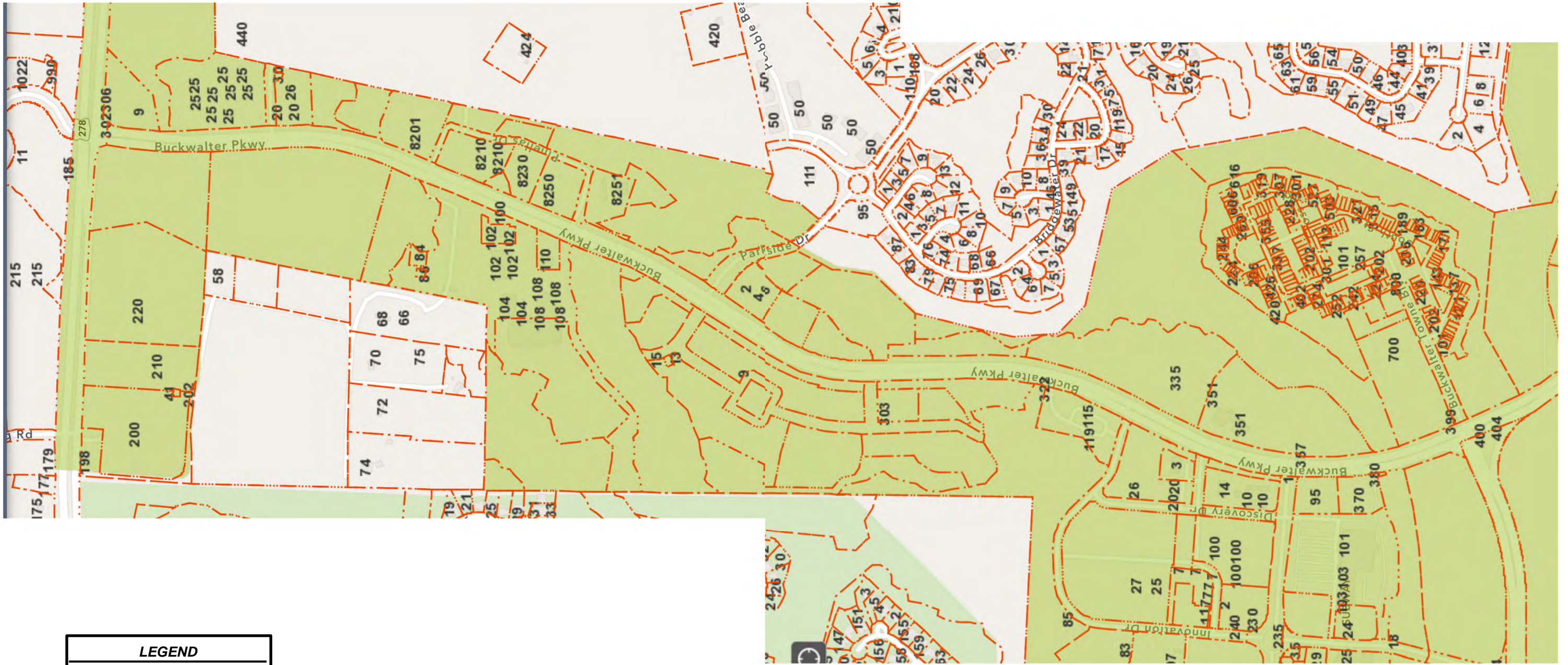
6.5 Next Steps

The following steps should be completed in the near term:


- Installation of a new roadway between Innovation Drive and Bluffton Commons – it is our understanding that an existing wetlands permit will expire in the near term
- Development of conceptual design of the intersection of Buckwalter Parkway at Pinellas Drive North/Berkeley Place Driveway #1
- Coordination and additional planning of the connection roadways with the Town of Bluffton
- Coordination with property owners along the corridor regarding the updated access management plan for the corridor
- Perform traffic signal warrant analysis for planned signalized intersection locations

Appendix





LEGEND

 Bluffton Town Limits

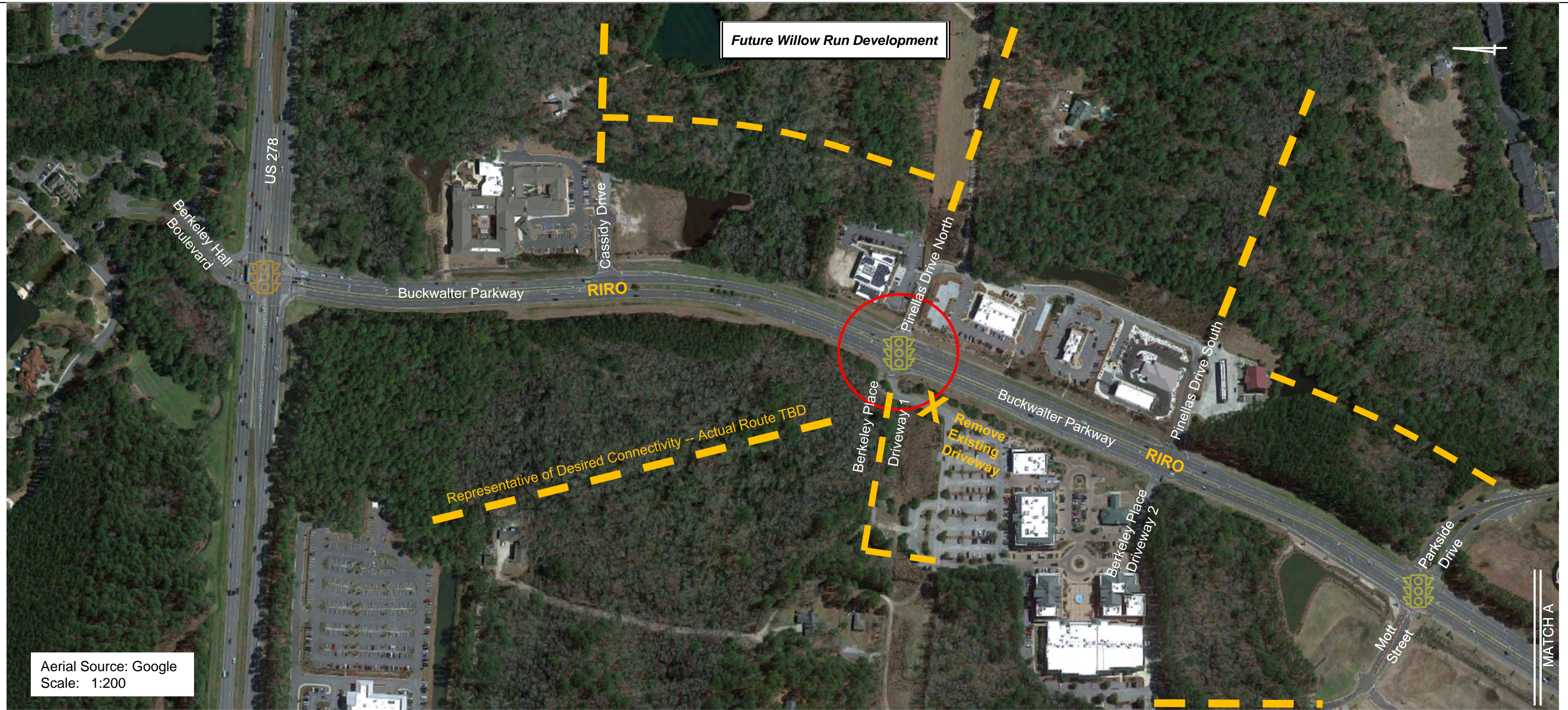
Source: Beaufort County GIS



Buckwalter Access Management Plan Update

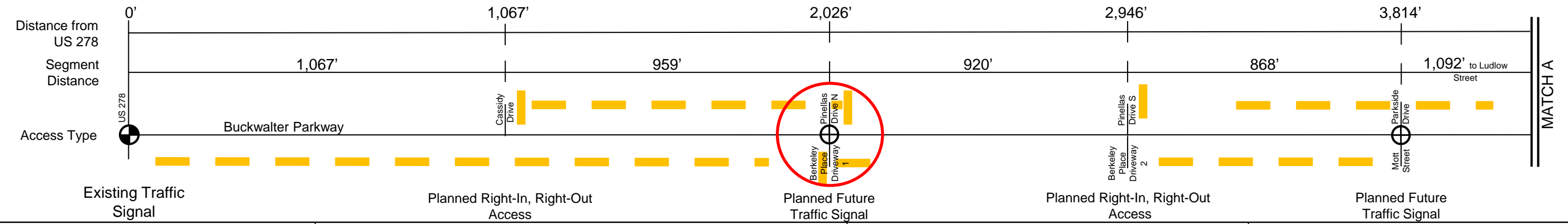
Bluffton Town Limits

Figure 2



Aerial Source: Google
Scale: 1:200

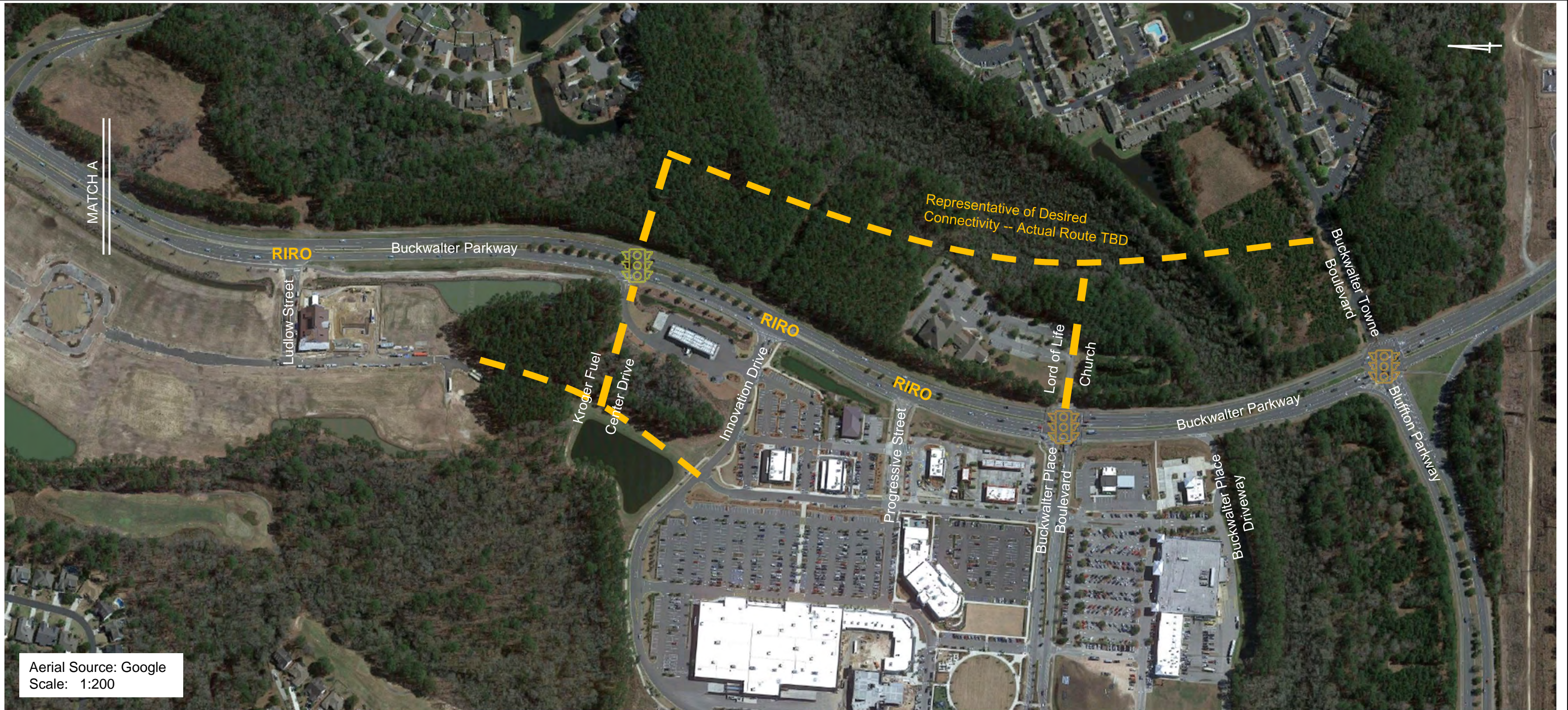
Legend	
Cross Access Connection	
Improvements Required	



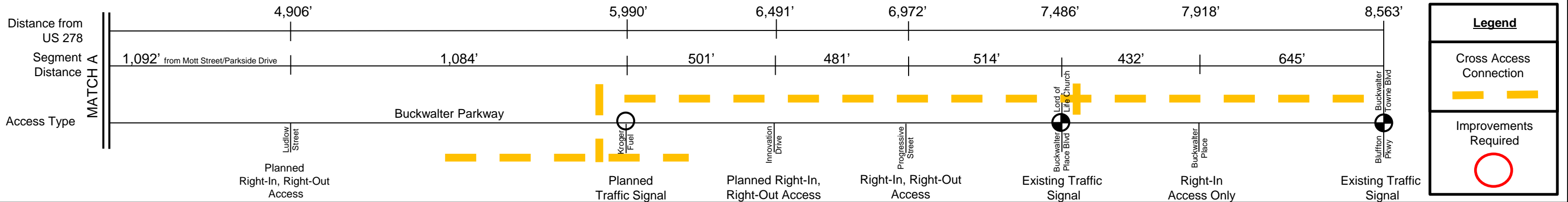
Buckwalter Access Management Plan Update

Access Management Plan

Figure 3A



Aerial Source: Google
Scale: 1:200



Legend

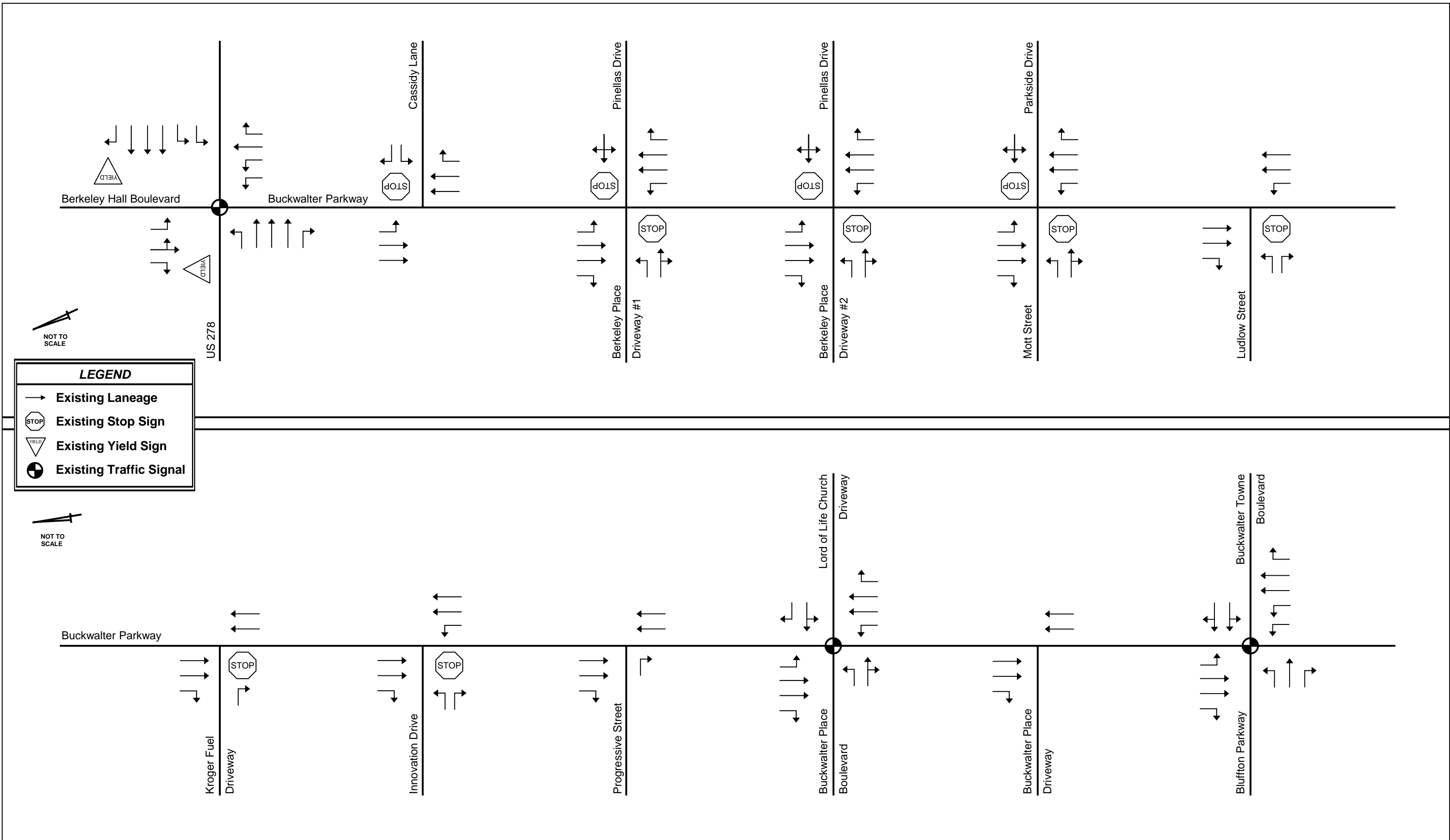
- Cross Access Connection
- Improvements Required



Buckwalter Access Management Plan Update

Access Management Plan

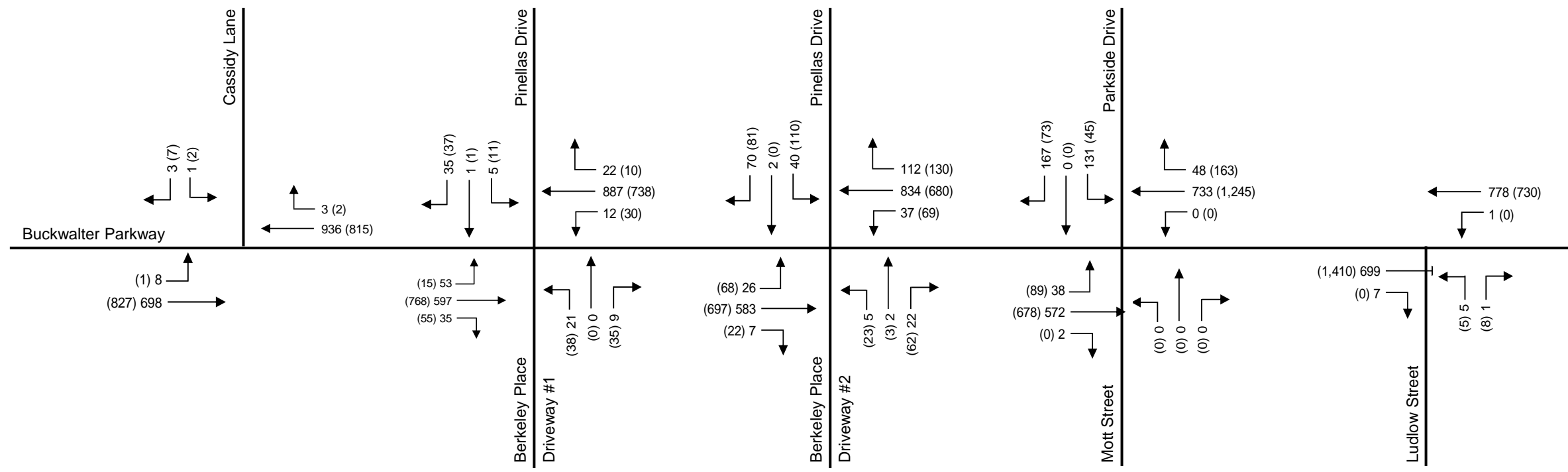
Figure 3B



Buckwalter Access Management Plan Update

Existing Laneage

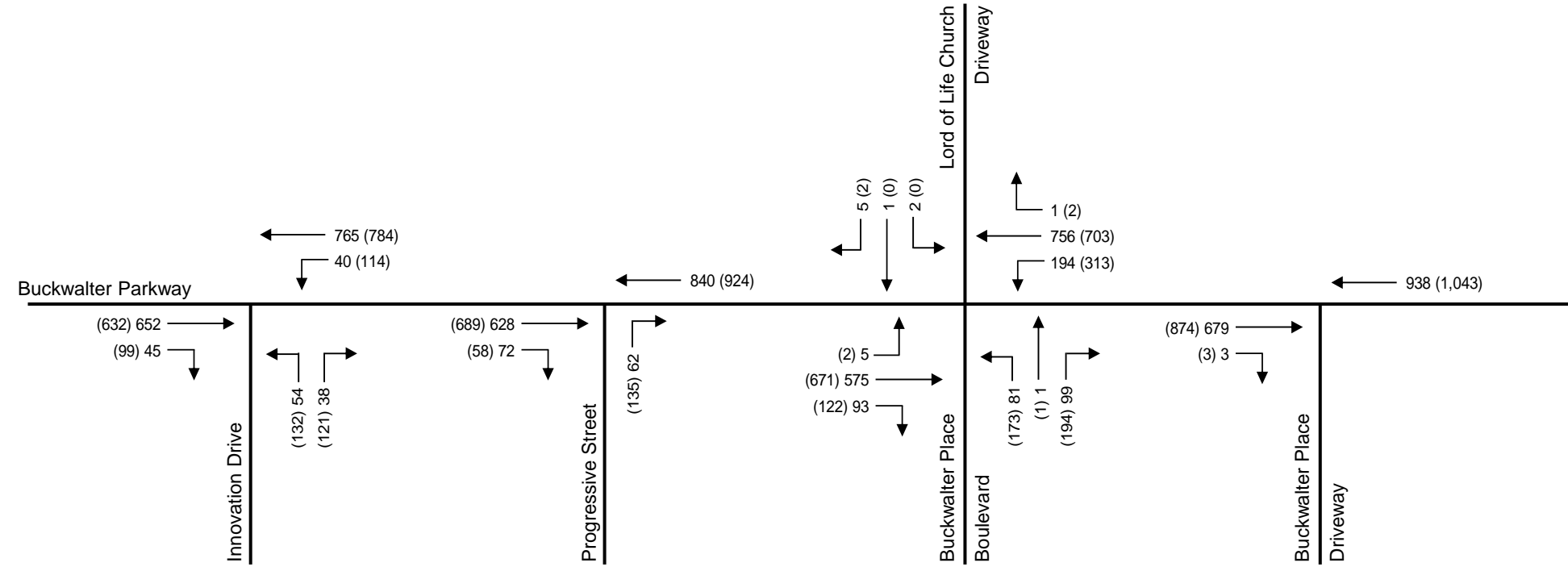
Figure 4



NOT TO SCALE

LEGEND

XX AM Peak Hour Traffic
 (XX) PM Peak Hour Traffic



NOT TO SCALE

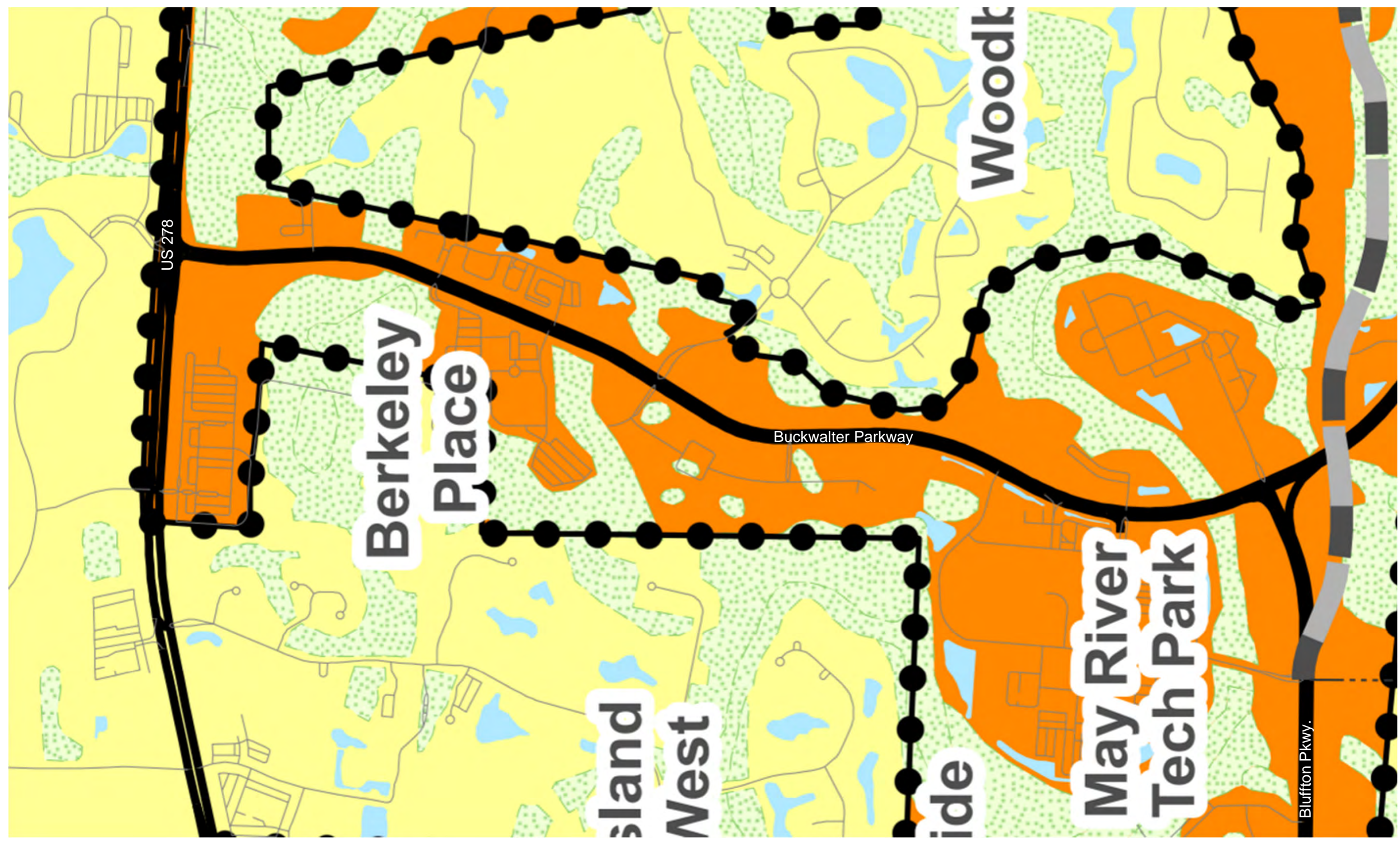


Buckwalter Access Management Plan Update

Existing Traffic Volumes

Figure 5

NOT TO SCALE



Town of Bluffton
Beaufort County, SC

GROWTH MANAGEMENT
DEPARTMENT

**BLUFFTON
WATER
RESOURCES**

Adopted: 9/04/2007
Revised: 12/09/2014
Updated: 1/13/2021

- Legend**
- JURISDICTIONAL**
- Bluffton
 - Hilton Head Island
 - Hardeeville
 - Beaufort County
 - Jasper County
 - Bluffton Town Limits
- TRANSPORTATION**
- Roads
 - Interstate
 - Bluffton Parkway (Proposed)
- HYDROLOGY**
- Water
 - Marsh
 - Wetland

