



The Town of Hilton Head Island  
**Planning Commission Regular Meeting**  
**Wednesday, February 19, 2020 – 3:00 p.m.**  
Benjamin M. Racusin Council Chambers  
**AGENDA**

---

*As a courtesy to others please turn off / silence ALL mobile devices during the meeting. Thank you.*

1. **Call to Order**
2. **Pledge of Allegiance**
3. **FOIA Compliance** – Public notification of this meeting has been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act and the requirements of the Town of Hilton Head Island.
4. **Roll Call**
5. **Approval of Agenda**
6. **Approval of Minutes** – Meeting of January 15, 2020
7. **Staff Reports**
  - a. Presentation on Quality of Life Referendum
  - b. Quarterly Report
8. **Appearance by Citizens on Items Unrelated to Today's Agenda**
9. **Unfinished Business**
10. **New Business**
  - a. **Annual Traffic Report** – *Presented by Darrin Shoemaker*
11. **Commission Business**
12. **Chairman's Report**
13. **Committee Report**
14. **Adjournment**

Please note that a quorum of Town Council may result if four (4) or more of their members attend this meeting.



Town of Hilton Head Island  
**Planning Commission**  
January 15, 2020 at 3:00 p.m. Regular Meeting  
Benjamin M. Racusin Council Chambers

## **MEETING MINUTES**

**Present from the Commission:** Chairman Peter Kristian, Vice Chairman Lavon Stevens, Leslie McGowan, Mark O'Neil, Alan Perry, Michael Scanlon, Palmer E. Simmons, Todd Theodore

**Absent from the Commission:** Caroline McVitty (excused)

**Present from Town Council:** David Ames, Tamara Becker, Tom Lennox, Glenn Stanford

**Present from Town Staff:** Charles Cousins, Assistant to the Town Manager; Shawn Colin, Director of Community Development; Anne Cyran, Senior Planner; Nicole Dixon, Development Review Administrator; Brian Eber, Storm Water NPDES Coordinator; Teri Lewis, Deputy Director of Community Development; Jeff Netzinger, Assistant Town Engineer/Storm Water Manager; Jennifer Ray, Deputy Director of Community Development; Teresa Haley, Senior Administrative Assistant

---

### **1. Call to Order**

Chairman Kristian called the meeting to order at 3:00 p.m.

### **2. Pledge of Allegiance**

**3. FOIA Compliance** – Public notification of this meeting has been published, posted, and mailed in compliance with the South Carolina Freedom of Information Act and the Town of Hilton Head Island requirements.

**4. Roll Call** – See as noted above.

### **5. Approval of Agenda**

Chairman Kristian asked for a motion to amend the agenda to move item 10a prior to item 8a. Commissioner Theodore moved to approve the agenda as amended. Commissioner McGowan seconded. The motion passed with a vote of 8-0-0.

### **6. Approval of Minutes** – Meeting of November 20, 2019

Chairman Kristian asked for a motion to approve the minutes of the November 20, 2019 meeting. Commissioner Scanlon moved to approve. Commissioner O'Neil seconded. The motion passed with a vote of 8-0-0.

### **7. Appearance by Citizens on Items Unrelated to Today's Agenda**

Alex Brown addressed the Commission to incorporate Gullah preservation on the Island as part of the Comprehensive Plan update.

### **8. Unfinished Business**

a. Review of Town Council's changes related to zero lot line subdivision amendments as part of the 2019 LMO Amendments – Set One.

Ms. Dixon presented the item as described in the Commission's agenda package. Staff recommends that the Planning Commission review the suggested changes and forward their recommendation to the Town Council. The changes include:

- Amendments related to zero lot line subdivisions be revised to require 50% maximum impervious coverage per lot instead of being based on the entire development; and
- Add the word "Residential" to the definition of "Zero Lot Line Subdivision."

The Commission made comments and inquiries regarding: the smallest lot size permitted; concern the impervious coverage requirement will not allow for enough land to build a structure; allowing the requirement be based on entire development would encourage quality spans of open space as opposed to small pieces; the intent of the zero lot line is to give flexibility; concern common areas will be absorbed; the intent was to provide the developer the option to meet impervious coverage requirements by lot or by entire development; and concern for creating nonconformities.

Upon the conclusion of the discussion, Chairman Kristian asked for a motion.

Commissioner McGowan moved to approve the Planning Commission's original recommendation to recommend that zero lot line subdivisions require a 50% maximum impervious coverage based on the entire development instead of per individual lot. Commissioner Theodore seconded. The motion passed with a vote of 8-0-0.

## 9. New Business

### a. Public Hearing

**LMO Amendments** (2019 LMO Amendments – Set Two) – The Town of Hilton Head Island is proposing to amend Chapters 2, 3, 4, 5, 10 and Appendix D of the Land Management Ordinance (LMO) to revise the following sections:

Section 16-2-103.F.5: clarify the language to make it clear that a final plat will not be approved or stamped for recording of the subdivision with Beaufort County until a final Certificate of Compliance (C of C) has been issued; Sections 16-3-105.C.2 and 16-4-102.A.6: allow an Indoor Commercial Recreation use as an allowed use in the CC zoning district; Section 16-3-106.F.2.f: allow projects that fall within the Corridor Overlay District but are not visible from the OCRM Baseline or the OCRM Critical Line to be reviewed through the Minor Corridor Review Procedure; Table 16-5-102.E: add HVAC units to the table of allowable setback encroachments; Section 16-5-109.B.1: clarify that stormwater requirements are applicable to any land disturbing activity that both disturbs ½ acre of land or greater and is within ½ mile of coastal receiving waters; Section 16-5-109.C.9: add the SCDHEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) and the SCDHEC Ocean & Coastal Resource Management (OCRM) Coastal Zone Consistency Certification (CZC) Heightened Stormwater Management Requirement to the list of acceptable reference guides