Source: Town of Bluffton GIS



**Buckwalter Access Management Plan
Update**

Wetlands along Corridor

Figure 6

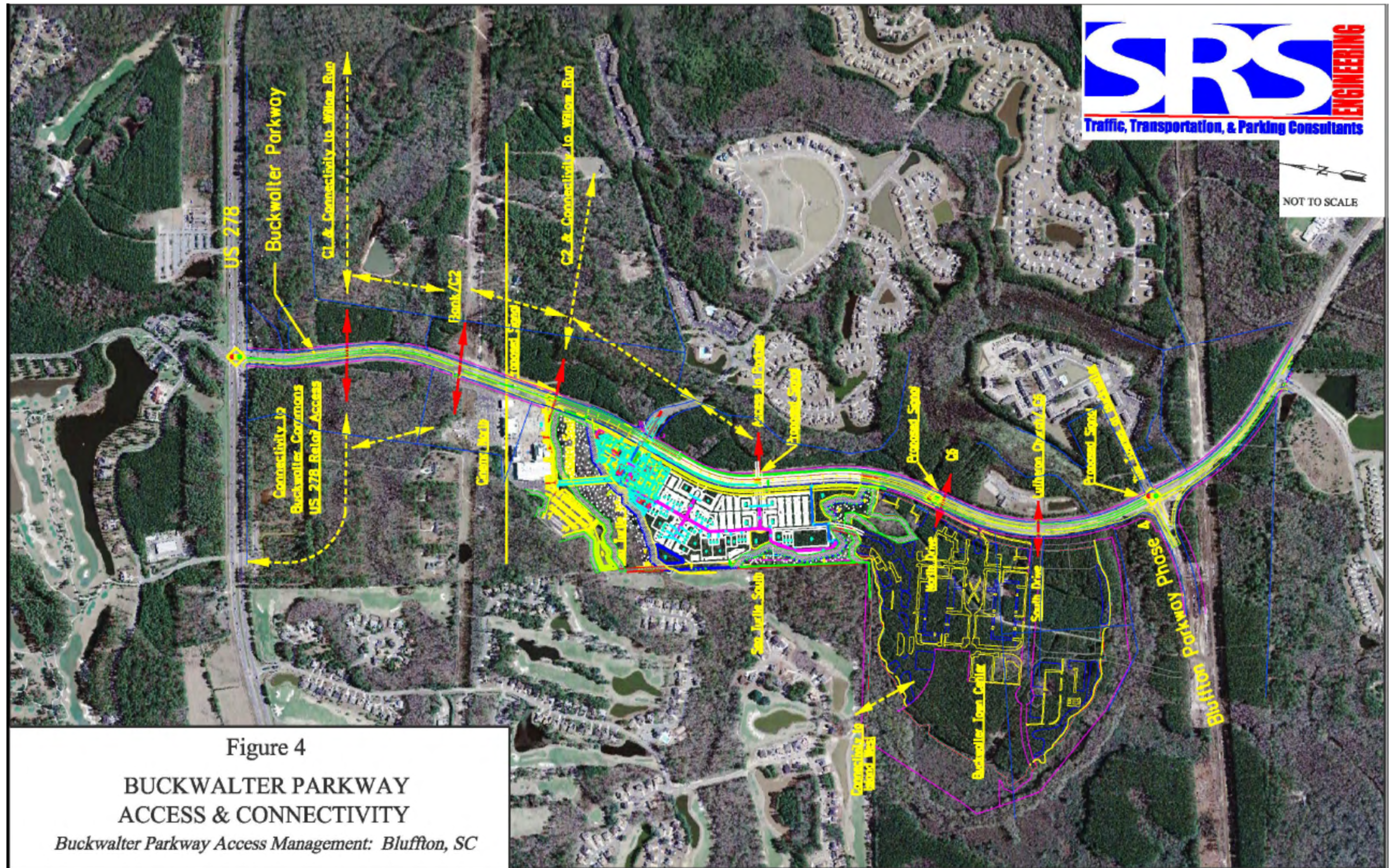
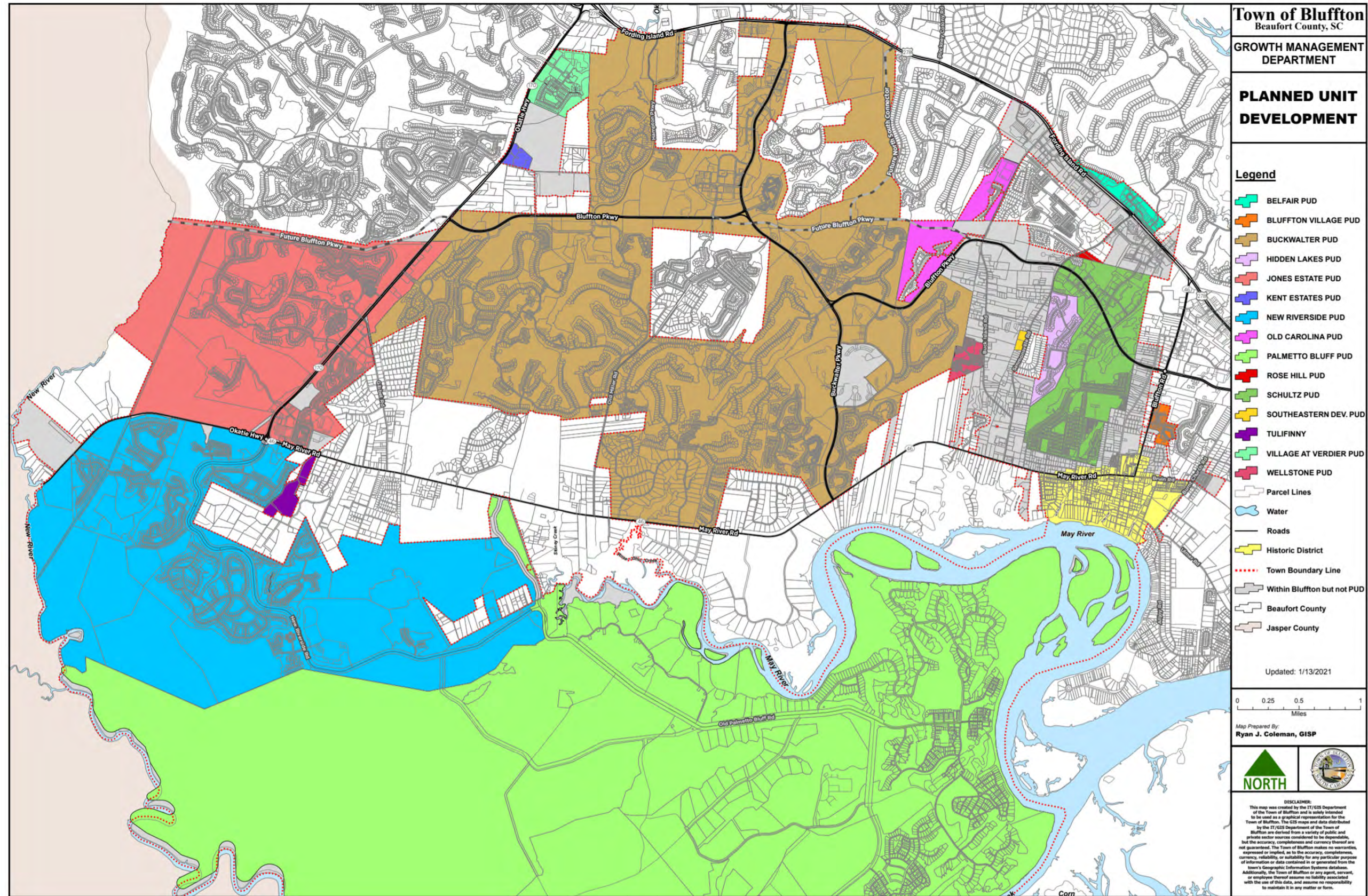


Figure 4
**BUCKWALTER PARKWAY
 ACCESS & CONNECTIVITY**
Buckwalter Parkway Access Management: Bluffton, SC



Source: Town of Bluffton GIS



Buckwalter Access Management Plan Update

Town of Bluffton PUD Boundaries

Figure 8

SHORT COUNTS

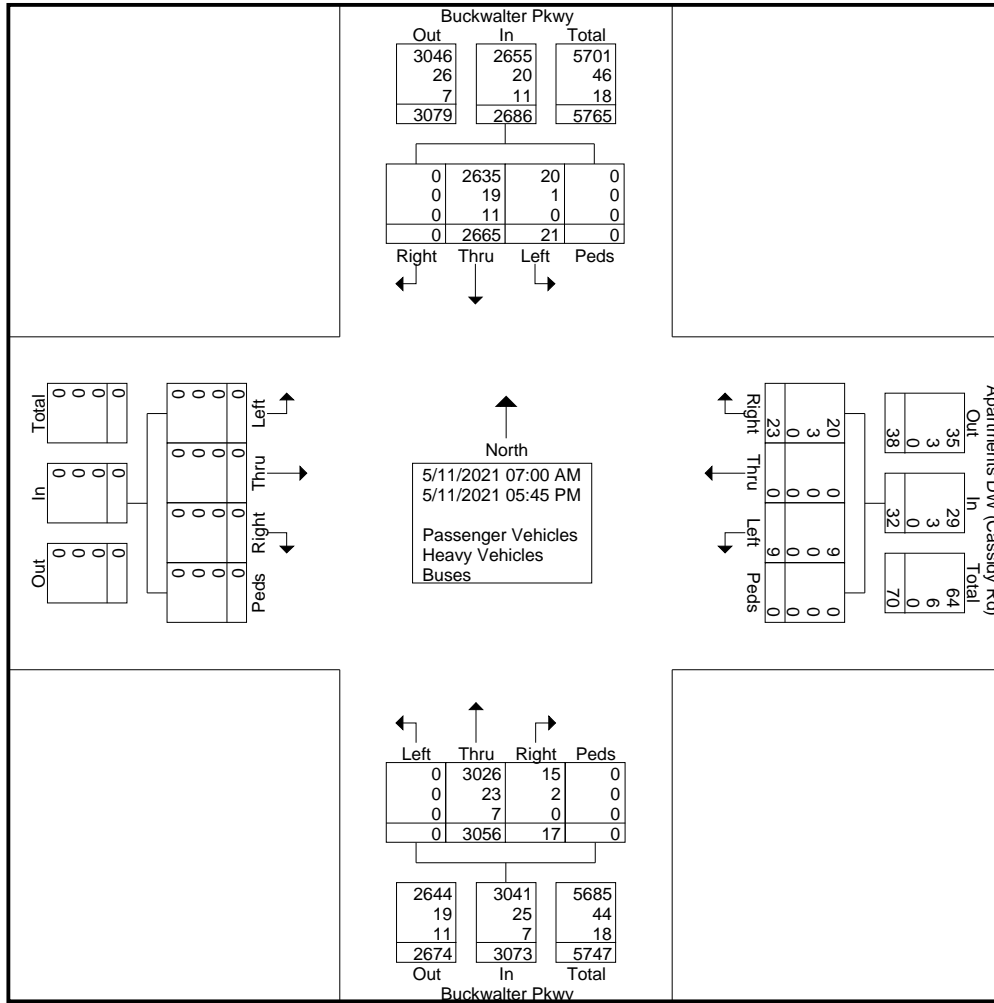
File Name : Buckwalter Pkwy @ Apartments DW (Cassidy St)
 Site Code :
 Start Date : 5/11/2021
 Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				Apartments DW (Cassidy Rd) From East				Buckwalter Pkwy From South				From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	3	81	0	0	0	0	1	0	0	161	0	0	0	0	0	0	246
07:15 AM	2	121	0	0	0	0	2	0	0	165	1	0	0	0	0	0	291
07:30 AM	1	158	0	0	1	0	1	0	0	211	0	0	0	0	0	0	372
07:45 AM	2	155	0	0	0	0	0	0	0	208	0	0	0	0	0	0	365
Total	8	515	0	0	1	0	4	0	0	745	1	0	0	0	0	0	1274
08:00 AM	1	159	0	0	0	0	0	0	0	197	1	0	0	0	0	0	358
08:15 AM	3	135	0	0	0	0	2	0	0	198	2	0	0	0	0	0	340
08:30 AM	2	138	0	0	0	0	2	0	0	180	5	0	0	0	0	0	327
08:45 AM	3	127	0	0	0	0	3	0	0	187	3	0	0	0	0	0	323
Total	9	559	0	0	0	0	7	0	0	762	11	0	0	0	0	0	1348
04:00 PM	1	209	0	0	0	0	0	0	0	201	1	0	0	0	0	0	412
04:15 PM	2	196	0	0	1	0	1	0	0	190	1	0	0	0	0	0	391
04:30 PM	0	204	0	0	4	0	3	0	0	173	0	0	0	0	0	0	384
04:45 PM	0	171	0	0	1	0	1	0	0	186	1	0	0	0	0	0	360
Total	3	780	0	0	6	0	5	0	0	750	3	0	0	0	0	0	1547
05:00 PM	1	191	0	0	0	0	4	0	0	232	1	0	0	0	0	0	429
05:15 PM	0	188	0	0	2	0	0	0	0	190	1	0	0	0	0	0	381
05:30 PM	0	201	0	0	0	0	3	0	0	217	0	0	0	0	0	0	421
05:45 PM	0	231	0	0	0	0	0	0	0	160	0	0	0	0	0	0	391
Total	1	811	0	0	2	0	7	0	0	799	2	0	0	0	0	0	1622
Grand Total	21	2665	0	0	9	0	23	0	0	3056	17	0	0	0	0	0	5791
Apprch %	0.8	99.2	0	0	28.1	0	71.9	0	0	99.4	0.6	0	0	0	0	0	
Total %	0.4	46	0	0	0.2	0	0.4	0	0	52.8	0.3	0	0	0	0	0	
Passenger Vehicles	20	2635	0	0	9	0	20	0	0	3026	15	0	0	0	0	0	5725
% Passenger Vehicles	95.2	98.9	0	0	100	0	87	0	0	99	88.2	0	0	0	0	0	98.9
Heavy Vehicles	1	19	0	0	0	0	3	0	0	23	2	0	0	0	0	0	48
% Heavy Vehicles	4.8	0.7	0	0	0	0	13	0	0	0.8	11.8	0	0	0	0	0	0.8
Buses	0	11	0	0	0	0	0	0	0	7	0	0	0	0	0	0	18
% Buses	0	0.4	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0.3

SHORT COUNTS

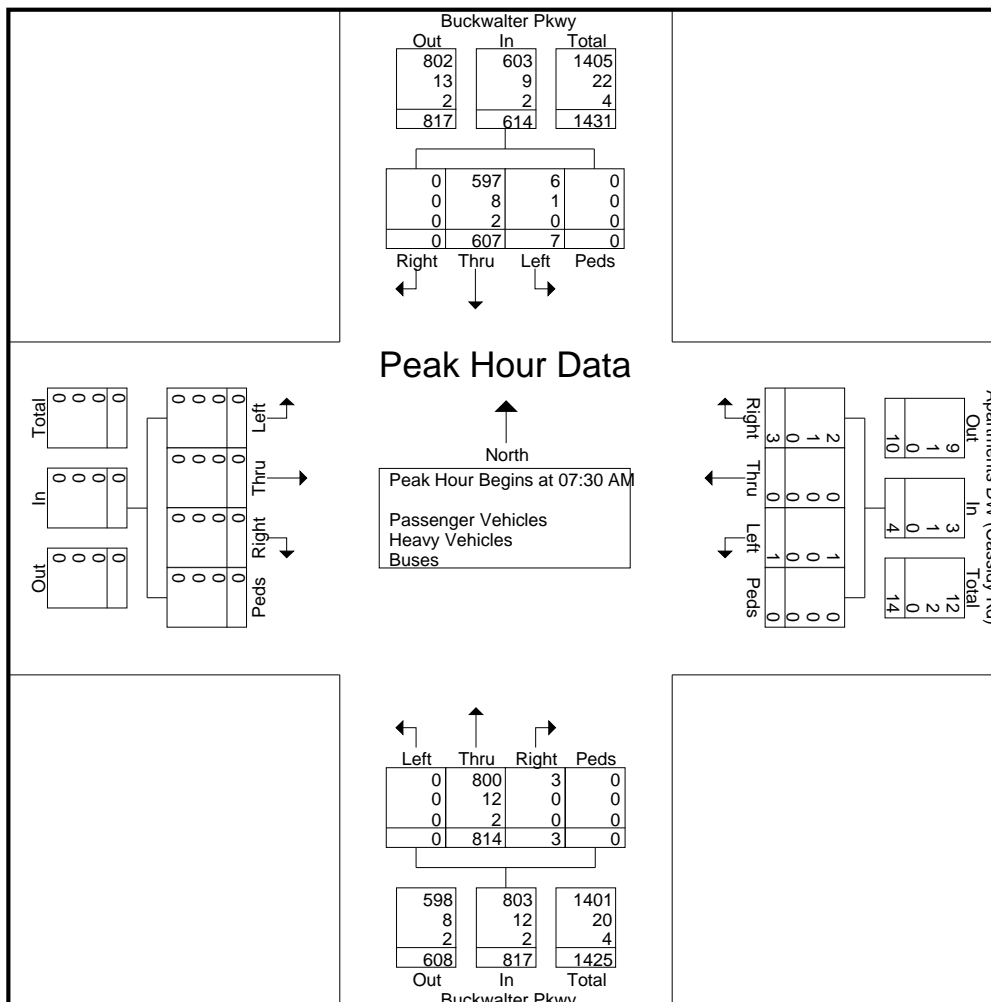
File Name : Buckwalter Pkwy @ Apartments DW (Cassidy St)
 Site Code :
 Start Date : 5/11/2021
 Page No : 2



SHORT COUNTS

File Name : Buckwalter Pkwy @ Apartments DW (Cassidy St)
 Site Code :
 Start Date : 5/11/2021
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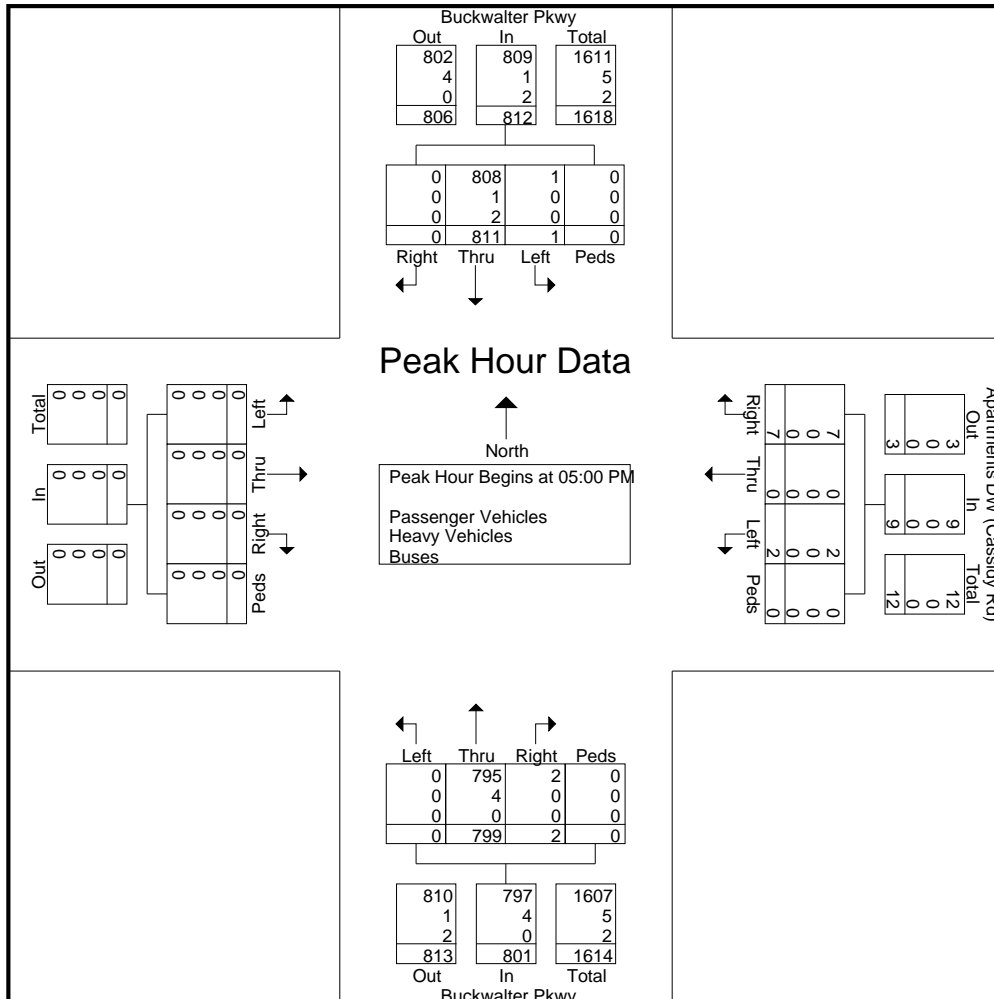
Start Time	Buckwalter Pkwy From North					Apartments DW (Cassidy Rd) From East					Buckwalter Pkwy From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	158	0	0	159	1	0	1	0	2	0	211	0	0	211	0	0	0	0	0	372
07:45 AM	2	155	0	0	157	0	0	0	0	0	0	208	0	0	208	0	0	0	0	0	365
08:00 AM	1	159	0	0	160	0	0	0	0	0	0	197	1	0	198	0	0	0	0	0	358
08:15 AM	3	135	0	0	138	0	0	2	0	2	0	198	2	0	200	0	0	0	0	0	340
Total Volume	7	607	0	0	614	1	0	3	0	4	0	814	3	0	817	0	0	0	0	0	1435
% App. Total	1.1	98.9	0	0		25	0	75	0		0	99.6	0.4	0		0	0	0	0		
PHF	.583	.954	.000	.000	.959	.250	.000	.375	.000	.500	.000	.964	.375	.000	.968	.000	.000	.000	.000	.000	.964
Passenger Vehicles	6	597	0	0	603	1	0	2	0	3	0	800	3	0	803	0	0	0	0	0	1409
% Passenger Vehicles	85.7	98.4						66.7				98.3									
Heavy Vehicles	1	8	0	0	9	0	0	1	0	1	0	12	0	0	12	0	0	0	0	0	22
% Heavy Vehicles	14.3	1.3	0	0	1.5	0	0	33.3	0	25.0	0	1.5	0	0	1.5	0	0	0	0	0	1.5
Buses	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
% Buses	0	0.3	0	0	0.3	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.3



SHORT COUNTS

File Name : Buckwalter Pkwy @ Apartments DW (Cassidy St)
 Site Code :
 Start Date : 5/11/2021
 Page No : 4

Start Time	Buckwalter Pkwy From North					Apartments DW (Cassidy Rd) From East					Buckwalter Pkwy From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	191	0	0	192	0	0	4	0	4	0	232	1	0	233	0	0	0	0	0	429
05:15 PM	0	188	0	0	188	2	0	0	0	2	0	190	1	0	191	0	0	0	0	0	381
05:30 PM	0	201	0	0	201	0	0	3	0	3	0	217	0	0	217	0	0	0	0	0	421
05:45 PM	0	231	0	0	231	0	0	0	0	0	0	160	0	0	160	0	0	0	0	0	391
Total Volume	1	811	0	0	812	2	0	7	0	9	0	799	2	0	801	0	0	0	0	0	1622
% App. Total	0.1	99.9	0	0		22.2	0	77.8	0		0	99.8	0.2	0		0	0	0	0	0	
PHF	.250	.878	.000	.000	.879	.250	.000	.438	.000	.563	.000	.861	.500	.000	.859	.000	.000	.000	.000	.000	.945
Passenger Vehicles	1	808	0	0	809	2	0	7	0	9	0	795	2	0	797	0	0	0	0	0	1615
% Passenger Vehicles		99.6										99.5									
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0.3
Buses	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



SHORT COUNTS

File Name : Buckwalter Pkwy @ Pinellas North

Site Code :

Start Date : 5/11/2021

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				Pinellas North From East				Buckwalter Pkwy From South				Shopping Access From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	5	72	2	0	1	0	6	0	0	151	2	0	3	0	0	0	242
07:15 AM	11	111	4	0	0	0	8	0	0	161	0	0	1	0	0	0	296
07:30 AM	10	142	1	0	3	0	4	0	1	215	4	0	0	0	1	0	381
07:45 AM	13	128	9	0	0	1	11	0	3	182	5	0	8	0	2	0	362
Total	39	453	16	0	4	1	29	0	4	709	11	0	12	0	3	0	1281
08:00 AM	12	141	8	0	1	0	6	0	4	189	5	0	5	0	4	0	375
08:15 AM	11	108	12	0	0	0	9	0	2	185	5	0	5	0	1	0	338
08:30 AM	11	116	9	0	1	0	6	0	1	182	0	0	3	0	0	0	329
08:45 AM	10	103	14	0	5	0	9	0	8	170	8	0	6	0	3	0	336
Total	44	468	43	0	7	0	30	0	15	726	18	0	19	0	8	0	1378
04:00 PM	7	186	17	0	3	1	5	0	9	189	3	0	13	0	9	0	442
04:15 PM	6	193	11	0	5	0	8	0	7	163	3	0	9	1	7	0	413
04:30 PM	2	188	12	0	5	0	9	0	7	167	5	0	5	1	5	0	406
04:45 PM	3	151	14	0	2	0	4	0	4	160	4	0	16	0	8	0	366
Total	18	718	54	0	15	1	26	0	27	679	15	0	43	2	29	0	1627
05:00 PM	1	179	15	0	5	0	14	0	7	205	4	0	17	0	6	1	454
05:15 PM	6	173	13	0	0	1	7	0	9	179	1	0	7	0	11	0	407
05:30 PM	4	184	9	0	4	0	4	0	5	204	2	0	7	0	8	0	431
05:45 PM	4	217	17	0	2	0	11	0	8	136	3	0	6	0	9	0	413
Total	15	753	54	0	11	1	36	0	29	724	10	0	37	0	34	1	1705
Grand Total	116	2392	167	0	37	3	121	0	75	2838	54	0	111	2	74	1	5991
Apprch %	4.3	89.4	6.2	0	23	1.9	75.2	0	2.5	95.7	1.8	0	59	1.1	39.4	0.5	
Total %	1.9	39.9	2.8	0	0.6	0.1	2	0	1.3	47.4	0.9	0	1.9	0	1.2	0	
Passenger Vehicles	114	2365	166	0	37	3	120	0	75	2809	54	0	111	2	74	1	5931
% Passenger Vehicles	98.3	98.9	99.4	0	100	100	99.2	0	100	99	100	0	100	100	100	100	99
Heavy Vehicles	2	17	1	0	0	0	1	0	0	22	0	0	0	0	0	0	43
% Heavy Vehicles	1.7	0.7	0.6	0	0	0	0.8	0	0	0.8	0	0	0	0	0	0	0.7
Buses	0	10	0	0	0	0	0	0	0	7	0	0	0	0	0	0	17
% Buses	0	0.4	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0.3

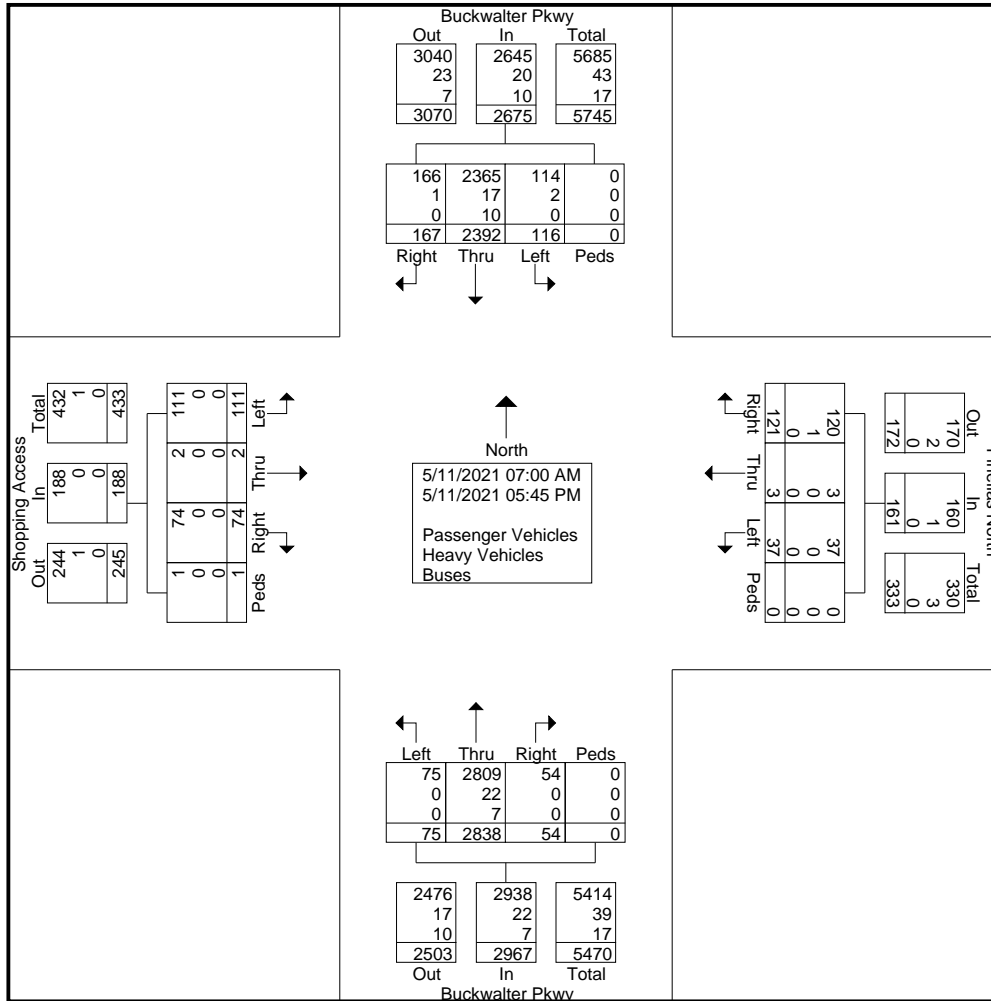
SHORT COUNTS

File Name : Buckwalter Pkwy @ Pinellas North

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SHORT COUNTS

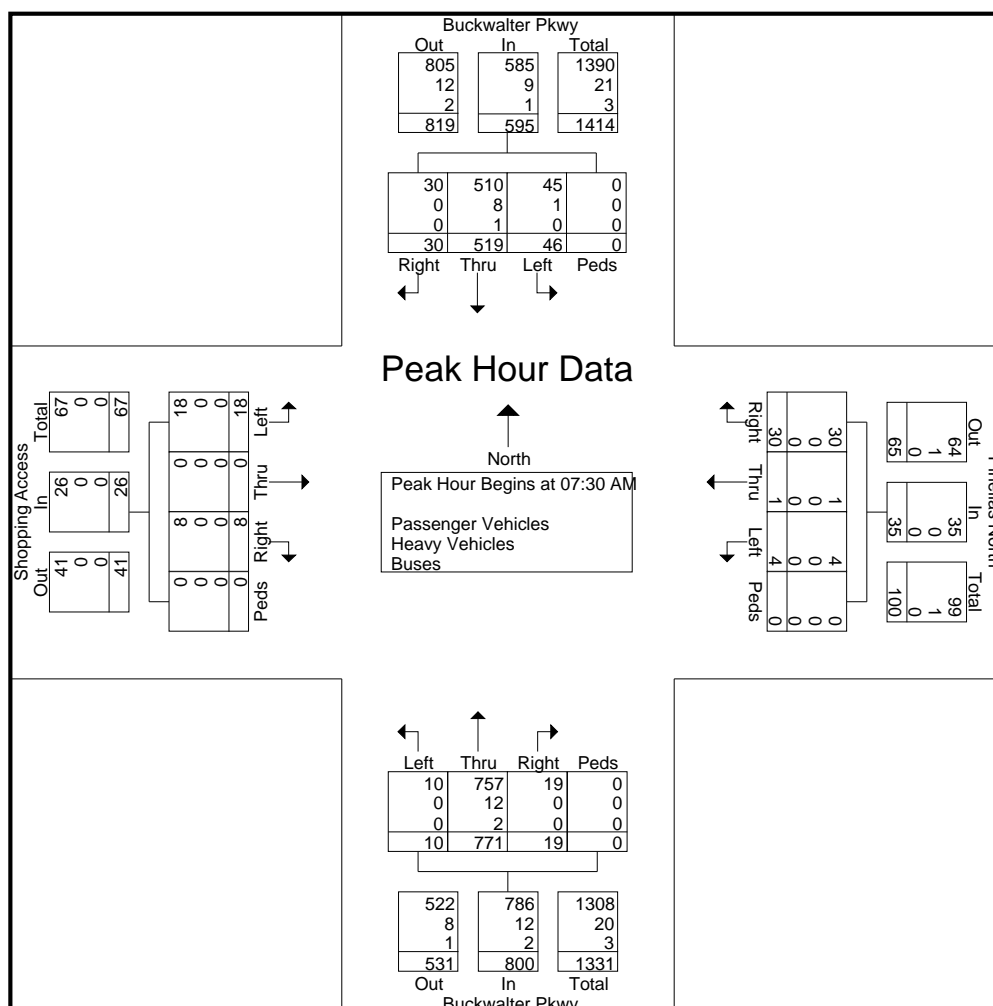
File Name : Buckwalter Pkwy @ Pinellas North

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Start Time	Buckwalter Pkwy From North					Pinellas North From East					Buckwalter Pkwy From South					Shopping Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	10	142	1	0	153	3	0	4	0	7	1	215	4	0	220	0	0	1	0	1	381
07:45 AM	13	128	9	0	150	0	1	11	0	12	3	182	5	0	190	8	0	2	0	10	362
08:00 AM	12	141	8	0	161	1	0	6	0	7	4	189	5	0	198	5	0	4	0	9	375
08:15 AM	11	108	12	0	131	0	0	9	0	9	2	185	5	0	192	5	0	1	0	6	338
Total Volume	46	519	30	0	595	4	1	30	0	35	10	771	19	0	800	18	0	8	0	26	1456
% App. Total	7.7	87.2	5	0		11.4	2.9	85.7	0		1.2	96.4	2.4	0		69.2	0	30.8	0		
PHF	.885	.914	.625	.000	.924	.333	.250	.682	.000	.729	.625	.897	.950	.000	.909	.563	.000	.500	.000	.650	.955
Passenger Vehicles	45	510	30	0	585	4	1	30	0	35	10	757	19	0	786	18	0	8	0	26	1432
% Passenger Vehicles	97.8	98.3									98.2										
Heavy Vehicles	1	8	0	0	9	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	21
% Heavy Vehicles	2.2	1.5	0	0	1.5	0	0	0	0	0	0	1.6	0	0	1.5	0	0	0	0	0	1.4
Buses	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.2



SHORT COUNTS

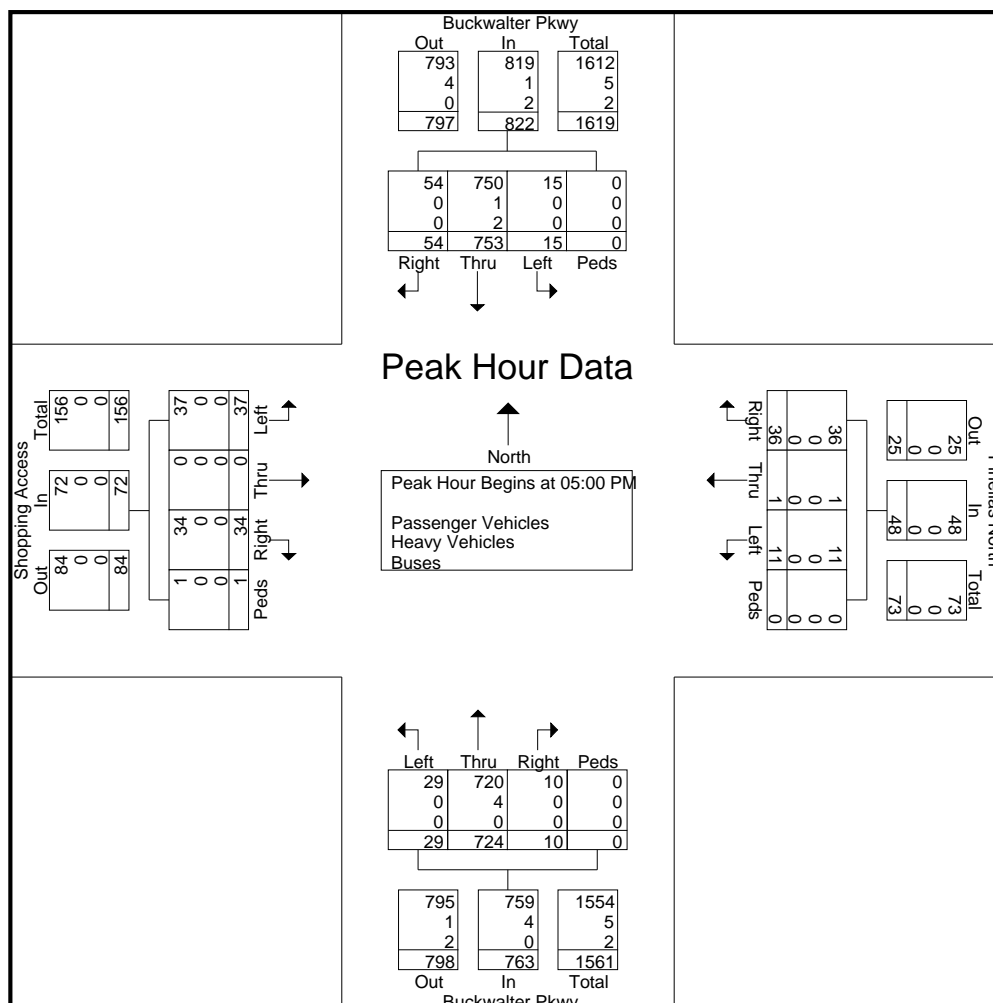
File Name : Buckwalter Pkwy @ Pinellas North

Site Code :

Start Date : 5/11/2021

Page No : 4

Start Time	Buckwalter Pkwy From North					Pinellas North From East					Buckwalter Pkwy From South					Shopping Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	179	15	0	195	5	0	14	0	19	7	205	4	0	216	17	0	6	1	24	454
05:15 PM	6	173	13	0	192	0	1	7	0	8	9	179	1	0	189	7	0	11	0	18	407
05:30 PM	4	184	9	0	197	4	0	4	0	8	5	204	2	0	211	7	0	8	0	15	431
05:45 PM	4	217	17	0	238	2	0	11	0	13	8	136	3	0	147	6	0	9	0	15	413
Total Volume	15	753	54	0	822	11	1	36	0	48	29	724	10	0	763	37	0	34	1	72	1705
% App. Total	1.8	91.6	6.6	0		22.9	2.1	75	0		3.8	94.9	1.3	0		51.4	0	47.2	1.4		
PHF	.625	.868	.794	.000	.863	.550	.250	.643	.000	.632	.806	.883	.625	.000	.883	.544	.000	.773	.250	.750	.939
Passenger Vehicles	15	750	54	0	819	11	1	36	0	48	29	720	10	0	759	37	0	34	1	72	1698
% Passenger Vehicles	99.6										99.4										
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0.6	0	0	0.5	0	0	0	0	0	0.3
Buses	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0.3	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



SHORT COUNTS

File Name : Buckwalter Pkwy @ Pinellas South

Site Code :

Start Date : 5/11/2021

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				Pinellas Dr South From East				Buckwalter Pkwy From South				Shopping Access From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	2	77	2	0	6	0	7	0	4	142	13	0	1	0	2	0	256
07:15 AM	5	98	1	0	4	1	16	0	9	143	18	0	2	1	1	0	299
07:30 AM	10	134	0	0	5	2	16	0	11	192	23	0	1	0	2	0	396
07:45 AM	3	120	1	0	12	0	11	0	7	182	29	0	2	1	3	0	371
Total	20	429	4	0	27	3	50	0	31	659	83	0	6	2	8	0	1322
08:00 AM	3	145	1	0	10	0	18	0	6	176	25	0	1	1	8	0	394
08:15 AM	7	108	4	0	8	0	16	0	8	175	20	0	0	0	6	2	354
08:30 AM	11	93	3	0	12	1	9	0	8	168	15	0	2	1	1	0	324
08:45 AM	7	114	1	0	10	0	14	0	6	170	18	0	3	0	8	0	351
Total	28	460	9	0	40	1	57	0	28	689	78	0	6	2	23	2	1423
04:00 PM	12	164	5	0	16	1	13	0	18	176	27	0	8	0	16	0	456
04:15 PM	14	198	6	0	23	2	22	0	19	157	29	0	7	0	18	0	495
04:30 PM	14	174	7	0	24	1	30	0	22	132	24	0	6	2	21	0	457
04:45 PM	7	150	6	0	19	1	17	0	23	156	29	0	2	0	17	0	427
Total	47	686	24	0	82	5	82	0	82	621	109	0	23	2	72	0	1835
05:00 PM	20	165	7	0	20	0	23	0	22	180	19	0	9	1	18	0	484
05:15 PM	15	169	6	0	19	0	13	0	11	171	31	0	6	0	16	2	459
05:30 PM	16	172	4	0	30	0	25	0	16	178	34	0	6	2	15	0	498
05:45 PM	16	177	5	0	39	0	18	0	19	138	43	0	2	0	12	0	469
Total	67	683	22	0	108	0	79	0	68	667	127	0	23	3	61	2	1910
Grand Total	162	2258	59	0	257	9	268	0	209	2636	397	0	58	9	164	4	6490
Apprch %	6.5	91.1	2.4	0	48.1	1.7	50.2	0	6.4	81.3	12.2	0	24.7	3.8	69.8	1.7	
Total %	2.5	34.8	0.9	0	4	0.1	4.1	0	3.2	40.6	6.1	0	0.9	0.1	2.5	0.1	
Passenger Vehicles	162	2232	59	0	256	9	267	0	208	2608	396	0	56	9	162	4	6428
% Passenger Vehicles	100	98.8	100	0	99.6	100	99.6	0	99.5	98.9	99.7	0	96.6	100	98.8	100	99
Heavy Vehicles	0	15	0	0	1	0	1	0	0	21	1	0	2	0	2	0	43
% Heavy Vehicles	0	0.7	0	0	0.4	0	0.4	0	0	0.8	0.3	0	3.4	0	1.2	0	0.7
Buses	0	11	0	0	0	0	0	0	1	7	0	0	0	0	0	0	19
% Buses	0	0.5	0	0	0	0	0	0	0.5	0.3	0	0	0	0	0	0	0.3

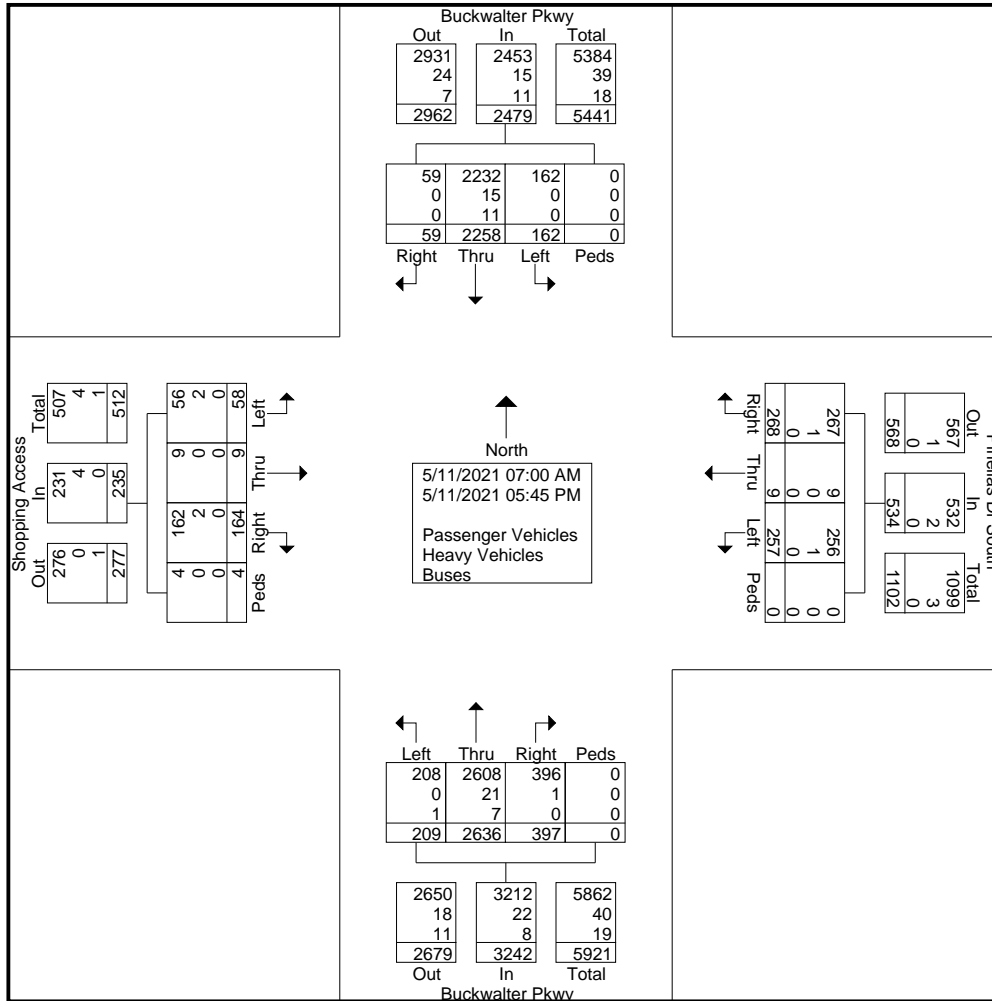
SHORT COUNTS

File Name : Buckwalter Pkwy @ Pinellas South

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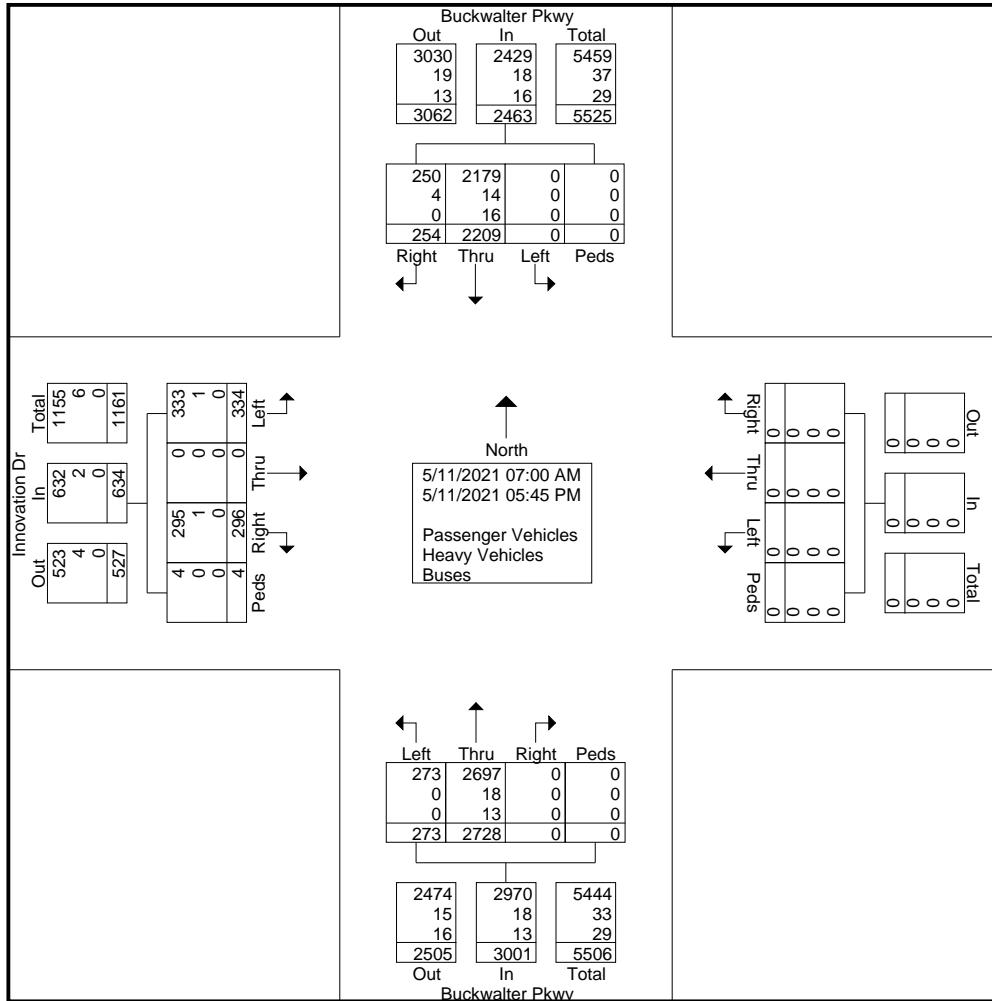
File Name : Buckwalter Pkwy @ Innovation Dr
 Site Code :
 Start Date : 5/11/2021
 Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				From East				Buckwalter Pkwy From South				Innovation Dr From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	74	4	0	0	0	0	0	2	115	0	0	11	0	3	0	209
07:15 AM	0	100	10	0	0	0	0	0	4	129	0	0	7	0	6	0	256
07:30 AM	0	125	10	0	0	0	0	0	7	179	0	0	9	0	5	0	335
07:45 AM	0	140	11	0	0	0	0	0	13	156	0	0	13	0	6	0	339
Total	0	439	35	0	0	0	0	0	26	579	0	0	40	0	20	0	1139
08:00 AM	0	163	12	0	0	0	0	0	6	152	0	0	13	0	10	0	356
08:15 AM	0	139	6	0	0	0	0	0	9	178	0	0	12	0	12	0	356
08:30 AM	0	94	14	0	0	0	0	0	16	159	0	0	10	0	11	0	304
08:45 AM	0	108	8	0	0	0	0	0	17	178	0	0	13	0	20	1	345
Total	0	504	40	0	0	0	0	0	48	667	0	0	48	0	53	1	1361
04:00 PM	0	156	18	0	0	0	0	0	18	210	0	0	27	0	24	0	453
04:15 PM	0	168	28	0	0	0	0	0	20	172	0	0	28	0	23	0	439
04:30 PM	0	166	19	0	0	0	0	0	28	172	0	0	27	0	32	1	445
04:45 PM	0	156	17	0	0	0	0	0	21	159	0	0	35	0	25	1	414
Total	0	646	82	0	0	0	0	0	87	713	0	0	117	0	104	2	1751
05:00 PM	0	160	24	0	0	0	0	0	19	210	0	0	24	0	32	0	469
05:15 PM	0	157	30	0	0	0	0	0	34	189	0	0	34	0	24	0	468
05:30 PM	0	149	23	0	0	0	0	0	31	198	0	0	36	0	25	0	462
05:45 PM	0	154	20	0	0	0	0	0	28	172	0	0	35	0	38	1	448
Total	0	620	97	0	0	0	0	0	112	769	0	0	129	0	119	1	1847
Grand Total	0	2209	254	0	0	0	0	0	273	2728	0	0	334	0	296	4	6098
Apprch %	0	89.7	10.3	0	0	0	0	0	9.1	90.9	0	0	52.7	0	46.7	0.6	
Total %	0	36.2	4.2	0	0	0	0	0	4.5	44.7	0	0	5.5	0	4.9	0.1	
Passenger Vehicles	0	2179	250	0	0	0	0	0	273	2697	0	0	333	0	295	4	6031
% Passenger Vehicles	0	98.6	98.4	0	0	0	0	0	100	98.9	0	0	99.7	0	99.7	100	98.9
Heavy Vehicles	0	14	4	0	0	0	0	0	0	18	0	0	1	0	1	0	38
% Heavy Vehicles	0	0.6	1.6	0	0	0	0	0	0	0.7	0	0	0.3	0	0.3	0	0.6
Buses	0	16	0	0	0	0	0	0	0	13	0	0	0	0	0	0	29
% Buses	0	0.7	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0.5

SHORT COUNTS

File Name : Buckwalter Pkwy @ Innovation Dr
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SHORT COUNTS

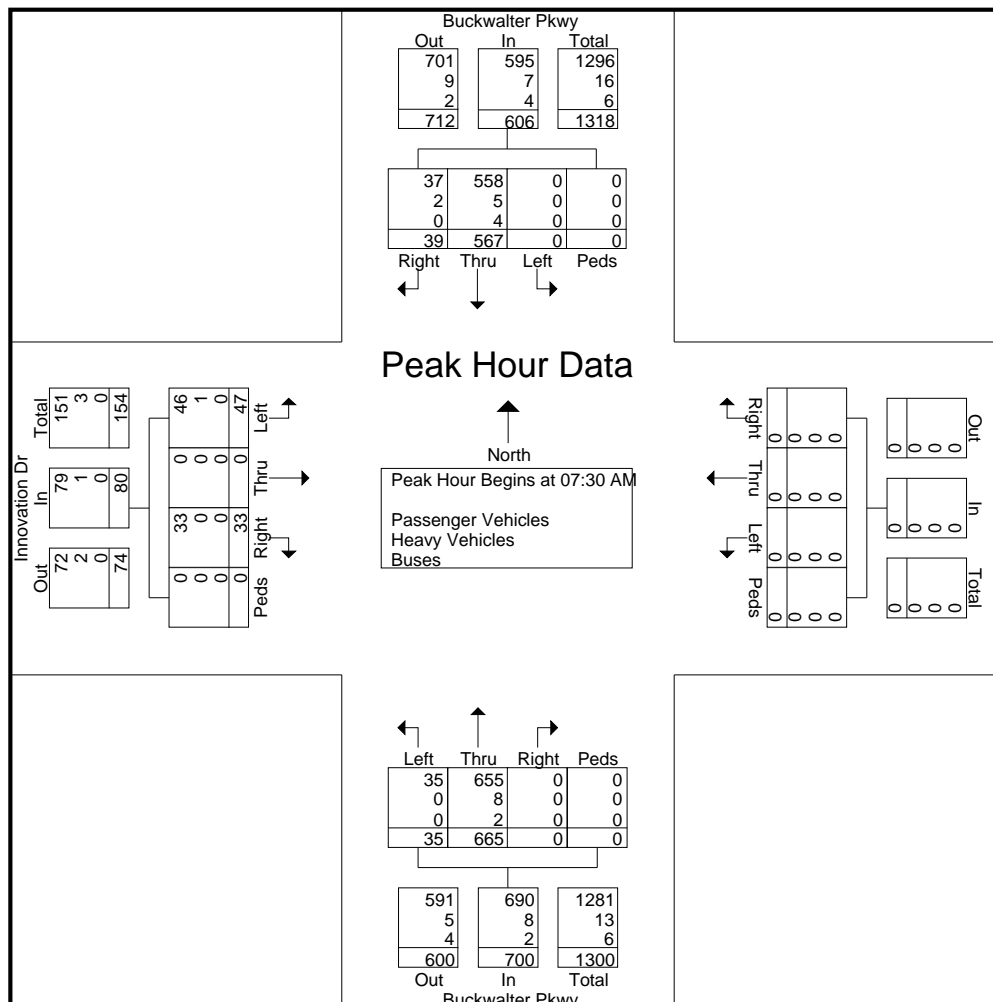
File Name : Buckwalter Pkwy @ Innovation Dr

Site Code :

Start Date : 5/11/2021

Page No : 3

Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Innovation Dr From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	125	10	0	135	0	0	0	0	0	7	179	0	0	186	9	0	5	0	14	335
07:45 AM	0	140	11	0	151	0	0	0	0	0	13	156	0	0	169	13	0	6	0	19	339
08:00 AM	0	163	12	0	175	0	0	0	0	0	6	152	0	0	158	13	0	10	0	23	356
08:15 AM	0	139	6	0	145	0	0	0	0	0	9	178	0	0	187	12	0	12	0	24	356
Total Volume	0	567	39	0	606	0	0	0	0	0	35	665	0	0	700	47	0	33	0	80	1386
% App. Total	0	93.6	6.4	0		0	0	0	0		5	95	0	0		58.8	0	41.2	0		
PHF	.000	.870	.813	.000	.866	.000	.000	.000	.000	.000	.673	.929	.000	.000	.936	.904	.000	.688	.000	.833	.973
Passenger Vehicles	0	558	37	0	595	0	0	0	0	0	35	655	0	0	690	46	0	33	0	79	1364
% Passenger Vehicles		98.4	94.9									98.5				97.9					
Heavy Vehicles	0	5	2	0	7	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	16
% Heavy Vehicles	0	0.9	5.1	0	1.2	0	0	0	0	0	0	1.2	0	0	1.1	2.1	0	0	0	1.3	1.2
Buses	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Buses	0	0.7	0	0	0.7	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.4



SHORT COUNTS

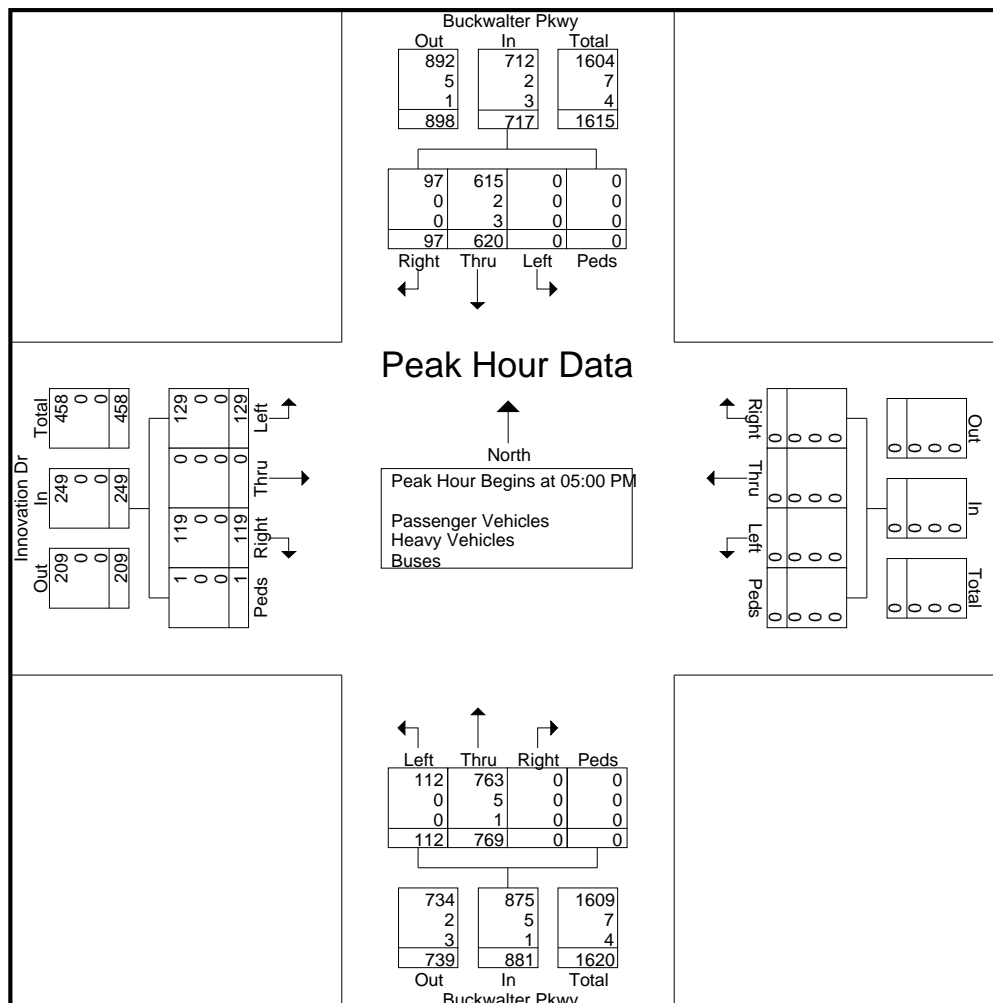
File Name : Buckwalter Pkwy @ Innovation Dr

Site Code :

Start Date : 5/11/2021

Page No : 4

Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Innovation Dr From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	160	24	0	184	0	0	0	0	0	19	210	0	0	229	24	0	32	0	56	469
05:15 PM	0	157	30	0	187	0	0	0	0	0	34	189	0	0	223	34	0	24	0	58	468
05:30 PM	0	149	23	0	172	0	0	0	0	0	31	198	0	0	229	36	0	25	0	61	462
05:45 PM	0	154	20	0	174	0	0	0	0	0	28	172	0	0	200	35	0	38	1	74	448
Total Volume	0	620	97	0	717	0	0	0	0	0	112	769	0	0	881	129	0	119	1	249	1847
% App. Total	0	86.5	13.5	0		0	0	0	0	0	12.7	87.3	0	0		51.8	0	47.8	0.4		
PHF	.000	.969	.808	.000	.959	.000	.000	.000	.000	.000	.824	.915	.000	.000	.962	.896	.000	.783	.250	.841	.985
Passenger Vehicles	0	615	97	0	712	0	0	0	0	0	112	763	0	0	875	129	0	119	1	249	1836
% Passenger Vehicles		99.2										99.2									
Heavy Vehicles	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
% Heavy Vehicles	0	0.3	0	0	0.3	0	0	0	0	0	0	0.7	0	0	0.6	0	0	0	0	0	0.4
Buses	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Buses	0	0.5	0	0	0.4	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.2



SHORT COUNTS

File Name : Buckwalter Pkwy @ Progressive St

Site Code :

Start Date : 5/11/2021

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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				From East				Buckwalter Pkwy From South				Progressive St From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	80	5	0	0	0	0	0	0	121	0	0	0	0	2	0	208
07:15 AM	0	86	7	0	0	0	0	0	0	132	0	0	0	0	7	0	232
07:30 AM	0	116	15	0	0	0	0	0	0	184	0	0	0	0	12	0	327
07:45 AM	0	133	15	0	0	0	0	0	0	186	0	0	0	0	14	0	348
Total	0	415	42	0	0	0	0	0	0	623	0	0	0	0	35	0	1115
08:00 AM	0	143	18	0	0	0	0	0	0	171	0	0	0	0	17	0	349
08:15 AM	0	154	15	0	0	0	0	0	0	189	0	0	0	0	11	0	369
08:30 AM	0	99	9	0	0	0	0	0	0	191	0	0	0	0	9	0	308
08:45 AM	0	109	15	0	0	0	0	0	0	206	0	0	0	0	22	0	352
Total	0	505	57	0	0	0	0	0	0	757	0	0	0	0	59	0	1378
04:00 PM	0	166	13	0	0	0	0	0	0	231	0	0	0	0	17	0	427
04:15 PM	0	168	11	0	0	0	0	0	0	206	0	0	0	0	26	0	411
04:30 PM	0	197	13	0	0	0	0	0	0	176	0	0	0	0	20	0	406
04:45 PM	0	173	14	0	0	0	0	0	0	205	0	0	0	0	23	0	415
Total	0	704	51	0	0	0	0	0	0	818	0	0	0	0	86	0	1659
05:00 PM	0	154	17	0	0	0	0	0	0	228	0	0	0	0	38	0	437
05:15 PM	0	182	11	0	0	0	0	0	0	231	0	0	0	0	25	0	449
05:30 PM	0	161	19	0	0	0	0	0	0	242	0	0	0	0	30	0	452
05:45 PM	0	178	10	0	0	0	0	0	0	205	0	0	0	0	39	0	432
Total	0	675	57	0	0	0	0	0	0	906	0	0	0	0	132	0	1770
Grand Total	0	2299	207	0	0	0	0	0	0	3104	0	0	0	0	312	0	5922
Apprch %	0	91.7	8.3	0	0	0	0	0	0	100	0	0	0	0	100	0	
Total %	0	38.8	3.5	0	0	0	0	0	0	52.4	0	0	0	0	5.3	0	
Passenger Vehicles	0	2269	207	0	0	0	0	0	0	3071	0	0	0	0	312	0	5859
% Passenger Vehicles	0	98.7	100	0	0	0	0	0	0	98.9	0	0	0	0	100	0	98.9
Heavy Vehicles	0	14	0	0	0	0	0	0	0	20	0	0	0	0	0	0	34
% Heavy Vehicles	0	0.6	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0.6
Buses	0	16	0	0	0	0	0	0	0	13	0	0	0	0	0	0	29
% Buses	0	0.7	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0.5

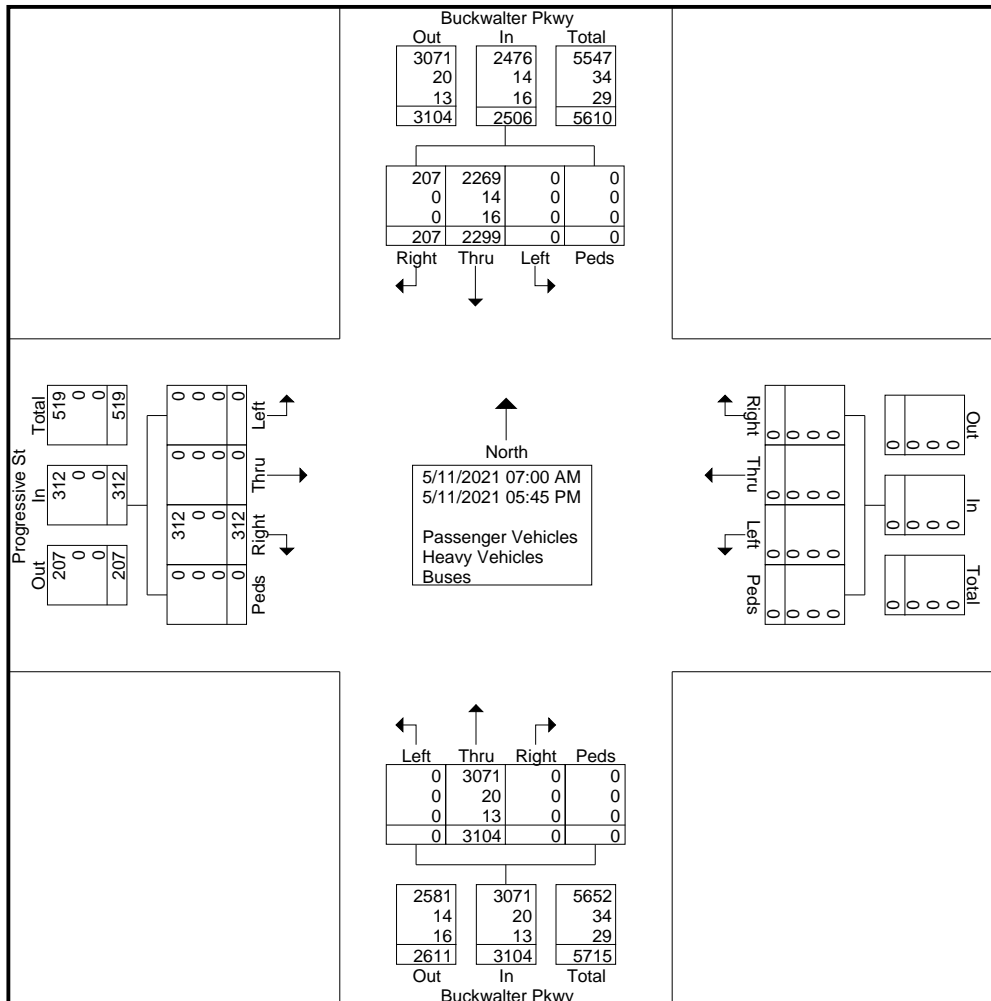
SHORT COUNTS

File Name : Buckwalter Pkwy @ Progressive St

Site Code :

Start Date : 5/11/2021

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SHORT COUNTS

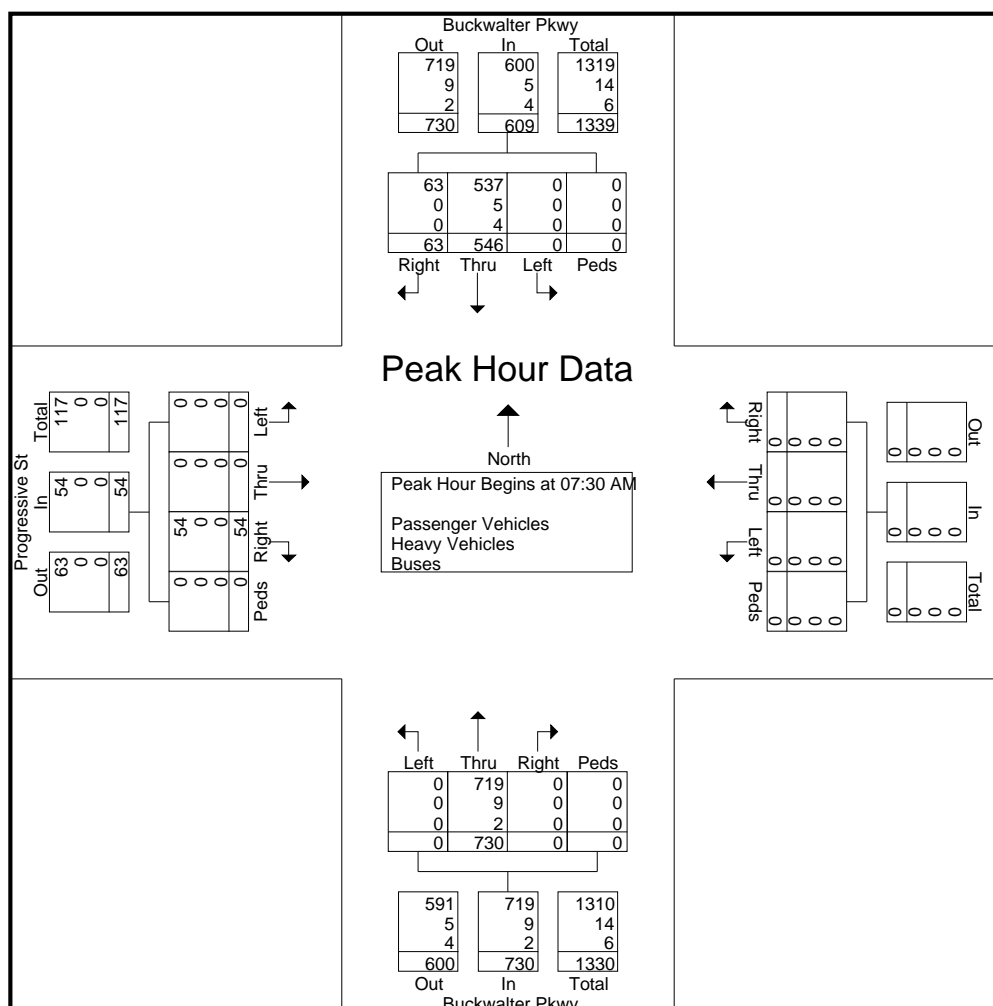
File Name : Buckwalter Pkwy @ Progressive St

Site Code :

Start Date : 5/11/2021

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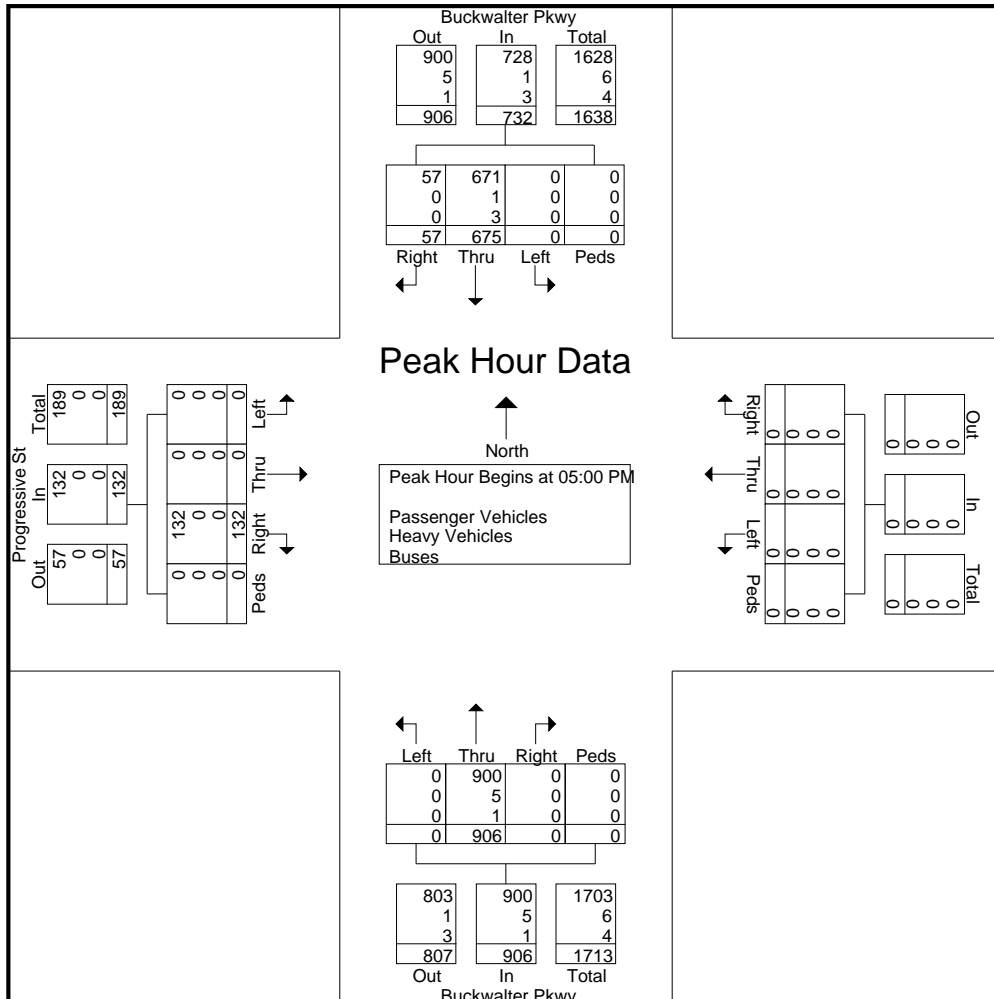
Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Progressive St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	116	15	0	131	0	0	0	0	0	0	184	0	0	184	0	0	12	0	12	327
07:45 AM	0	133	15	0	148	0	0	0	0	0	0	186	0	0	186	0	0	14	0	14	348
08:00 AM	0	143	18	0	161	0	0	0	0	0	0	171	0	0	171	0	0	17	0	17	349
08:15 AM	0	154	15	0	169	0	0	0	0	0	0	189	0	0	189	0	0	11	0	11	369
Total Volume	0	546	63	0	609	0	0	0	0	0	0	730	0	0	730	0	0	54	0	54	1393
% App. Total	0	89.7	10.3	0		0	0	0	0	0	0	100	0	0		0	0	100	0		
PHF	.000	.886	.875	.000	.901	.000	.000	.000	.000	.000	.000	.966	.000	.000	.966	.000	.000	.794	.000	.794	.944
Passenger Vehicles	0	537	63	0	600	0	0	0	0	0	0	719	0	0	719	0	0	54	0	54	1373
% Passenger Vehicles		98.4										98.5									
Heavy Vehicles	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	14
% Heavy Vehicles	0	0.9	0	0	0.8	0	0	0	0	0	0	1.2	0	0	1.2	0	0	0	0	0	1.0
Buses	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Buses	0	0.7	0	0	0.7	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.4



SHORT COUNTS

File Name : Buckwalter Pkwy @ Progressive St
 Site Code :
 Start Date : 5/11/2021
 Page No : 4

Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Progressive St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	154	17	0	171	0	0	0	0	0	0	228	0	0	228	0	0	38	0	38	437
05:15 PM	0	182	11	0	193	0	0	0	0	0	0	231	0	0	231	0	0	25	0	25	449
05:30 PM	0	161	19	0	180	0	0	0	0	0	0	242	0	0	242	0	0	30	0	30	452
05:45 PM	0	178	10	0	188	0	0	0	0	0	0	205	0	0	205	0	0	39	0	39	432
Total Volume	0	675	57	0	732	0	0	0	0	0	0	906	0	0	906	0	0	132	0	132	1770
% App. Total	0	92.2	7.8	0		0	0	0	0	0	0	100	0	0		0	0	100	0		
PHF	.000	.927	.750	.000	.948	.000	.000	.000	.000	.000	.000	.936	.000	.000	.936	.000	.000	.846	.000	.846	.979
Passenger Vehicles	0	671	57	0	728	0	0	0	0	0	0	900	0	0	900	0	0	132	0	132	1760
% Passenger Vehicles		99.4										99.3									
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	6
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.3
Buses	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Buses	0	0.4	0	0	0.4	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.2



SHORT COUNTS

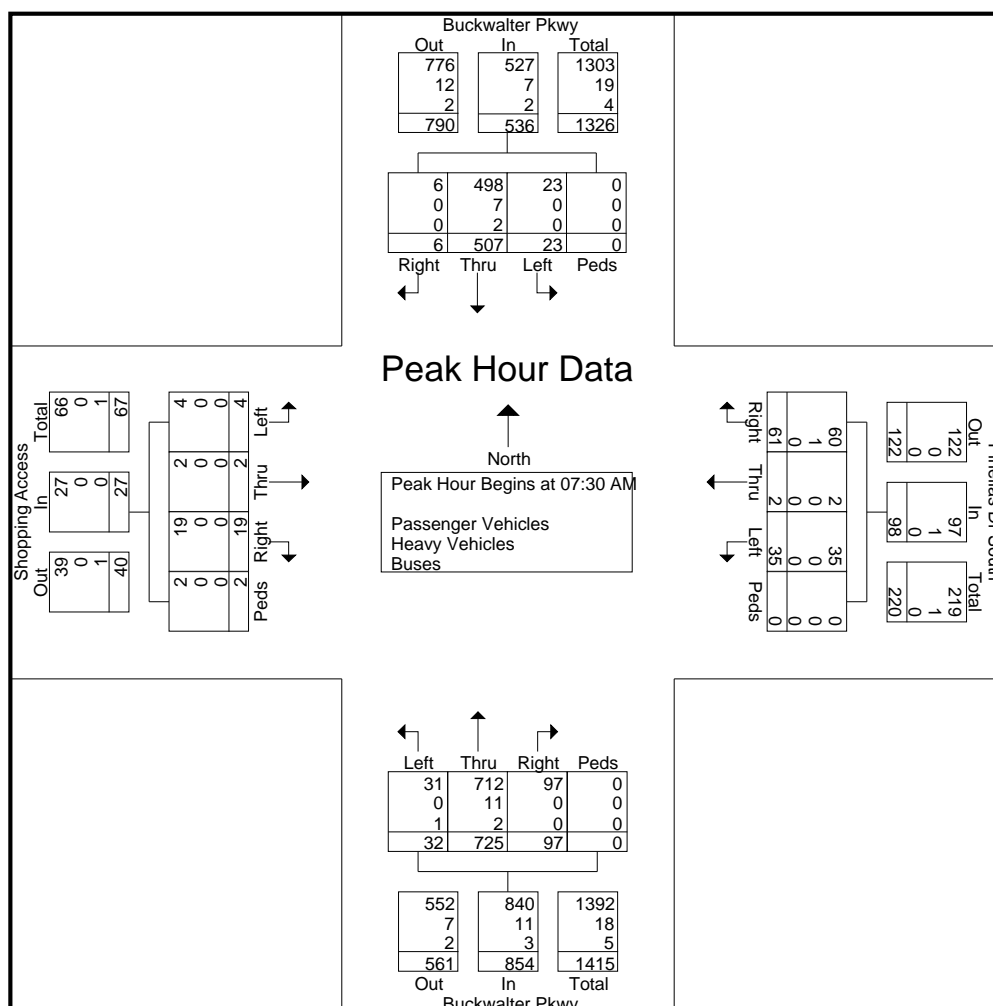
File Name : Buckwalter Pkwy @ Pinellas South

Site Code :

Start Date : 5/11/2021

Page No : 3

Start Time	Buckwalter Pkwy From North					Pinellas Dr South From East					Buckwalter Pkwy From South					Shopping Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	10	134	0	0	144	5	2	16	0	23	11	192	23	0	226	1	0	2	0	3	396
07:45 AM	3	120	1	0	124	12	0	11	0	23	7	182	29	0	218	2	1	3	0	6	371
08:00 AM	3	145	1	0	149	10	0	18	0	28	6	176	25	0	207	1	1	8	0	10	394
08:15 AM	7	108	4	0	119	8	0	16	0	24	8	175	20	0	203	0	0	6	2	8	354
Total Volume	23	507	6	0	536	35	2	61	0	98	32	725	97	0	854	4	2	19	2	27	1515
% App. Total	4.3	94.6	1.1	0		35.7	2	62.2	0		3.7	84.9	11.4	0		14.8	7.4	70.4	7.4		
PHF	.575	.874	.375	.000	.899	.729	.250	.847	.000	.875	.727	.944	.836	.000	.945	.500	.500	.594	.250	.675	.956
Passenger Vehicles	23	498	6	0	527	35	2	60	0	97	31	712	97	0	840	4	2	19	2	27	1491
% Passenger Vehicles	98.2					98.4					96.9					98.2					
Heavy Vehicles	0	7	0	0	7	0	0	1	0	1	0	11	0	0	11	0	0	0	0	0	19
% Heavy Vehicles	0	1.4	0	0	1.3	0	0	1.6	0	1.0	0	1.5	0	0	1.3	0	0	0	0	0	1.3
Buses	0	2	0	0	2	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	5
% Buses	0	0.4	0	0	0.4	0	0	0	0	0	3.1	0.3	0	0	0.4	0	0	0	0	0	0.3



SHORT COUNTS

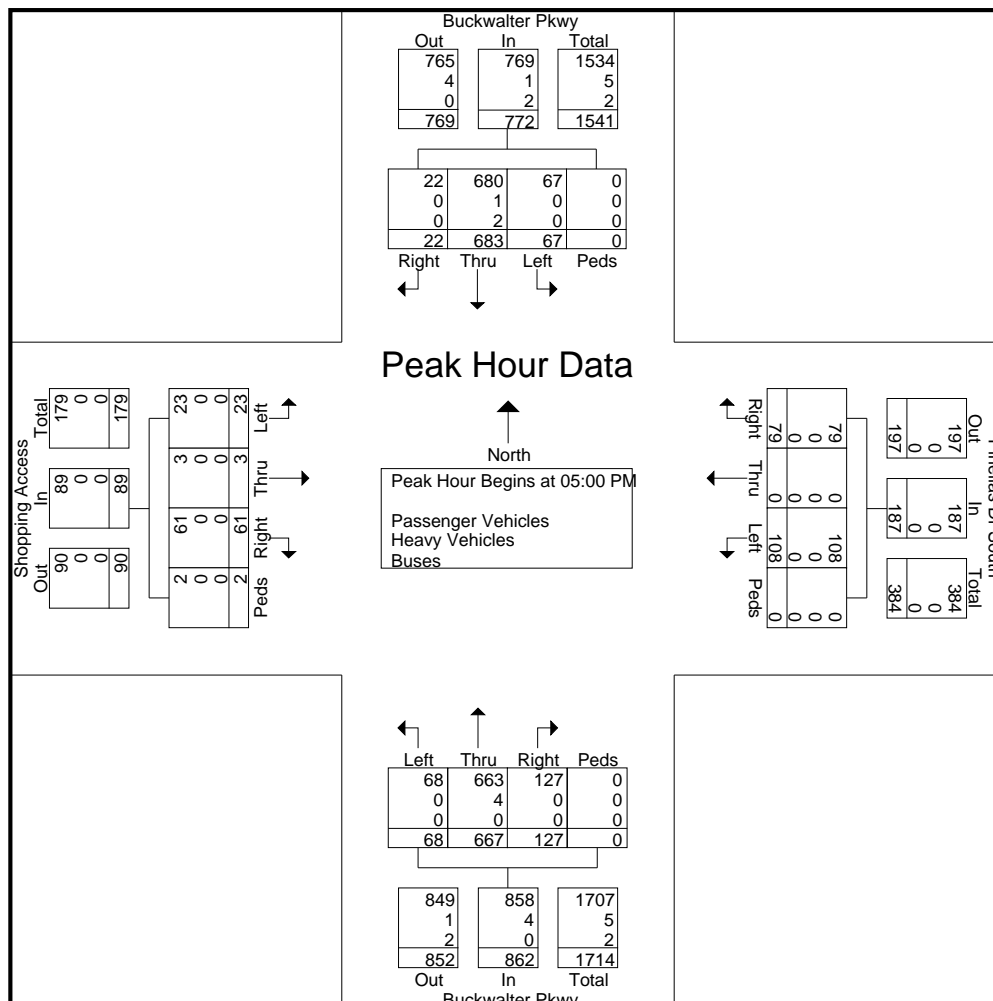
File Name : Buckwalter Pkwy @ Pinellas South

Site Code :

Start Date : 5/11/2021

Page No : 4

Start Time	Buckwalter Pkwy From North					Pinellas Dr South From East					Buckwalter Pkwy From South					Shopping Access From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	20	165	7	0	192	20	0	23	0	43	22	180	19	0	221	9	1	18	0	28	484
05:15 PM	15	169	6	0	190	19	0	13	0	32	11	171	31	0	213	6	0	16	2	24	459
05:30 PM	16	172	4	0	192	30	0	25	0	55	16	178	34	0	228	6	2	15	0	23	498
05:45 PM	16	177	5	0	198	39	0	18	0	57	19	138	43	0	200	2	0	12	0	14	469
Total Volume	67	683	22	0	772	108	0	79	0	187	68	667	127	0	862	23	3	61	2	89	1910
% App. Total	8.7	88.5	2.8	0		57.8	0	42.2	0		7.9	77.4	14.7	0		25.8	3.4	68.5	2.2		
PHF	.838	.965	.786	.000	.975	.692	.000	.790	.000	.820	.773	.926	.738	.000	.945	.639	.375	.847	.250	.795	.959
Passenger Vehicles	67	680	22	0	769	108	0	79	0	187	68	663	127	0	858	23	3	61	2	89	1903
% Passenger Vehicles	99.6										99.4										
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0.6	0	0	0.5	0	0	0	0	0	0.3
Buses	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



SHORT COUNTS

File Name : Buckwalter Pkwy @ Buckwalter Pl Blvd

Site Code :

Start Date : 5/11/2021

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Buckwalter Pkwy From North				Church Access From East				Buckwalter Pkwy From South				Buckwalter Pl Blvd From West				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	3	57	15	0	0	0	0	0	21	104	3	0	16	0	15	0	234
07:15 AM	4	86	13	0	0	0	0	0	29	124	1	0	9	0	23	0	289
07:30 AM	0	93	26	0	0	0	0	0	39	171	1	0	19	1	29	0	379
07:45 AM	1	129	18	0	0	0	1	0	48	165	0	0	14	0	22	0	398
Total	8	365	72	0	0	0	1	0	137	564	5	0	58	1	89	0	1300
08:00 AM	2	145	15	0	1	0	1	1	34	144	0	0	21	0	13	0	377
08:15 AM	1	133	22	0	1	1	2	0	48	177	0	0	16	0	22	1	424
08:30 AM	2	90	15	0	3	1	4	0	45	163	1	0	19	0	22	0	365
08:45 AM	0	102	25	0	1	1	2	0	45	170	1	0	26	0	28	0	401
Total	5	470	77	0	6	3	9	1	172	654	2	0	82	0	85	1	1567
04:00 PM	0	179	26	0	0	0	0	0	75	175	0	0	46	0	37	0	538
04:15 PM	0	188	33	0	0	0	0	0	52	163	0	0	41	0	39	0	516
04:30 PM	0	168	31	0	0	0	0	0	84	157	0	0	39	0	48	0	527
04:45 PM	0	176	27	0	0	0	0	0	58	160	0	0	40	0	42	0	503
Total	0	711	117	0	0	0	0	0	269	655	0	0	166	0	166	0	2084
05:00 PM	1	164	30	0	0	0	1	0	65	176	1	0	45	1	43	0	527
05:15 PM	1	161	27	0	0	0	1	0	66	180	0	0	39	0	56	0	531
05:30 PM	0	154	27	0	0	0	0	1	83	173	0	0	50	0	53	0	541
05:45 PM	0	179	36	0	0	0	0	1	93	160	1	0	36	0	38	1	545
Total	2	658	120	0	0	0	2	2	307	689	2	0	170	1	190	1	2144
Grand Total	15	2204	386	0	6	3	12	3	885	2562	9	0	476	2	530	2	7095
Apprch %	0.6	84.6	14.8	0	25	12.5	50	12.5	25.6	74.1	0.3	0	47.1	0.2	52.5	0.2	
Total %	0.2	31.1	5.4	0	0.1	0	0.2	0	12.5	36.1	0.1	0	6.7	0	7.5	0	
Passenger Vehicles	15	2183	384	0	6	3	12	3	879	2539	9	0	468	2	526	2	7031
% Passenger Vehicles	100	99	99.5	0	100	100	100	100	99.3	99.1	100	0	98.3	100	99.2	100	99.1
Heavy Vehicles	0	11	2	0	0	0	0	0	6	15	0	0	7	0	4	0	45
% Heavy Vehicles	0	0.5	0.5	0	0	0	0	0	0.7	0.6	0	0	1.5	0	0.8	0	0.6
Buses	0	10	0	0	0	0	0	0	0	8	0	0	1	0	0	0	19
% Buses	0	0.5	0	0	0	0	0	0	0	0.3	0	0	0.2	0	0	0	0.3

SHORT COUNTS

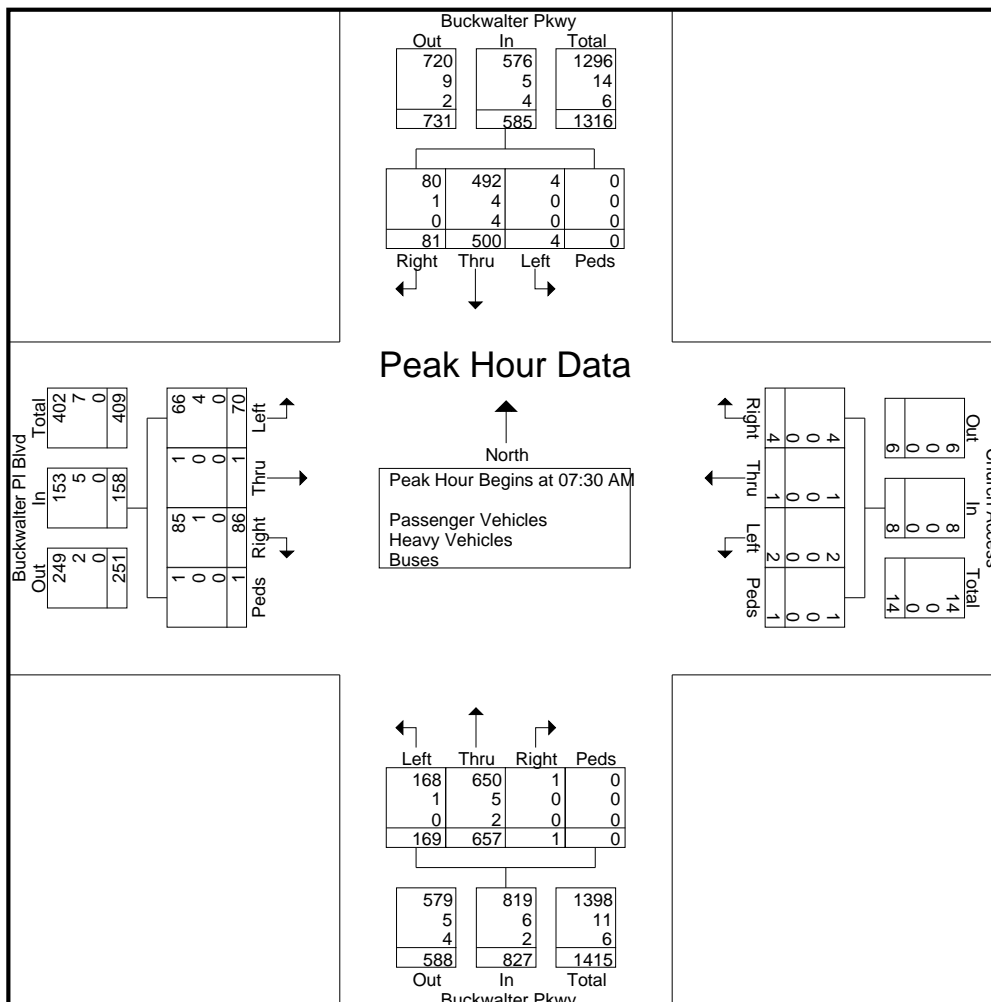
File Name : Buckwalter Pkwy @ Buckwalter Pl Blvd

Site Code :

Start Date : 5/11/2021

Page No : 2

Start Time	Buckwalter Pkwy From North					Church Access From East					Buckwalter Pkwy From South					Buckwalter Pl Blvd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	93	26	0	119	0	0	0	0	0	39	171	1	0	211	19	1	29	0	49	379
07:45 AM	1	129	18	0	148	0	0	1	0	1	48	165	0	0	213	14	0	22	0	36	398
08:00 AM	2	145	15	0	162	1	0	1	1	3	34	144	0	0	178	21	0	13	0	34	377
08:15 AM	1	133	22	0	156	1	1	2	0	4	48	177	0	0	225	16	0	22	1	39	424
Total Volume	4	500	81	0	585	2	1	4	1	8	169	657	1	0	827	70	1	86	1	158	1578
% App. Total	0.7	85.5	13.8	0		25	12.5	50	12.5		20.4	79.4	0.1	0		44.3	0.6	54.4	0.6		
PHF	.500	.862	.779	.000	.903	.500	.250	.500	.250	.500	.880	.928	.250	.000	.919	.833	.250	.741	.250	.806	.930
Passenger Vehicles	4	492	80	0	576	2	1	4	1	8	168	650	1	0	819	66	1	85	1	153	1556
% Passenger Vehicles		98.4	98.8								99.4	98.9				94.3		98.8			
Heavy Vehicles	0	4	1	0	5	0	0	0	0	0	1	5	0	0	6	4	0	1	0	5	16
% Heavy Vehicles	0	0.8	1.2	0	0.9	0	0	0	0	0	0.6	0.8	0	0	0.7	5.7	0	1.2	0	3.2	1.0
Buses	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Buses	0	0.8	0	0	0.7	0	0	0	0	0	0	0.3	0	0	0.2	0	0	0	0	0	0.4



SHORT COUNTS

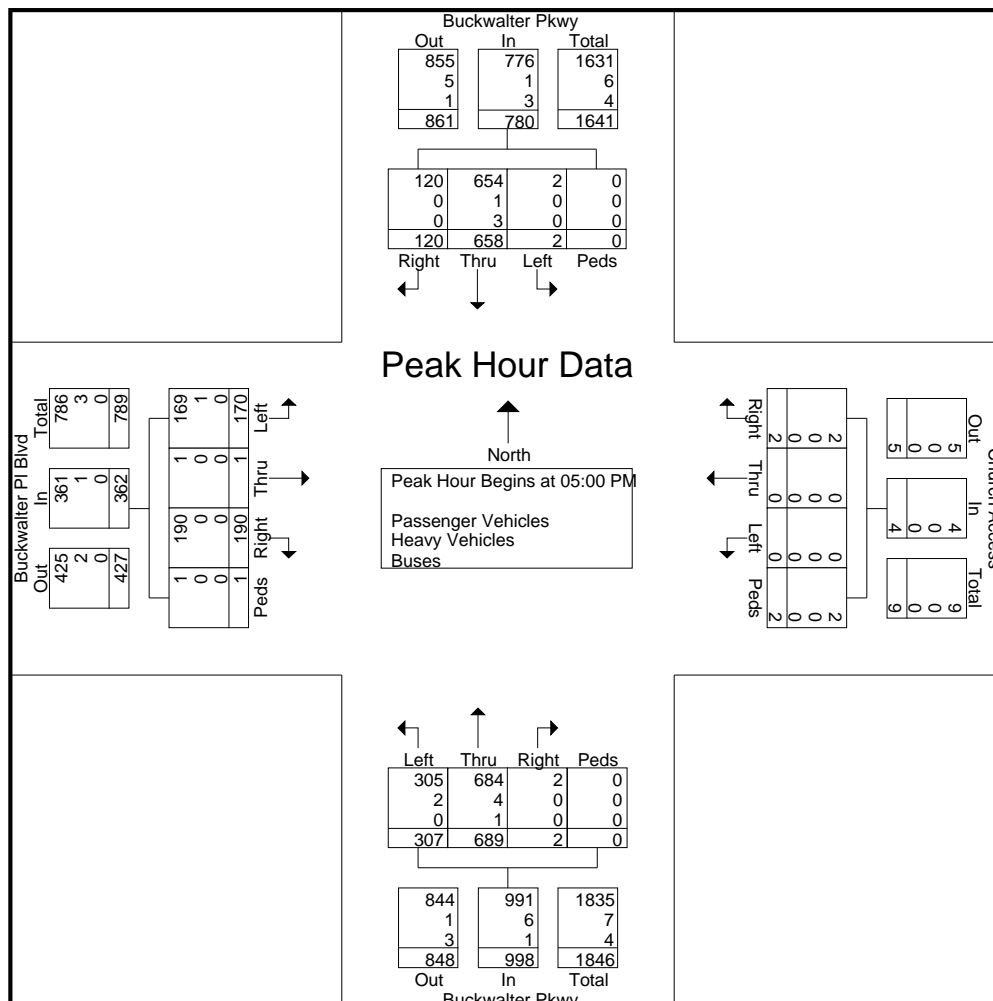
File Name : Buckwalter Pkwy @ Buckwalter Pl Blvd

Site Code :

Start Date : 5/11/2021

Page No : 3

Start Time	Buckwalter Pkwy From North					Church Access From East					Buckwalter Pkwy From South					Buckwalter Pl Blvd From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	164	30	0	195	0	0	1	0	1	65	176	1	0	242	45	1	43	0	89	527
05:15 PM	1	161	27	0	189	0	0	1	0	1	66	180	0	0	246	39	0	56	0	95	531
05:30 PM	0	154	27	0	181	0	0	0	1	1	83	173	0	0	256	50	0	53	0	103	541
05:45 PM	0	179	36	0	215	0	0	0	1	1	93	160	1	0	254	36	0	38	1	75	545
Total Volume	2	658	120	0	780	0	0	2	2	4	307	689	2	0	998	170	1	190	1	362	2144
% App. Total	0.3	84.4	15.4	0		0	0	50	50		30.8	69	0.2	0		47	0.3	52.5	0.3		
PHF	.500	.919	.833	.000	.907	.000	.000	.500	.500	1.00	.825	.957	.500	.000	.975	.850	.250	.848	.250	.879	.983
Passenger Vehicles	2	654	120	0	776	0	0	2	2	4	305	684	2	0	991	169	1	190	1	361	2132
% Passenger Vehicles		99.4									99.3	99.3				99.4					
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	2	4	0	0	6	1	0	0	0	1	8
% Heavy Vehicles	0	0.2	0	0	0.1	0	0	0	0	0	0.7	0.6	0	0	0.6	0.6	0	0	0	0.3	0.4
Buses	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Buses	0	0.5	0	0	0.4	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.2



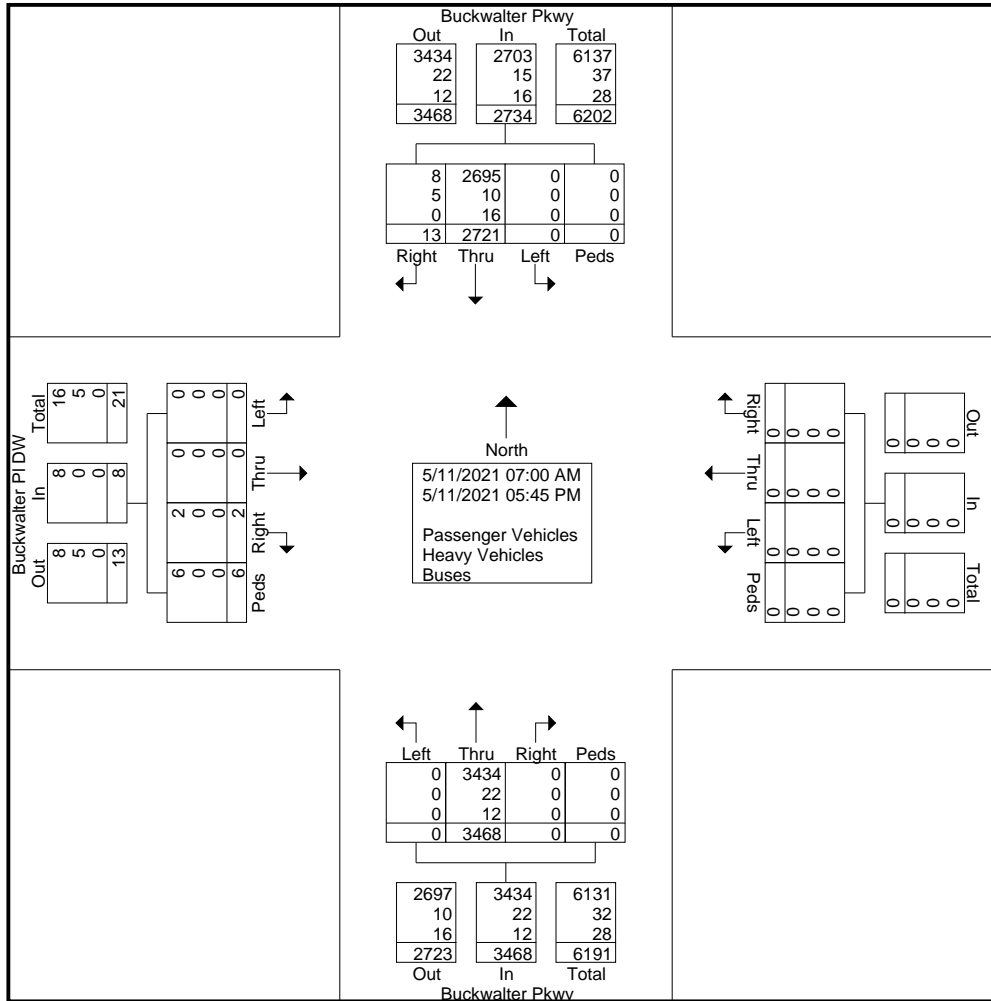
SHORT COUNTS

File Name : Buckwalter Pkwy @ Buckwalter PI DW

Site Code :

Start Date : 5/11/2021

Page No : 2



SHORT COUNTS

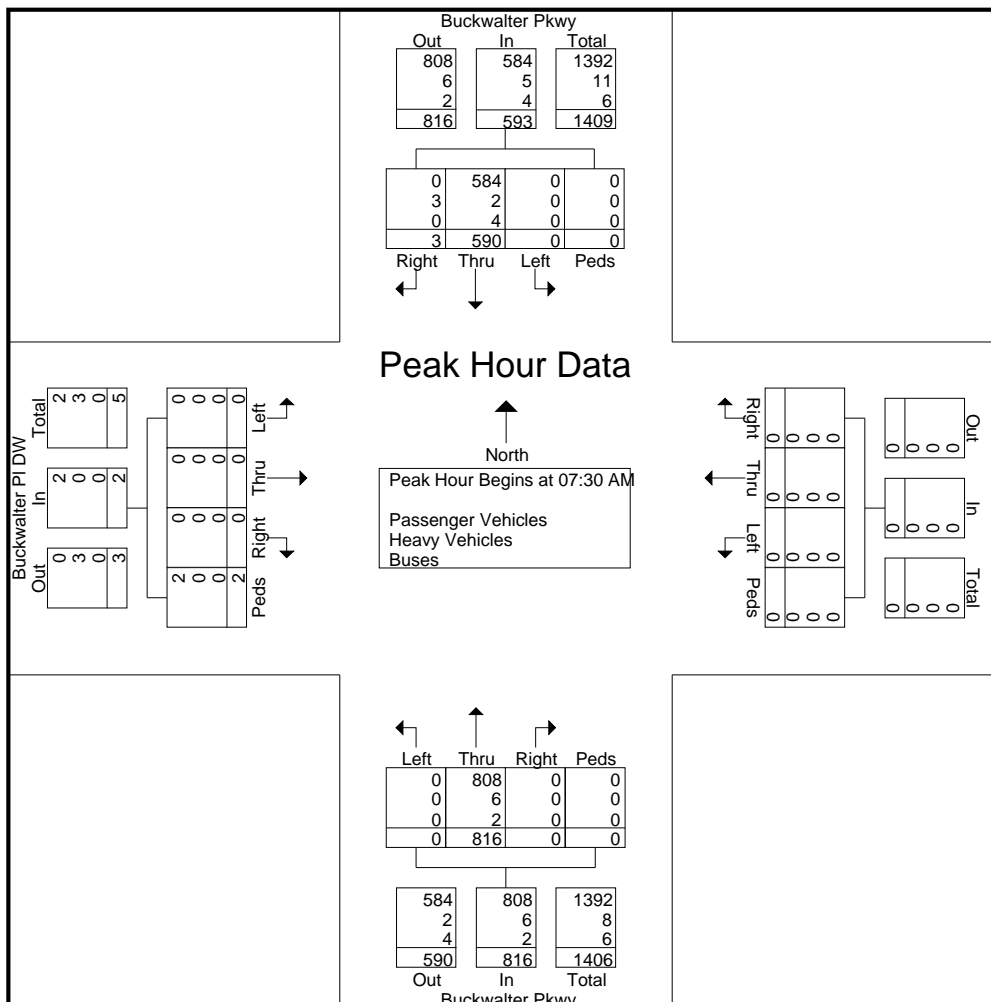
File Name : Buckwalter Pkwy @ Buckwalter PI DW

Site Code :

Start Date : 5/11/2021

Page No : 3

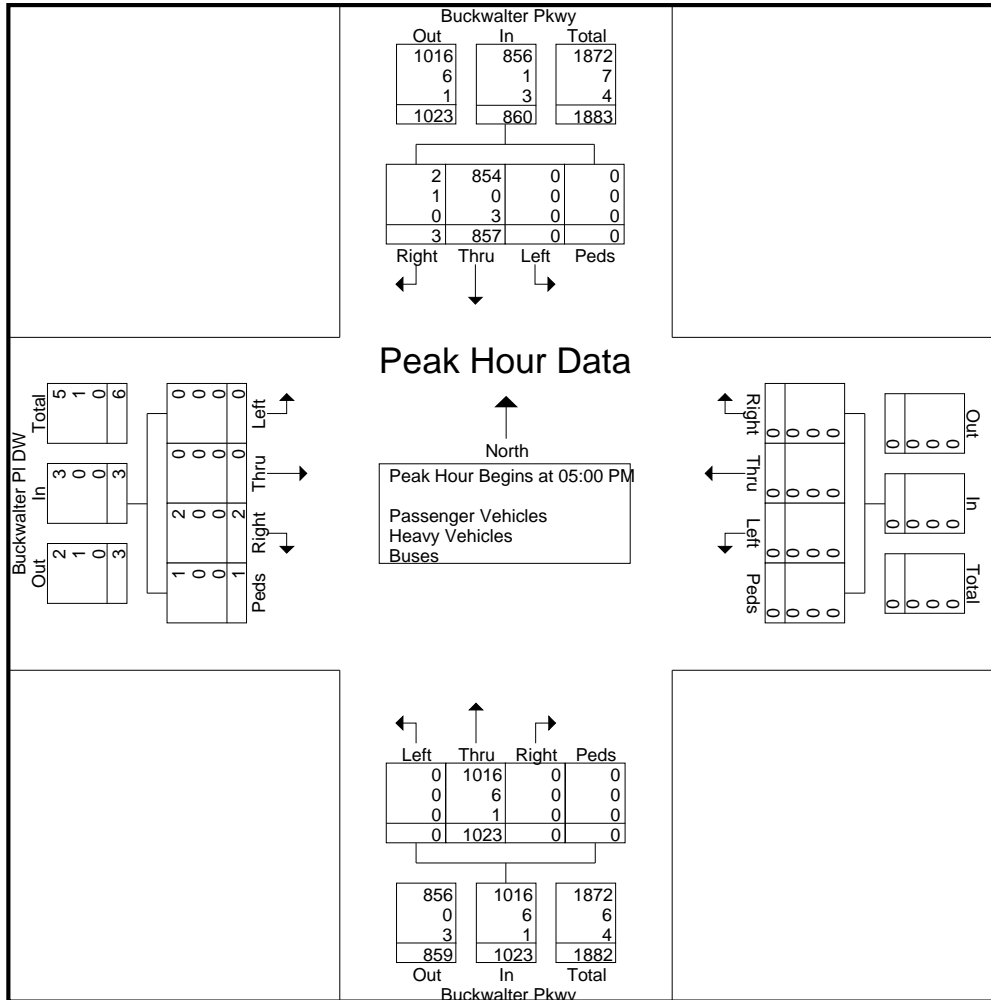
Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Buckwalter PI DW From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	125	1	0	126	0	0	0	0	0	0	222	0	0	222	0	0	0	0	0	348
07:45 AM	0	149	1	0	150	0	0	0	0	0	0	209	0	0	209	0	0	0	1	1	360
08:00 AM	0	169	1	0	170	0	0	0	0	0	0	185	0	0	185	0	0	0	0	0	355
08:15 AM	0	147	0	0	147	0	0	0	0	0	0	200	0	0	200	0	0	0	1	1	348
Total Volume	0	590	3	0	593	0	0	0	0	0	0	816	0	0	816	0	0	0	2	2	1411
% App. Total	0	99.5	0.5	0		0	0	0	0	0	0	100	0	0		0	0	0	100		
PHF	.000	.873	.750	.000	.872	.000	.000	.000	.000	.000	.000	.919	.000	.000	.919	.000	.000	.000	.500	.500	.980
Passenger Vehicles	0	584	0	0	584	0	0	0	0	0	0	808	0	0	808	0	0	0	2	2	1394
% Passenger Vehicles		99.0										99.0									
Heavy Vehicles	0	2	3	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
% Heavy Vehicles	0	0.3	100	0	0.8	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0.8
Buses	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Buses	0	0.7	0	0	0.7	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.4



SHORT COUNTS

File Name : Buckwalter Pkwy @ Buckwalter PI DW
 Site Code :
 Start Date : 5/11/2021
 Page No : 4

Start Time	Buckwalter Pkwy From North					From East					Buckwalter Pkwy From South					Buckwalter PI DW From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	212	0	0	212	0	0	0	0	0	0	256	0	0	256	0	0	2	0	2	470
05:15 PM	0	217	0	0	217	0	0	0	0	0	0	244	0	0	244	0	0	0	0	0	461
05:30 PM	0	215	0	0	215	0	0	0	0	0	0	275	0	0	275	0	0	0	0	0	490
05:45 PM	0	213	3	0	216	0	0	0	0	0	0	248	0	0	248	0	0	0	1	1	465
Total Volume	0	857	3	0	860	0	0	0	0	0	0	1023	0	0	1023	0	0	2	1	3	1886
% App. Total	0	99.7	0.3	0		0	0	0	0	0	0	100	0	0		0	0	66.7	33.3		
PHF	.000	.987	.250	.000	.991	.000	.000	.000	.000	.000	.000	.930	.000	.000	.930	.000	.000	.250	.250	.375	.962
Passenger Vehicles	0	854	2	0	856	0	0	0	0	0	0	1016	0	0	1016	0	0	2	1	3	1875
% Passenger Vehicles	0	99.6	66.7	0	99.5	0	0	0	0	0	0	99.3	0	0	99.3	0	0	100	100	100	99.4
Heavy Vehicles	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	7
% Heavy Vehicles	0	0	33.3	0	0.1	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.4
Buses	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Buses	0	0.4	0	0	0.3	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.2



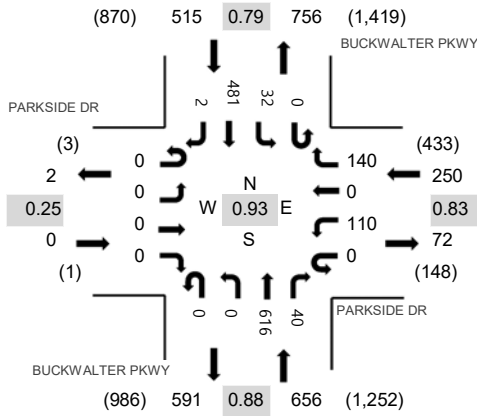
Location: 1 BUCKWALTER PKWY & PARKSIDE DR AM

Date: Wednesday, January 20, 2021

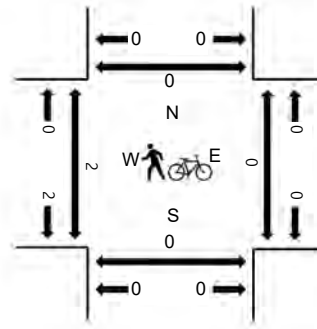
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PARKSIDE DR Eastbound			PARKSIDE DR Westbound			BUCKWALTER PKWY Northbound		BUCKWALTER PKWY Southbound			Total	Rolling Pedestrian Crossings									
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru	Right	U-Turn		Left	Thru	Right	Hour	West	East	South	North		
7:00 AM	0	0	0	0	0	16	0	36	0	0	85	3	0	2	66	0	208	1,233	2	0	0	0
7:15 AM	0	0	0	0	0	15	0	26	0	0	148	10	0	8	85	0	292	1,375	0	0	0	0
7:30 AM	0	0	0	0	0	14	0	31	0	0	176	8	0	7	117	0	353	1,421	0	0	0	0
7:45 AM	0	0	0	0	0	22	0	44	0	0	147	4	0	11	151	1	380	1,404	0	0	0	0
8:00 AM	0	0	0	0	0	33	0	30	0	0	139	11	0	10	126	1	350	1,323	0	0	0	0
8:15 AM	0	0	0	0	0	41	0	35	0	0	154	17	0	4	87	0	338		0	0	0	0
8:30 AM	0	0	0	0	0	18	0	29	0	0	165	25	0	8	91	0	336		0	0	0	0
8:45 AM	0	0	0	1	0	16	0	27	0	1	147	12	0	8	87	0	299		1	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound			Westbound			Northbound			Southbound			Total				
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right					
Articulated Trucks	0	0	0	0	0	0	0	0	6	0	0	0	8	0	14		
Lights	0	0	0	0	0	107	0	138	0	0	600	39	0	30	465	2	1,381
Mediums	0	0	0	0	0	3	0	2	0	0	10	1	0	2	8	0	26
Total	0	0	0	0	0	110	0	140	0	0	616	40	0	32	481	2	1,421

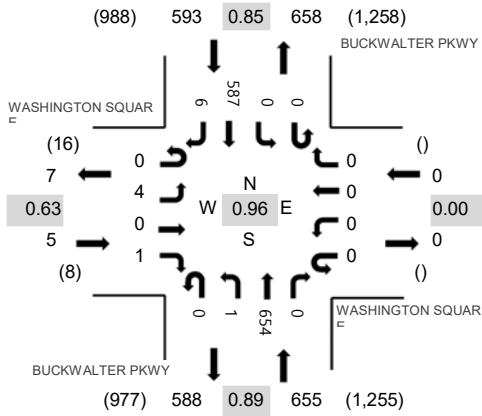
Location: 2 BUCKWALTER PKWY & WASHINGTON SQUARE AM

Date: Wednesday, January 20, 2021

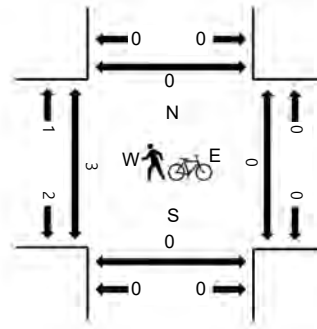
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	WASHINGTON Eastbound			WASHINGTON Westbound			BUCKWALTER PKWY Northbound			BUCKWALTER PKWY Southbound			Total	Rolling Pedestrian Crossings								
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right		Hour	West	East	South	North				
7:00 AM	0	0	0	1	0	0	0	0	0	1	90	0	0	0	78	1	171	1,074	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	160	0	0	0	99	3	262	1,211	1	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	181	0	0	0	129	3	314	1,253	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	151	0	0	0	171	3	327	1,235	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	0	0	0	155	0	0	0	152	0	308	1,177	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0	0	0	167	0	0	0	135	0	304		1	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	188	0	0	0	106	1	296		1	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	160	0	0	0	105	2	269		1	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound			Westbound			Northbound			Southbound			Total				
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right					
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	16	
Lights	0	4	0	1	0	0	0	0	0	1	637	0	0	0	568	6	1,217
Mediums	0	0	0	0	0	0	0	0	0	0	9	0	0	0	11	0	20
Total	0	4	0	1	0	0	0	0	0	1	654	0	0	0	587	6	1,253

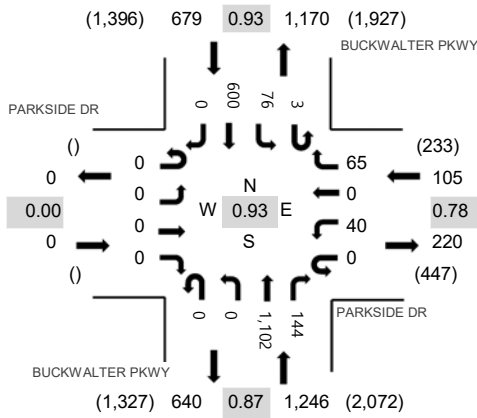
Location: 1 BUCKWALTER PKWY & PARKSIDE DR PM

Date: Wednesday, January 20, 2021

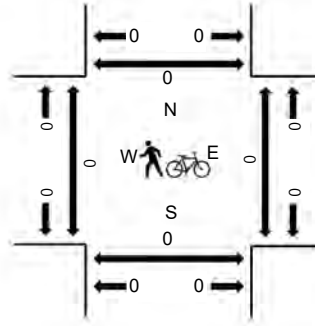
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

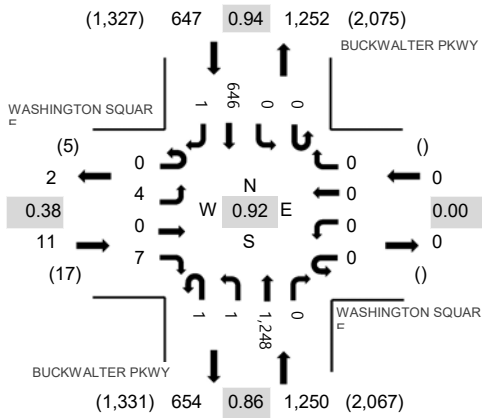
Traffic Counts - Motorized Vehicles

Interval Start Time	PARKSIDE DR Eastbound			PARKSIDE DR Westbound			BUCKWALTER PKWY Northbound		BUCKWALTER PKWY Southbound			Total	Rolling Pedestrian Crossings									
	U-Turn	Left	Thru Right	U-Turn	Left	ThruRight	U-Turn	Left	Thru	Right	U-Turn		Left	Thru	Right	Hour	West	East	South	North		
4:00 PM	0	0	0	0	0	12	0	29	0	0	158	44	0	10	161	0	414	1,671	0	0	0	0
4:15 PM	0	0	0	0	0	14	0	16	0	0	192	41	0	32	156	0	451	1,713	0	0	0	0
4:30 PM	0	0	0	0	1	18	0	16	0	0	171	31	1	27	165	0	430	1,806	0	0	0	0
4:45 PM	0	0	0	0	0	11	0	11	0	0	162	27	1	14	150	0	376	1,882	0	0	0	0
5:00 PM	0	0	0	0	0	8	0	17	0	0	220	40	0	17	154	0	456	2,030	0	0	0	0
5:15 PM	0	0	0	0	0	11	0	16	0	0	324	35	0	23	135	0	544		0	0	0	0
5:30 PM	0	0	0	0	0	7	0	24	0	0	278	31	0	18	148	0	506		0	0	0	0
5:45 PM	0	0	0	0	0	14	0	8	0	0	280	38	3	18	163	0	524		0	0	0	0

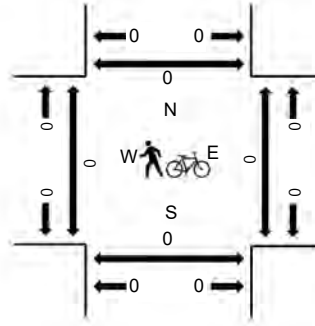
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound			Westbound			Northbound			Southbound			Total			
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right				
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	
Lights	0	0	0	0	40	0	65	0	0	1,089	143	3	76	593	0	2,009
Mediums	0	0	0	0	0	0	0	0	0	12	1	0	0	6	0	19
Total	0	0	0	0	40	0	65	0	0	1,102	144	3	76	600	0	2,030

Peak Hour - Motorized Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

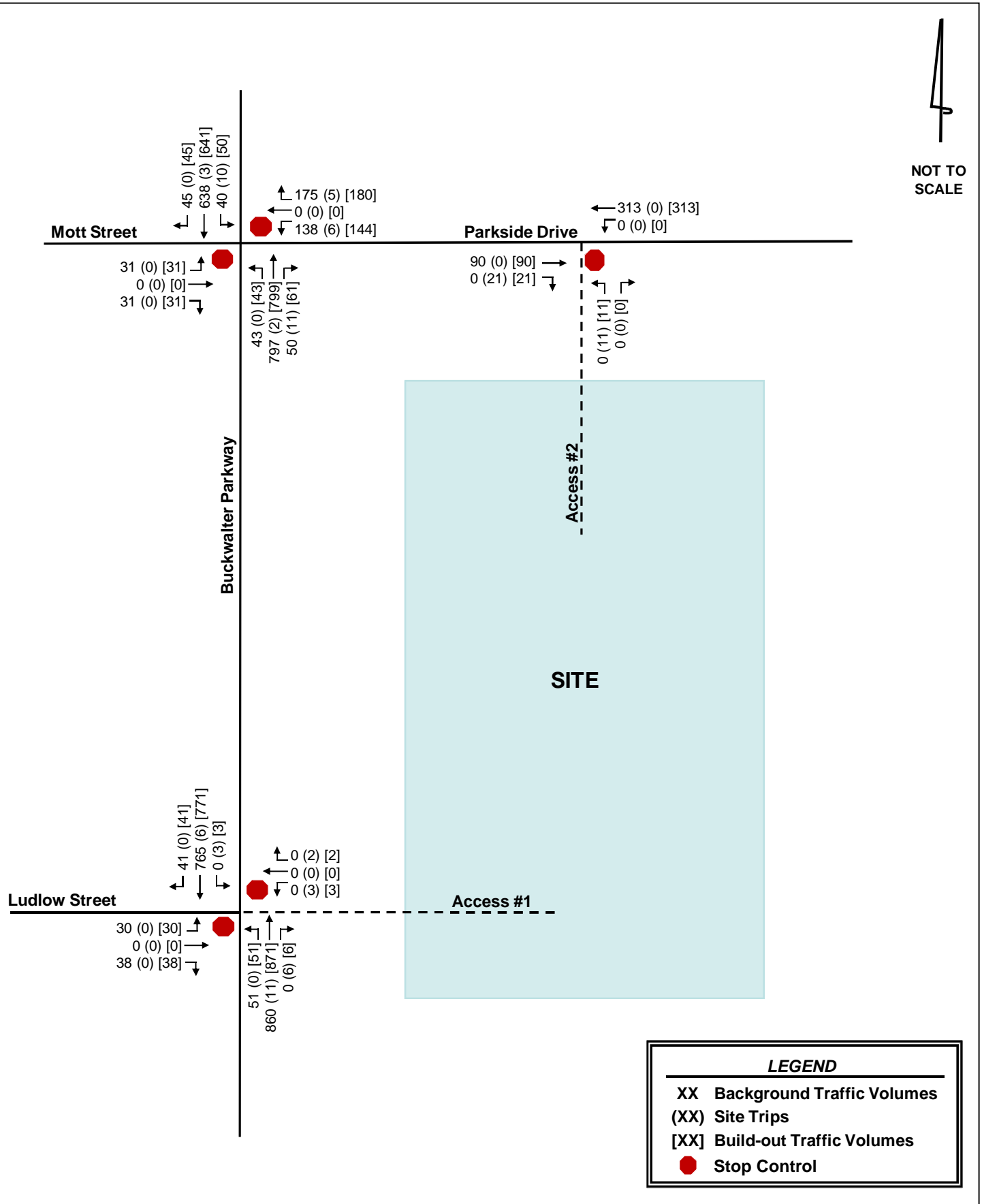
Interval Start Time	WASHINGTON Eastbound		WASHINGTON Westbound		BUCKWALTER PKWY Northbound		BUCKWALTER PKWY Southbound		Total	Rolling Hour	Pedestrian Crossings						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North			
4:00 PM	0	2	0	0	0	0	0	0	200	0	2	371	1,503	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	230	0	1	402	1,564	0	0	0	0
4:30 PM	0	1	0	1	0	0	0	0	199	0	0	382	1,678	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	188	0	0	348	1,755	0	0	0	0
5:00 PM	0	3	0	5	0	0	0	0	260	0	1	432	1,908	0	0	0	0
5:15 PM	0	0	0	2	0	0	0	0	362	0	0	516		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	305	0	0	459		0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	321	0	0	501		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound		Westbound		Northbound		Southbound		Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	1
Lights	0	4	0	6	1	11,234	0	0	640
Mediums	0	0	0	1	0	13	0	0	5
Total	0	4	0	7	1	11,248	0	0	646

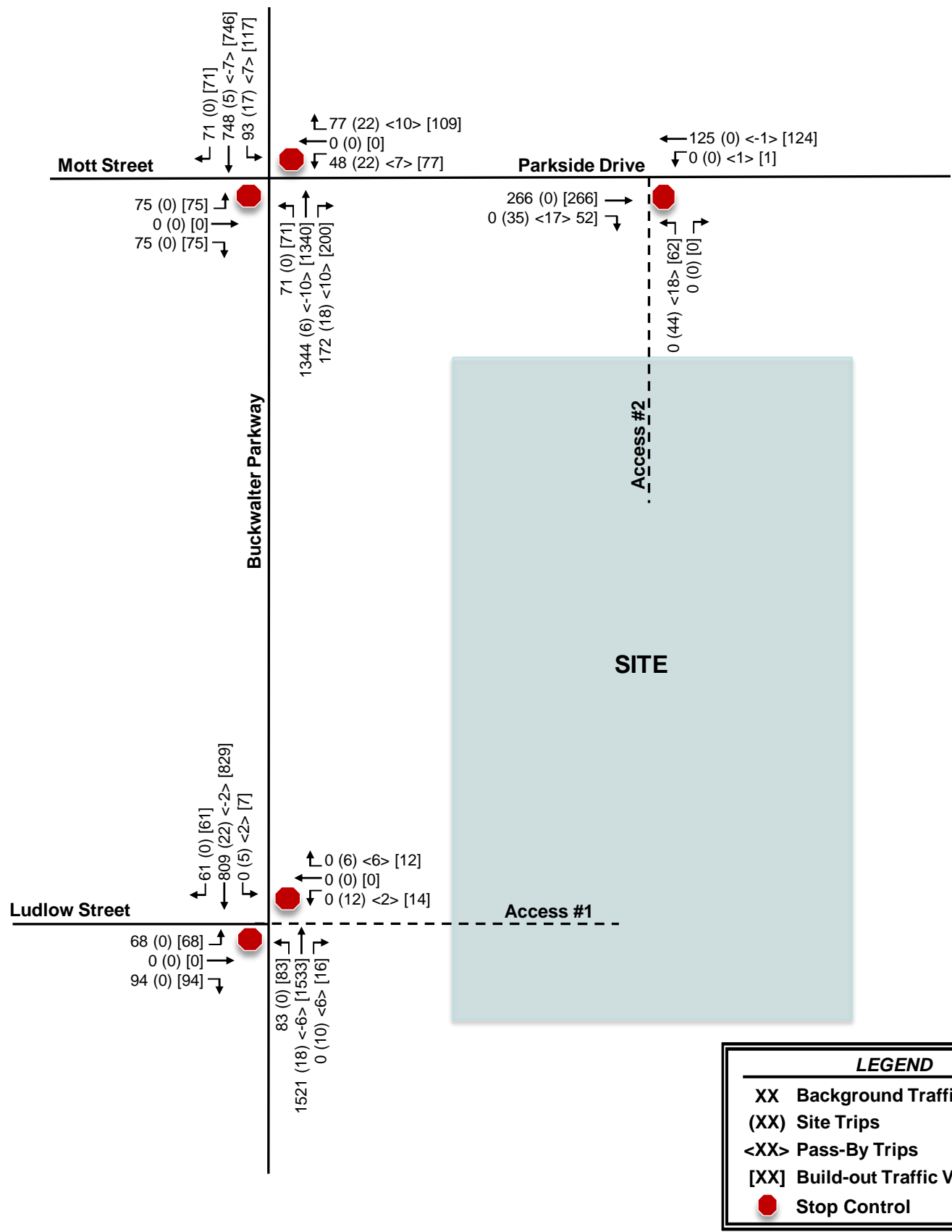


NOT TO SCALE



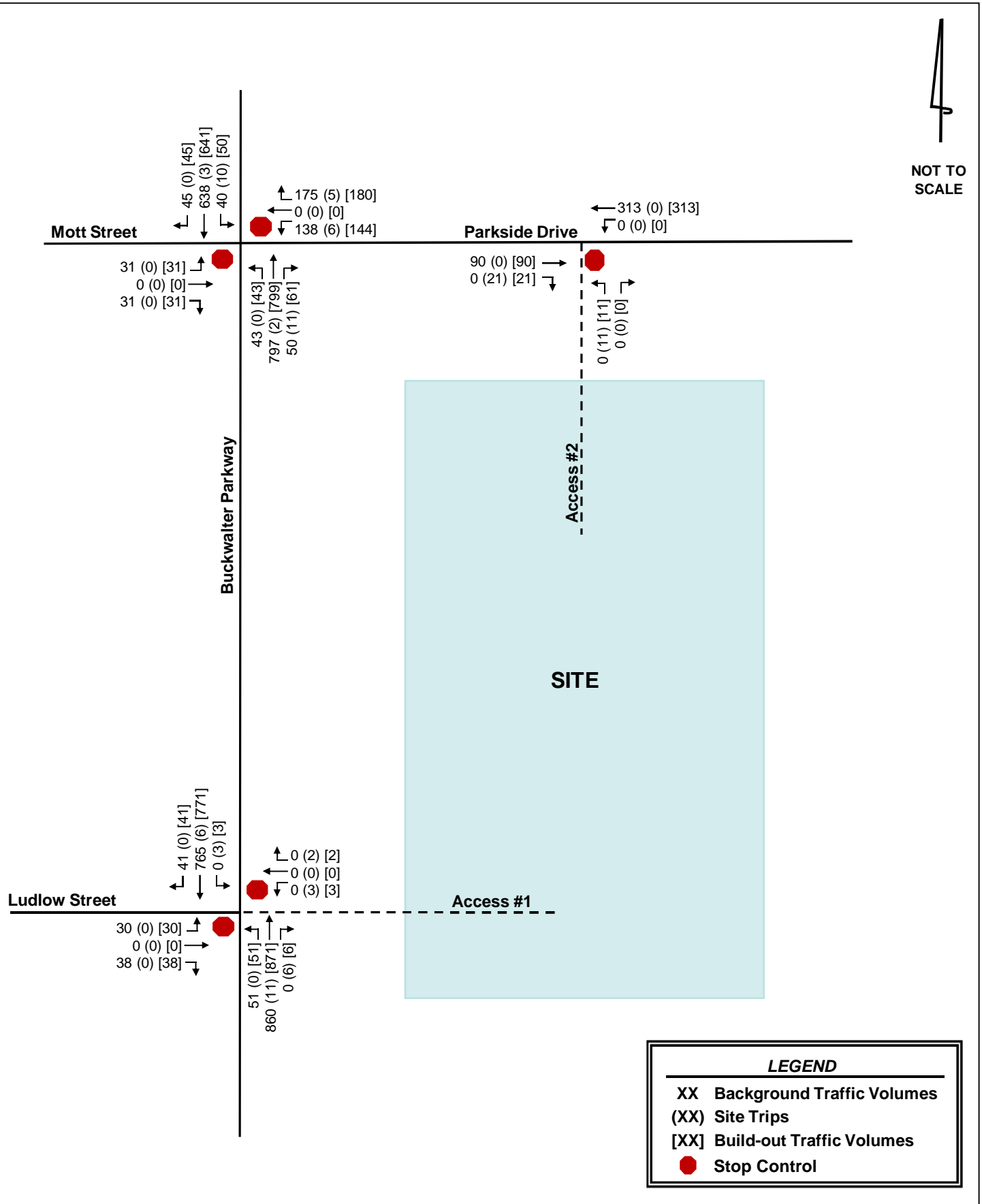


NOT TO SCALE



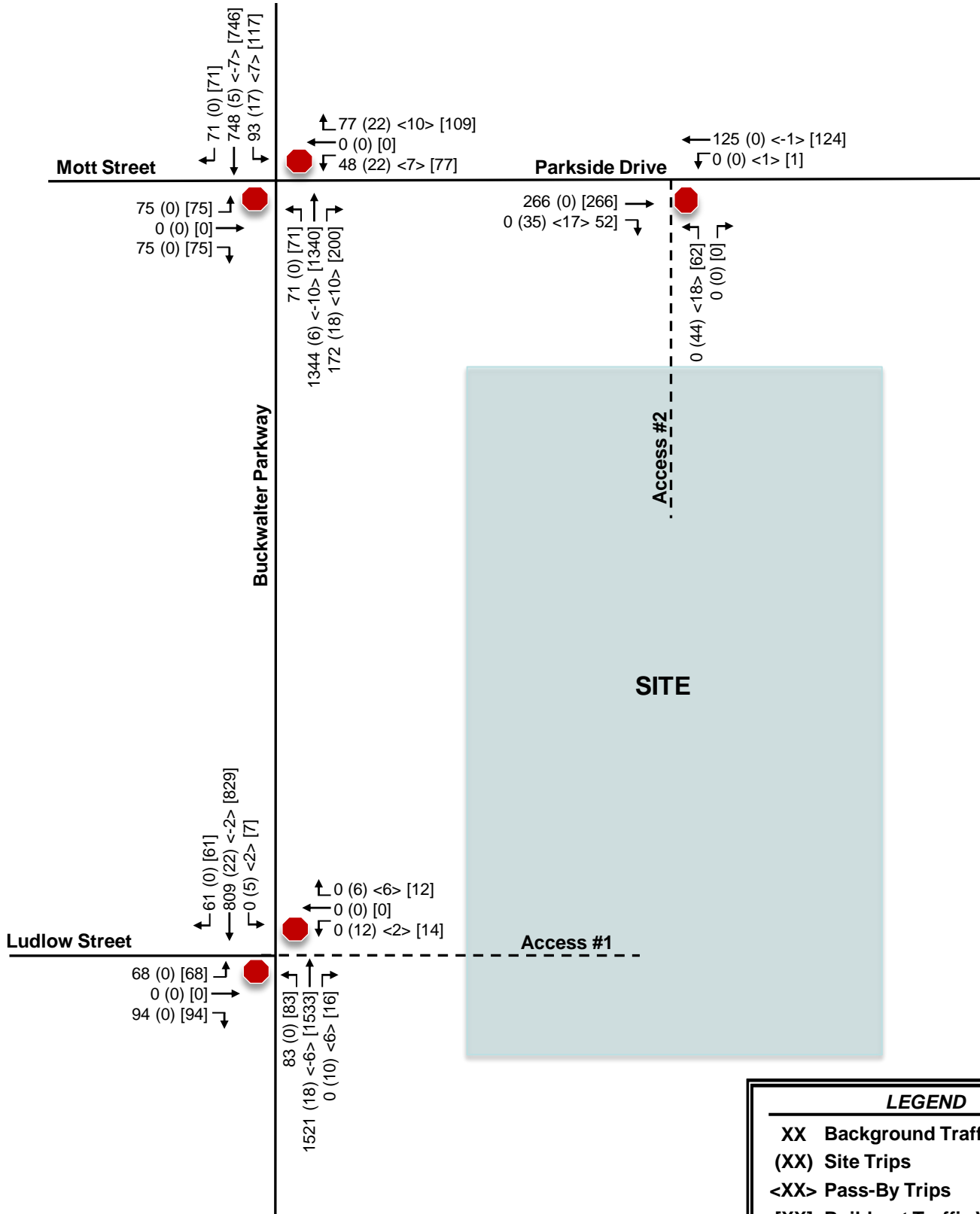


NOT TO SCALE



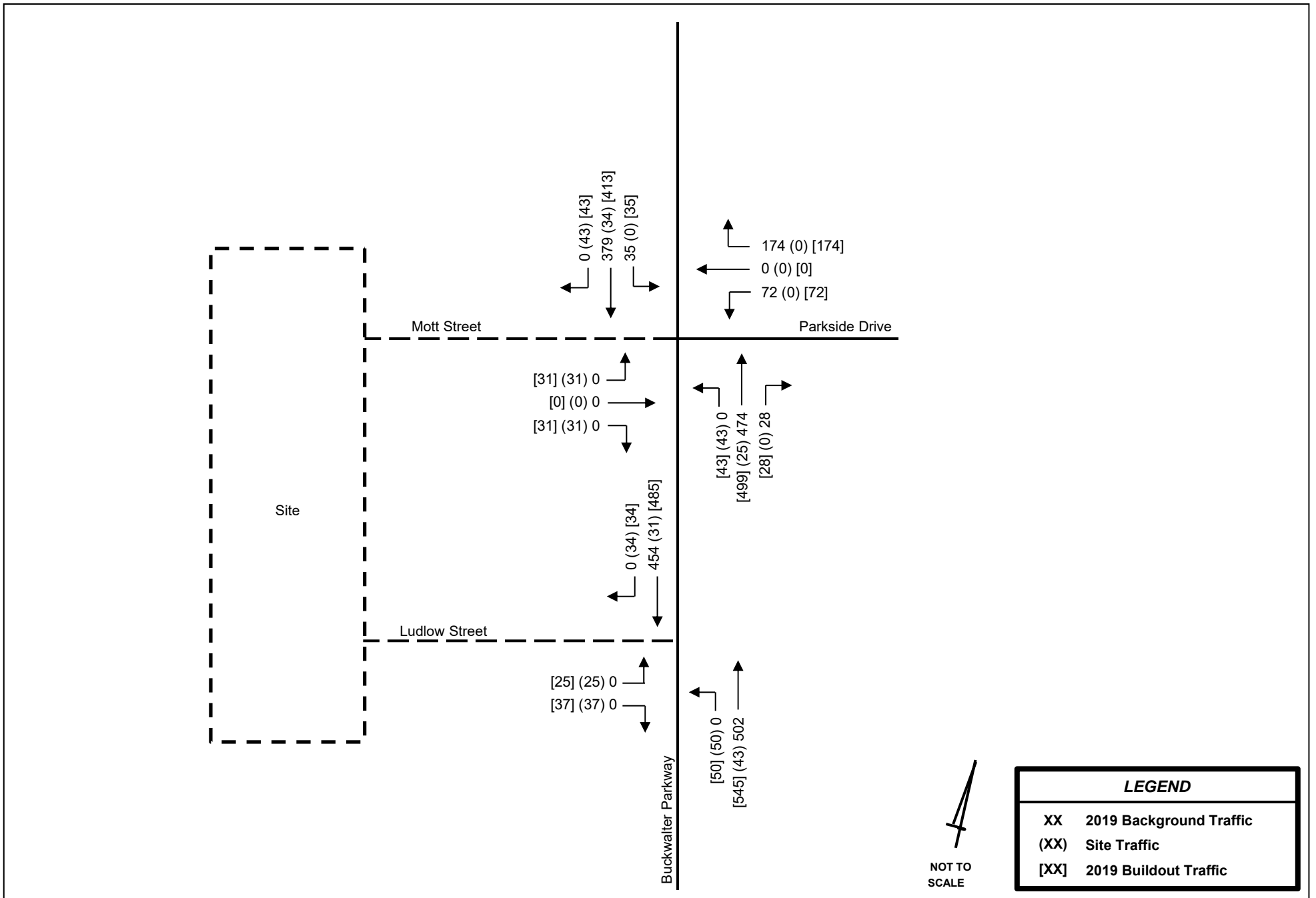


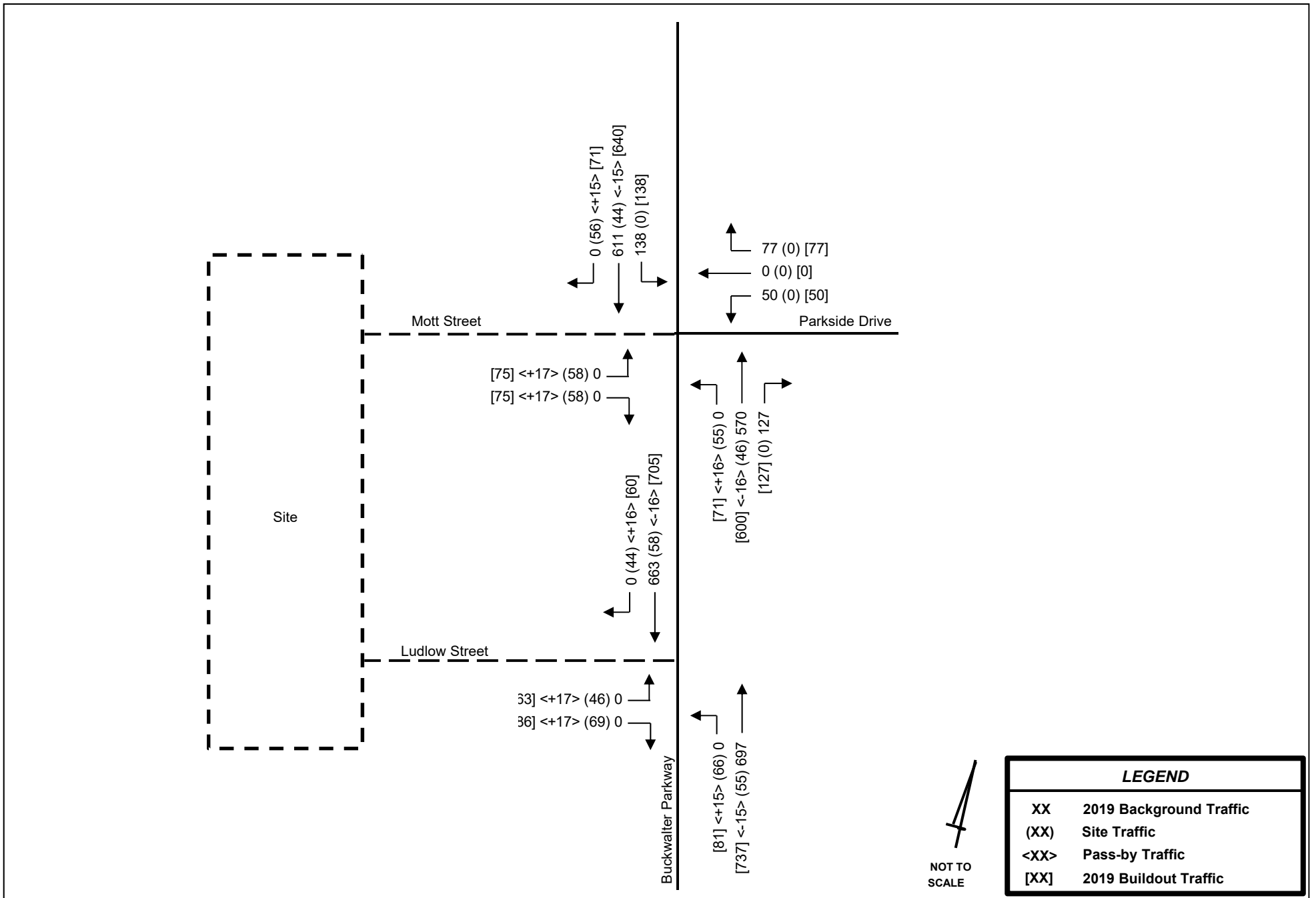
NOT TO SCALE



LEGEND

- XX Background Traffic Volumes
- (XX) Site Trips
- <XX> Pass-By Trips
- [XX] Build-out Traffic Volumes
- Stop Control





HCM 6th TWSC
 3: Buckwalter Parkway & Cassidy Drive

08/25/2021

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↕↕	↗	↘	↕↕
Traffic Vol, veh/h	1	3	936	3	8	698
Future Vol, veh/h	1	3	936	3	8	698
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	130	-	100	130	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	95	95	95	95
Heavy Vehicles, %	25	25	2	2	2	2
Mvmt Flow	2	6	985	3	8	735

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1369	493	0	0	988
Stage 1	985	-	-	-	-
Stage 2	384	-	-	-	-
Critical Hdwy	7.3	7.4	-	-	4.14
Critical Hdwy Stg 1	6.3	-	-	-	-
Critical Hdwy Stg 2	6.3	-	-	-	-
Follow-up Hdwy	3.75	3.55	-	-	2.22
Pot Cap-1 Maneuver	112	465	-	-	695
Stage 1	274	-	-	-	-
Stage 2	595	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	111	465	-	-	695
Mov Cap-2 Maneuver	111	-	-	-	-
Stage 1	274	-	-	-	-
Stage 2	588	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	111	465	695	-
HCM Lane V/C Ratio	-	-	0.018	0.013	0.012	-
HCM Control Delay (s)	-	-	38	12.8	10.2	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕	↗	↖	↕	↗
Traffic Vol, veh/h	21	0	9	5	1	35	12	887	22	53	597	35
Future Vol, veh/h	21	0	9	5	1	35	12	887	22	53	597	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	320	-	100	320	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	73	73	73	91	91	91	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	14	7	1	48	13	975	24	58	649	38

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1279	1790	325	1442	1804	488	687	0	0	999	0	0
Stage 1	765	765	-	1001	1001	-	-	-	-	-	-	-
Stage 2	514	1025	-	441	803	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	123	80	671	93	79	526	903	-	-	689	-	-
Stage 1	362	410	-	260	319	-	-	-	-	-	-	-
Stage 2	511	311	-	565	394	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	102	72	671	84	71	526	903	-	-	689	-	-
Mov Cap-2 Maneuver	102	72	-	84	71	-	-	-	-	-	-	-
Stage 1	357	376	-	256	315	-	-	-	-	-	-	-
Stage 2	456	307	-	507	361	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	42.3		20.2		0.1		0.8	
HCM LOS	E		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	903	-	-	102	671	293	689	-	-
HCM Lane V/C Ratio	0.015	-	-	0.317	0.021	0.192	0.084	-	-
HCM Control Delay (s)	9	-	-	55.9	10.5	20.2	10.7	-	-
HCM Lane LOS	A	-	-	F	B	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	0.7	0.3	-	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕	↕	↗	↕	↗
Traffic Vol, veh/h	5	2	22	40	2	70	37	834	112	26	583	7
Future Vol, veh/h	5	2	22	40	2	70	37	834	112	26	583	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	320	-	100	320	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	88	88	88	95	95	95	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	3	32	45	2	80	39	878	118	29	648	8

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1224	1780	324	1340	1670	439	656	0	0	996	0	0
Stage 1	706	706	-	956	956	-	-	-	-	-	-	-
Stage 2	518	1074	-	384	714	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	135	81	672	111	95	566	927	-	-	690	-	-
Stage 1	393	437	-	277	335	-	-	-	-	-	-	-
Stage 2	509	294	-	611	433	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	107	74	672	96	87	566	927	-	-	690	-	-
Mov Cap-2 Maneuver	107	74	-	96	87	-	-	-	-	-	-	-
Stage 1	376	419	-	265	321	-	-	-	-	-	-	-
Stage 2	416	282	-	553	415	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.5		50.5		0.3		0.4	
HCM LOS	C		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	927	-	-	95	672	199	690	-	-
HCM Lane V/C Ratio	0.042	-	-	0.108	0.048	0.64	0.042	-	-
HCM Control Delay (s)	9.1	-	-	47.4	10.6	50.5	10.4	-	-
HCM Lane LOS	A	-	-	E	B	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	3.8	0.1	-	-

HCM 6th TWSC
 11: Buckwalter Parkway & Mott Street/Parkside Drive

08/25/2021

Intersection

Int Delay, s/veh 27.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑↑	↖	↖	↑↑	↖
Traffic Vol, veh/h	0	0	0	131	0	167	0	733	48	38	572	2
Future Vol, veh/h	0	0	0	131	0	167	0	733	48	38	572	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	65	-	-	100	-	-	335	-	265	225	-	215
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	83	83	83	79	79	79	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	158	0	201	0	928	61	43	650	2

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1200	1725	325	1339	1666	464	652	0	0	989	0	0
Stage 1	736	736	-	928	928	-	-	-	-	-	-	-
Stage 2	464	989	-	411	738	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	141	88	671	~ 111	96	545	930	-	-	695	-	-
Stage 1	377	423	-	288	345	-	-	-	-	-	-	-
Stage 2	548	323	-	589	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	85	83	671	~ 106	90	545	930	-	-	695	-	-
Mov Cap-2 Maneuver	85	83	-	~ 106	90	-	-	-	-	-	-	-
Stage 1	377	397	-	288	345	-	-	-	-	-	-	-
Stage 2	346	323	-	553	396	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	156.2	0	0.7
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	930	-	-	-	-	106	545	695	-	-
HCM Lane V/C Ratio	-	-	-	-	-	1.489	0.369	0.062	-	-
HCM Control Delay (s)	0	-	-	0	0	335.7	15.4	10.5	-	-
HCM Lane LOS	A	-	-	A	A	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	11.6	1.7	0.2	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 13: Buckwalter Parkway & Kroger Fuel Driveway

08/25/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	55	0	799	642	57
Future Vol, veh/h	0	55	0	799	642	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	0	868	698	62

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	349	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	647	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	647	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 647	-	-
HCM Lane V/C Ratio	- 0.092	-	-
HCM Control Delay (s)	- 11.1	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.3	-	-

HCM 6th TWSC
 16: Buckwalter Parkway & Innovation Drive

08/25/2021

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	38	40	765	652	45
Future Vol, veh/h	54	38	40	765	652	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	200	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	94	94	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	46	43	814	749	52

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1242	375	801	0	-	0
Stage 1	749	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	167	623	818	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	158	623	818	-	-	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.8	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	818	-	158	623	-	-
HCM Lane V/C Ratio	0.052	-	0.412	0.073	-	-
HCM Control Delay (s)	9.6	-	42.9	11.2	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.8	0.2	-	-

HCM 6th TWSC
 20: Buckwalter Parkway & Progressive Street

08/25/2021

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	62	0	840	628	72
Future Vol, veh/h	0	62	0	840	628	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	120
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	95	95	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	78	0	884	698	80

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	349	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	647	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	647	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	647	-	-
HCM Lane V/C Ratio	-	0.121	-	-
HCM Control Delay (s)	-	11.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

HCM 6th TWSC
 25: Buckwalter Parkway & Ludlow Street

08/25/2021

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗				↖	↕		↖	↕	↗
Traffic Vol, veh/h	5	0	1	0	0	0	1	778	0	0	699	7
Future Vol, veh/h	5	0	1	0	0	0	1	778	0	0	699	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	-	-	-	210	-	-	215	-	200
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	92	92	92	89	89	89	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	2	0	0	0	1	874	0	0	822	8

Major/Minor	Minor2			Major1			Major2					
Conflicting Flow All	1261	1698	411				830	0	0	874	0	0
Stage 1	822	822	-				-	-	-	-	-	-
Stage 2	439	876	-				-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94				4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32				2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	162	91	590				798	-	-	768	-	-
Stage 1	392	386	-				-	-	-	-	-	-
Stage 2	617	365	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	162	0	590				798	-	-	768	-	-
Mov Cap-2 Maneuver	162	0	-				-	-	-	-	-	-
Stage 1	392	0	-				-	-	-	-	-	-
Stage 2	617	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	798	-	-	162	590	768	-	-
HCM Lane V/C Ratio	0.001	-	-	0.049	0.003	-	-	-
HCM Control Delay (s)	9.5	-	-	28.4	11.1	0	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

HCM 6th TWSC
 3: Buckwalter Parkway & Cassidy Drive

08/25/2021

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↕↕	↗	↘	↕↕
Traffic Vol, veh/h	2	7	815	2	1	827
Future Vol, veh/h	2	7	815	2	1	827
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	130	-	100	130	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	56	56	86	86	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	13	948	2	1	940

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1420	474	0	0	950	0
Stage 1	948	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	127	537	-	-	719	-
Stage 1	337	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	127	537	-	-	719	-
Mov Cap-2 Maneuver	127	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	593	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	127	537	719	-
HCM Lane V/C Ratio	-	-	0.028	0.023	0.002	-
HCM Control Delay (s)	-	-	34.2	11.9	10	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↕	↗	↗	↕↕	↗
Traffic Vol, veh/h	38	0	35	11	1	37	30	738	10	15	768	55
Future Vol, veh/h	38	0	35	11	1	37	30	738	10	15	768	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	320	-	100	320	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	63	63	63	88	88	88	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	0	47	17	2	59	34	839	11	17	893	64

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1416	1845	447	1388	1898	420	957	0	0	850	0	0
Stage 1	927	927	-	907	907	-	-	-	-	-	-	-
Stage 2	489	918	-	481	991	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	97	74	559	102	69	582	714	-	-	784	-	-
Stage 1	289	345	-	297	353	-	-	-	-	-	-	-
Stage 2	529	349	-	535	322	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	81	69	559	89	64	582	714	-	-	784	-	-
Mov Cap-2 Maneuver	81	69	-	89	64	-	-	-	-	-	-	-
Stage 1	275	337	-	283	336	-	-	-	-	-	-	-
Stage 2	451	332	-	480	315	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB		
HCM Control Delay, s	60.5		26.8		0.4		0.2		
HCM LOS	F		D						

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	714	-	-	81	559	242	784	-	-
HCM Lane V/C Ratio	0.048	-	-	0.626	0.083	0.321	0.022	-	-
HCM Control Delay (s)	10.3	-	-	105.2	12	26.8	9.7	-	-
HCM Lane LOS	B	-	-	F	B	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.9	0.3	1.3	0.1	-	-

Intersection												
Int Delay, s/veh	58.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕	↗	↖	↕	↗
Traffic Vol, veh/h	23	3	62	110	0	81	69	680	130	68	697	22
Future Vol, veh/h	23	3	62	110	0	81	69	680	130	68	697	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	320	-	100	320	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	82	82	82	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	4	78	134	0	99	73	716	137	72	734	23

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1382	1877	367	1375	1763	358	757	0	0	853	0	0
Stage 1	878	878	-	862	862	-	-	-	-	-	-	-
Stage 2	504	999	-	513	901	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	103	71	630	~ 104	83	638	850	-	-	782	-	-
Stage 1	309	364	-	316	370	-	-	-	-	-	-	-
Stage 2	518	319	-	512	355	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	76	59	630	~ 76	69	638	850	-	-	782	-	-
Mov Cap-2 Maneuver	76	59	-	~ 76	69	-	-	-	-	-	-	-
Stage 1	282	331	-	289	338	-	-	-	-	-	-	-
Stage 2	400	292	-	403	322	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.9	\$ 505.7	0.8	0.9
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	850	-	-	74	630	121	782	-	-
HCM Lane V/C Ratio	0.085	-	-	0.439	0.123	1.925	0.092	-	-
HCM Control Delay (s)	9.6	-	-	87.3	11.5	\$ 505.7	10.1	-	-
HCM Lane LOS	A	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.8	0.4	18.7	0.3	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Buckwalter Parkway & Mott Street/Parkside Drive

08/25/2021

Intersection												
Int Delay, s/veh	18											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵		↵	↑↑	↵	↵	↑↑	↵
Traffic Vol, veh/h	0	0	0	45	0	73	0	1245	163	89	678	0
Future Vol, veh/h	0	0	0	45	0	73	0	1245	163	89	678	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	65	-	-	100	-	-	335	-	265	225	-	215
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	87	87	87	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	58	0	94	0	1431	187	96	729	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1637	2539	365	1988	2352	716	729	0	0	1618	0	0
Stage 1	921	921	-	1431	1431	-	-	-	-	-	-	-
Stage 2	716	1618	-	557	921	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	67	27	632	~36	35	373	871	-	-	399	-	-
Stage 1	291	347	-	141	198	-	-	-	-	-	-	-
Stage 2	387	161	-	482	347	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	41	20	632	~29	27	373	871	-	-	399	-	-
Mov Cap-2 Maneuver	41	20	-	~29	27	-	-	-	-	-	-	-
Stage 1	291	263	-	141	198	-	-	-	-	-	-	-
Stage 2	290	161	-	366	263	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	298.1	0	2
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	871	-	-	-	-	29	373	399	-	-
HCM Lane V/C Ratio	-	-	-	-	-	1.989	0.251	0.24	-	-
HCM Control Delay (s)	0	-	-	0	0	752.6	17.9	16.8	-	-
HCM Lane LOS	A	-	-	A	A	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	6.8	1	0.9	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 13: Buckwalter Parkway & Kroger Fuel Driveway

08/25/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	62	0	1164	671	64
Future Vol, veh/h	0	62	0	1164	671	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	67	0	1265	729	70

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	365	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	632	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	632	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	632	-	-
HCM Lane V/C Ratio	-	0.107	-	-
HCM Control Delay (s)	-	11.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

HCM 6th TWSC
 16: Buckwalter Parkway & Innovation Drive

08/25/2021

Intersection						
Int Delay, s/veh	18.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↕↕	↕↕	↗
Traffic Vol, veh/h	132	121	114	784	632	99
Future Vol, veh/h	132	121	114	784	632	99
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	200	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	144	120	825	665	104

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1318	333	769	0	-	0
Stage 1	665	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 149	663	841	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 128	663	841	-	-	-
Mov Cap-2 Maneuver	~ 128	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	480	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	120	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	841	-	128	663	-	-
HCM Lane V/C Ratio	0.143	-	1.228	0.217	-	-
HCM Control Delay (s)	10	-	219.1	11.9	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	9.7	0.8	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 20: Buckwalter Parkway & Progressive Street

08/25/2021

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	135	0	924	689	58
Future Vol, veh/h	0	135	0	924	689	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	120
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	94	94	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	159	0	983	725	61

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	363	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	634	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	634	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	634	-	-
HCM Lane V/C Ratio	-	0.251	-	-
HCM Control Delay (s)	-	12.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	1	-	-

HCM 6th TWSC
25: Buckwalter Parkway & Ludlow Street

08/25/2021

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗				↖	↕↗		↖	↕↗	↗
Traffic Vol, veh/h	5	0	8	0	0	0	2	1410	0	0	730	1
Future Vol, veh/h	5	0	8	0	0	0	2	1410	0	0	730	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	-	-	-	210	-	-	215	-	200
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	86	86	86	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	16	0	0	0	2	1640	0	0	777	1

Major/Minor	Minor2			Major1			Major2					
Conflicting Flow All	1601	2421	389				778	0	0	1640	0	0
Stage 1	777	777	-				-	-	-	-	-	-
Stage 2	824	1644	-				-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94				4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32				2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	97	32	610				834	-	-	391	-	-
Stage 1	414	405	-				-	-	-	-	-	-
Stage 2	391	156	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	97	0	610				834	-	-	391	-	-
Mov Cap-2 Maneuver	97	0	-				-	-	-	-	-	-
Stage 1	413	0	-				-	-	-	-	-	-
Stage 2	391	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	834	-	-	97	610	391	-	-
HCM Lane V/C Ratio	0.003	-	-	0.103	0.026	-	-	-
HCM Control Delay (s)	9.3	-	-	46.3	11.1	0	-	-
HCM Lane LOS	A	-	-	E	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵	↵	↕↕	↵	↵	↕↕
Traffic Vol, veh/h	1	3	1182	4	10	924
Future Vol, veh/h	1	3	1182	4	10	924
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	130	-	100	130	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	25	25	2	2	2	2
Mvmt Flow	1	3	1313	4	11	1027

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1849	657	0	0	1317	0
Stage 1	1313	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Critical Hdwy	7.3	7.4	-	-	4.14	-
Critical Hdwy Stg 1	6.3	-	-	-	-	-
Critical Hdwy Stg 2	6.3	-	-	-	-	-
Follow-up Hdwy	3.75	3.55	-	-	2.22	-
Pot Cap-1 Maneuver	51	357	-	-	521	-
Stage 1	177	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	50	357	-	-	521	-
Mov Cap-2 Maneuver	50	-	-	-	-	-
Stage 1	177	-	-	-	-	-
Stage 2	480	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.1	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	50	357	521	-
HCM Lane V/C Ratio	-	-	0.022	0.009	0.021	-
HCM Control Delay (s)	-	-	78.6	15.2	12.1	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0	0.1	-

HCM 6th Signalized Intersection Summary
 5: Buckwalter Parkway & Pinellas Drive North

2030 AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	28	2	10	49	3	38	94	772	42	58	1118	26
Future Volume (veh/h)	28	2	10	49	3	38	94	772	42	58	1118	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	2	11	54	3	42	104	858	47	64	1242	29
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	9	152	104	14	53	365	2858	1275	555	2858	1275
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	1.00	1.00	1.00	0.80	0.80	0.80
Sat Flow, veh/h	1151	95	1585	600	147	551	436	3554	1585	616	3554	1585
Grp Volume(v), veh/h	33	0	11	99	0	0	104	858	47	64	1242	29
Grp Sat Flow(s),veh/h/ln	1247	0	1585	1298	0	0	436	1777	1585	616	1777	1585
Q Serve(g_s), s	0.0	0.0	0.8	6.3	0.0	0.0	5.3	0.0	0.0	2.7	12.6	0.4
Cycle Q Clear(g_c), s	3.0	0.0	0.8	9.3	0.0	0.0	17.9	0.0	0.0	2.7	12.6	0.4
Prop In Lane	0.94		1.00	0.55		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	0	152	171	0	0	365	2858	1275	555	2858	1275
V/C Ratio(X)	0.19	0.00	0.07	0.58	0.00	0.00	0.29	0.30	0.04	0.12	0.43	0.02
Avail Cap(c_a), veh/h	287	0	277	288	0	0	365	2858	1275	555	2858	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	49.4	53.7	0.0	0.0	1.2	0.0	0.0	2.6	3.5	2.3
Incr Delay (d2), s/veh	0.5	0.0	0.2	3.1	0.0	0.0	2.0	0.3	0.1	0.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.3	3.1	0.0	0.0	0.2	0.1	0.0	0.3	3.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	0.0	49.6	56.8	0.0	0.0	3.1	0.3	0.1	3.0	4.0	2.4
LnGrp LOS	D	A	D	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		44			99			1009			1335	
Approach Delay, s/veh		50.6			56.8			0.6			3.9	
Approach LOS		D			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		102.5		17.5		102.5		17.5				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		87.0		21.0		87.0		21.0				
Max Q Clear Time (g_c+I1), s		19.9		5.0		14.6		11.3				
Green Ext Time (p_c), s		9.3		0.1		13.1		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			5.5									
HCM 6th LOS			A									

HCM 6th TWSC
 8: Buckwalter Parkway & Pinellas Drive South

2030 AM

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕	↗		↕	↗
Traffic Vol, veh/h	0	0	24	0	0	77	0	1104	134	0	831	8
Future Vol, veh/h	0	0	24	0	0	77	0	1104	134	0	831	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	100	-	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	27	0	0	86	0	1227	149	0	923	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	462	-	-	614	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	547	0	0	435	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	547	-	-	435	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.9		15.3		0		0	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	547	435	-
HCM Lane V/C Ratio	-	-	0.049	0.197	-
HCM Control Delay (s)	-	-	11.9	15.3	-
HCM Lane LOS	-	-	B	C	-
HCM 95th %tile Q(veh)	-	-	0.2	0.7	-

HCM 6th Signalized Intersection Summary
 11: Buckwalter Parkway & Mott Street/Parkside Drive

2030 AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	0	31	151	0	189	94	873	68	58	718	45
Future Volume (veh/h)	61	0	31	151	0	189	94	873	68	58	718	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	0	34	168	0	210	104	970	76	64	798	50
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	0	315	309	0	315	516	2493	1112	438	2493	1112
Arrive On Green	0.20	0.00	0.20	0.20	0.00	0.20	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1172	0	1585	1375	0	1585	650	3554	1585	539	3554	1585
Grp Volume(v), veh/h	68	0	34	168	0	210	104	970	76	64	798	50
Grp Sat Flow(s),veh/h/ln	1172	0	1585	1375	0	1585	650	1777	1585	539	1777	1585
Q Serve(g_s), s	6.8	0.0	2.1	13.7	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.5	0.0	2.1	15.8	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	0	315	309	0	315	516	2493	1112	438	2493	1112
V/C Ratio(X)	0.46	0.00	0.11	0.54	0.00	0.67	0.20	0.39	0.07	0.15	0.32	0.04
Avail Cap(c_a), veh/h	288	0	502	471	0	502	516	2493	1112	438	2493	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	39.4	45.9	0.0	44.4	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.1	1.5	0.0	2.4	0.9	0.5	0.1	0.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.8	4.8	0.0	6.0	0.1	0.2	0.0	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	0.0	39.5	47.4	0.0	46.9	0.9	0.5	0.1	0.7	0.3	0.1
LnGrp LOS	E	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		102			378			1150				912
Approach Delay, s/veh		50.9			47.1			0.5				0.4
Approach LOS		D			D			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		90.2		29.8		90.2		29.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		70.0		38.0		70.0		38.0				
Max Q Clear Time (g_c+I1), s		2.0		23.5		2.0		17.8				
Green Ext Time (p_c), s		9.8		0.3		7.2		1.8				
Intersection Summary												
HCM 6th Ctrl Delay				9.4								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary
 13: Buckwalter Parkway & Kroger Fuel Driveway

2030 AM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	59	60	48	1011	844	68
Future Volume (veh/h)	59	60	48	1011	844	68
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	0	53	1123	938	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	86		569	3027	3027	
Arrive On Green	0.05	0.00	0.85	0.85	1.00	0.00
Sat Flow, veh/h	1781	1585	597	3647	3647	1585
Grp Volume(v), veh/h	66	0	53	1123	938	0
Grp Sat Flow(s),veh/h/ln	1781	1585	597	1777	1777	1585
Q Serve(g_s), s	4.4	0.0	1.7	8.2	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	1.7	8.2	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	86		569	3027	3027	
V/C Ratio(X)	0.77		0.09	0.37	0.31	
Avail Cap(c_a), veh/h	341		569	3027	3027	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.4	0.0	1.4	1.9	0.0	0.0
Incr Delay (d2), s/veh	13.3	0.0	0.3	0.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.1	1.3	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	69.8	0.0	1.8	2.3	0.3	0.0
LnGrp LOS	E		A	A	A	
Approach Vol, veh/h	66	A		1176	938	A
Approach Delay, s/veh	69.8			2.3	0.3	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		108.2		11.8		108.2
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		85.0		23.0		85.0
Max Q Clear Time (g_c+I1), s		10.2		6.4		2.0
Green Ext Time (p_c), s		10.8		0.1		7.5
Intersection Summary						
HCM 6th Ctrl Delay			3.4			
HCM 6th LOS			A			
Notes						
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.						

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	↗
Traffic Vol, veh/h	0	42	0	1072	856	54
Future Vol, veh/h	0	42	0	1072	856	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	47	0	1191	951	60

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	476	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	535	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	535	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	535	-
HCM Lane V/C Ratio	-	0.087	-
HCM Control Delay (s)	-	12.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	62	0	840	628	72
Future Vol, veh/h	0	62	0	840	628	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	120
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	69	0	933	698	80

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	349	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	647	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	647	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	647	-	-
HCM Lane V/C Ratio	-	0.106	-	-
HCM Control Delay (s)	-	11.2	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕↔			↕↕	↗
Traffic Vol, veh/h	0	0	38	0	0	2	0	1035	6	0	875	42
Future Vol, veh/h	0	0	38	0	0	2	0	1035	6	0	875	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	42	0	0	2	0	1150	7	0	972	47

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	486	-	-	579	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-
Pot Cap-1 Maneuver	0	0	527	0	0	458	0	-
Stage 1	0	0	-	0	0	-	0	-
Stage 2	0	0	-	0	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	527	-	-	458	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.4		12.9		0		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	527	458	-
HCM Lane V/C Ratio	-	-	0.08	0.005	-
HCM Control Delay (s)	-	-	12.4	12.9	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵	↵	↕↕	↵	↵	↕↕
Traffic Vol, veh/h	2	8	1100	2	1	1116
Future Vol, veh/h	2	8	1100	2	1	1116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	130	-	100	130	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	25	25	2	2	2	2
Mvmt Flow	2	9	1222	2	1	1240

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1844	611	0	0	1224
Stage 1	1222	-	-	-	-
Stage 2	622	-	-	-	-
Critical Hdwy	7.3	7.4	-	-	4.14
Critical Hdwy Stg 1	6.3	-	-	-	-
Critical Hdwy Stg 2	6.3	-	-	-	-
Follow-up Hdwy	3.75	3.55	-	-	2.22
Pot Cap-1 Maneuver	51	385	-	-	565
Stage 1	200	-	-	-	-
Stage 2	439	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	51	385	-	-	565
Mov Cap-2 Maneuver	51	-	-	-	-
Stage 1	200	-	-	-	-
Stage 2	438	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	51	385	565	-
HCM Lane V/C Ratio	-	-	0.044	0.023	0.002	-
HCM Control Delay (s)	-	-	78.8	14.6	11.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

HCM 6th Signalized Intersection Summary
 5: Buckwalter Parkway & Pinellas Drive North

2030 pm



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	67	3	38	132	1	40	99	965	66	118	983	12
Future Volume (veh/h)	67	3	38	132	1	40	99	965	66	118	983	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	3	42	147	1	44	110	1072	73	131	1092	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	12	312	217	4	50	351	2498	1114	405	2498	1114
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	1.00	1.00	1.00	0.70	0.70	0.70
Sat Flow, veh/h	1377	62	1585	832	22	254	510	3554	1585	491	3554	1585
Grp Volume(v), veh/h	77	0	42	192	0	0	110	1072	73	131	1092	13
Grp Sat Flow(s),veh/h/ln	1439	0	1585	1109	0	0	510	1777	1585	491	1777	1585
Q Serve(g_s), s	0.0	0.0	2.6	15.6	0.0	0.0	7.0	0.0	0.0	13.0	15.8	0.3
Cycle Q Clear(g_c), s	5.4	0.0	2.6	21.0	0.0	0.0	22.8	0.0	0.0	13.0	15.8	0.3
Prop In Lane	0.96		1.00	0.77		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	342	0	312	271	0	0	351	2498	1114	405	2498	1114
V/C Ratio(X)	0.22	0.00	0.13	0.71	0.00	0.00	0.31	0.43	0.07	0.32	0.44	0.01
Avail Cap(c_a), veh/h	427	0	409	358	0	0	351	2498	1114	405	2498	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	0.0	39.7	49.5	0.0	0.0	2.1	0.0	0.0	7.2	7.6	5.3
Incr Delay (d2), s/veh	0.3	0.0	0.2	4.3	0.0	0.0	2.3	0.5	0.1	2.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.0	5.9	0.0	0.0	0.4	0.2	0.0	1.4	5.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	39.9	53.7	0.0	0.0	4.5	0.5	0.1	9.3	8.2	5.4
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		119			192			1255				1236
Approach Delay, s/veh		40.7			53.7			0.9				8.3
Approach LOS		D			D			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		90.4		29.6		90.4		29.6				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		77.0		31.0		77.0		31.0				
Max Q Clear Time (g_c+I1), s		24.8		7.4		17.8		23.0				
Green Ext Time (p_c), s		11.8		0.5		12.6		0.6				
Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

HCM 6th TWSC
 8: Buckwalter Parkway & Pinellas Drive South

2030 pm

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕	↗		↕	↗
Traffic Vol, veh/h	0	0	68	0	0	89	0	1021	155	0	1081	26
Future Vol, veh/h	0	0	68	0	0	89	0	1021	155	0	1081	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	100	-	-	320
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	76	0	0	99	0	1134	172	0	1201	29

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	601	-	-	567	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-
Pot Cap-1 Maneuver	0	0	443	0	0	467	0	-
Stage 1	0	0	-	0	0	-	0	-
Stage 2	0	0	-	0	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	443	-	-	467	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.8		14.8		0		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	443	467	-
HCM Lane V/C Ratio	-	-	0.171	0.212	-
HCM Control Delay (s)	-	-	14.8	14.8	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.8	-

HCM 6th Signalized Intersection Summary
 11: Buckwalter Parkway & Mott Street/Parkside Drive

2030 pm



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↑↑	↷	↶	↑↑	↷
Traffic Volume (veh/h)	143	0	75	92	0	109	152	1445	223	139	828	71
Future Volume (veh/h)	143	0	75	92	0	109	152	1445	223	139	828	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	0	83	102	0	121	169	1606	248	154	920	79
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	0	238	195	0	238	483	2665	1189	246	2665	1189
Arrive On Green	0.15	0.00	0.15	0.15	0.00	0.15	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1270	0	1585	1315	0	1585	564	3554	1585	248	3554	1585
Grp Volume(v), veh/h	159	0	83	102	0	121	169	1606	248	154	920	79
Grp Sat Flow(s),veh/h/ln	1270	0	1585	1315	0	1585	564	1777	1585	248	1777	1585
Q Serve(g_s), s	9.6	0.0	5.6	9.1	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.0	0.0	5.6	14.7	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	0	238	195	0	238	483	2665	1189	246	2665	1189
V/C Ratio(X)	0.99	0.00	0.35	0.52	0.00	0.51	0.35	0.60	0.21	0.63	0.35	0.07
Avail Cap(c_a), veh/h	161	0	238	195	0	238	483	2665	1189	246	2665	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	45.7	52.3	0.0	46.9	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	66.4	0.0	0.9	2.5	0.0	1.8	2.0	1.0	0.4	11.4	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	2.3	3.1	0.0	3.5	0.3	0.4	0.1	0.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.3	0.0	46.6	54.8	0.0	48.7	2.0	1.0	0.4	11.4	0.4	0.1
LnGrp LOS	F	A	D	D	A	D	A	A	A	B	A	A
Approach Vol, veh/h		242			223			2023			1153	
Approach Delay, s/veh		97.0			51.5			1.0			1.8	
Approach LOS		F			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		96.0		24.0		96.0		24.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		90.0		18.0		90.0		18.0				
Max Q Clear Time (g_c+I1), s		2.0		20.0		2.0		16.7				
Green Ext Time (p_c), s		28.2		0.0		17.1		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.7								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 13: Buckwalter Parkway & Kroger Fuel Driveway

2030 pm



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	68	136	1408	963	76
Future Volume (veh/h)	144	68	136	1408	963	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	0	151	1564	1070	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	190		478	2819	2819	
Arrive On Green	0.11	0.00	0.79	0.79	1.00	0.00
Sat Flow, veh/h	1781	1585	527	3647	3647	1585
Grp Volume(v), veh/h	160	0	151	1564	1070	0
Grp Sat Flow(s),veh/h/ln	1781	1585	527	1777	1777	1585
Q Serve(g_s), s	10.6	0.0	10.0	19.5	0.0	0.0
Cycle Q Clear(g_c), s	10.6	0.0	10.0	19.5	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	190		478	2819	2819	
V/C Ratio(X)	0.84		0.32	0.55	0.38	
Avail Cap(c_a), veh/h	341		478	2819	2819	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.6	0.0	3.6	4.6	0.0	0.0
Incr Delay (d2), s/veh	9.6	0.0	1.7	0.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	0.9	5.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.2	0.0	5.3	5.4	0.4	0.0
LnGrp LOS	E		A	A	A	
Approach Vol, veh/h	160	A		1715	1070	A
Approach Delay, s/veh	62.2			5.4	0.4	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		101.2		18.8		101.2
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		85.0		23.0		85.0
Max Q Clear Time (g_c+I1), s		21.5		12.6		2.0
Green Ext Time (p_c), s		22.2		0.3		9.1
Intersection Summary						
HCM 6th Ctrl Delay			6.6			
HCM 6th LOS			A			
Notes						
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.						

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	↗
Traffic Vol, veh/h	0	132	0	1222	916	118
Future Vol, veh/h	0	132	0	1222	916	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	147	0	1358	1018	131

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	509	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	509	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	509	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	509	-
HCM Lane V/C Ratio	-	0.288	-
HCM Control Delay (s)	-	14.9	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	1.2	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↕↕	↕↕	↗
Traffic Vol, veh/h	0	148	0	1253	984	69
Future Vol, veh/h	0	148	0	1253	984	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	-	-	-	120
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	1392	1093	77

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	547	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	481	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	481	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 481	-	-
HCM Lane V/C Ratio	- 0.342	-	-
HCM Control Delay (s)	- 16.3	-	-
HCM Lane LOS	- C	-	-
HCM 95th %tile Q(veh)	- 1.5	-	-

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗		↕↔			↕↕	↗
Traffic Vol, veh/h	0	0	95	0	0	12	0	1005	17	0	1761	60
Future Vol, veh/h	0	0	95	0	0	12	0	1005	17	0	1761	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	106	0	0	13	0	1117	19	0	1957	67

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	979	-	-	568	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-
Pot Cap-1 Maneuver	0	0	249	0	0	466	0	-
Stage 1	0	0	-	0	0	-	0	-
Stage 2	0	0	-	0	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	249	-	-	466	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	29.7		13		0		0	
HCM LOS	D		B					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	249	466	-
HCM Lane V/C Ratio	-	-	0.424	0.029	-
HCM Control Delay (s)	-	-	29.7	13	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	2	0.1	-



MEMORANDUM

To: Beaufort County Planning Commission
From: Rob Merchant, AICP, Director, Planning and Zoning Department
Subject: Text Amendment to the Community Development Code (CDC): Section 4.1.70 (Drive-Through Facilities) to clarify the standards for drive-throughs in Transect zones.
Date: December 6, 2021

A. BACKGROUND: The Zoning Board of Appeals recently considered applications for a Variance and Special Use permit for a restaurant with a drive-through. The discussion surrounding those applications revealed that the standards for drive-through facilities in Transect zones should be clarified.

B. EXISTING STANDARDS: Currently, uses with drive-through facilities are permitted in the T2RC, T4HCO, and T4NC Transect zones. “General Offices & Services: with Drive-Through Facilities” are permitted as Conditional uses in the T2RC, T4HCO, and T4NC zones. “General Retail with Drive-Through Facilities” are permitted as Conditional uses in the T4NC zone. “Restaurant, Cafe, and Coffee Shop with Drive-Through Facilities” are permitted by Special Use in the T4HCO and T4NC zones.

Section 4.1.70 of the Community Development Code sets out the conditions for Drive-Through Facilities. As currently written, Section 4.1.70 reads that the listed standards apply to drive-through facilities in conventional zones--there are no standards set out for facilities in Transect zones. Staff and the Zoning Board of Appeals have applied standards for drive-throughs in Transect zones by “working backward” from standards such as Building Placement, Parking Location, and Allowed Frontage Types; however, additional clarity is warranted. In Transect zones, existing standards require that new buildings are brought forward on the lot, close to the street, and that parking is located behind the building. Drive-through facilities add site planning requirements for vehicle access to the drive-through window and for vehicle stacking in the drive-through lane. It is important that the code provide clear guidance on development standards for drive-throughs. To that end, staff is proposing to revise Section 4.1.70 to add specific standards for drive-through facilities in Transect zones.

C. SUMMARY OF PROPOSED AMENDMENT: Staff is proposing to add a new paragraph to Section 4.1.70 that specifically addresses the location of drive-through lanes in Transect zones. The standard mirrors the requirements the City of Beaufort has in place for drive-throughs. Staff researched other ordinances; however, using the City’s standard makes sense in an effort to coordinate development in areas where there is a mix of City and County jurisdiction.

The proposed amendment clarifies the standards for the location of service windows (not permitted on sides of the building facing a street) and sets specific standards for the location of drive-through lanes in Transect zones (not allowed between the building and the street). It also clarifies when in the review process a Traffic Impact Analysis is considered, and adds a requirement for evaluation of the site plan by a traffic engineer in cases where a Traffic Impact Analysis is not required.

D. ATTACHMENTS:

- Proposed revisions to Section 4.1.70

4.1.70 Drive-Through Facilities

Drive-through facilities in conventional zones shall comply with the following:

- A. ~~Drive-through Configuration~~ **Service Window Location.** Drive-throughs service windows shall be located to the side or at the rear of the building, and shall be designed so that pedestrian safety is ensured. In no instance shall the drive-through window be located on the side of a building facing a street.
- B. ~~Location on Corner Lot.~~ Drive-throughs serving a building located on a corner lot shall be located to the rear or interior side. In no instance shall the drive-through be located on the side of a building facing a street.
- B. Drive-Through Lane Location.** In the T4HCO and T4NC zones, drive-through lanes shall not be located between the front of the building and the primary street; i.e., drive-through lanes shall not circulate around or through the building.
 - 1. In the T4HCO and T4NC zones, drive-through lanes shall not be visible from any primary street. Where the lot configuration makes it impossible to screen the drive-through lane from the primary street with the building, opaque fencing or vegetation may be permitted to fulfill this requirement.
- ~~E.~~ **C. Stacking Lane Requirements.** Stacking lanes shall be a minimum of 12 feet in width and provide for the stacking of at least five vehicles. One bypass lane, a minimum of 10 feet in width, shall be provided.
 - 1. For uses that will generate over 50 peak-hour trips, a Traffic Impact Analysis shall be submitted in conjunction with Land Development Plan review or Special Use Development Plan review as appropriate; uses generating fewer trips shall provide an evaluation of the site plan by a traffic engineer.
 - 2. Pedestrian pathways that cross stacking lanes shall be made prominent using raised pavement, pavement markings, and/or signage, to ensure pedestrian visibility and safety.
- D. Parking.** In the T4HCO and T4NC zones, parking shall not be located between the front of the building and the primary street.
- ~~€.~~ **E. Roof.** If covered, the roof over the drive-through shall be of a complementary architectural design as the design covering the primary portion of the structure.
- ~~Đ.~~ **F. Talk Boxes.** Talk boxes at drive-through facilities shall be screened by a sound barrier such as landscaping, a fence or a masonry wall.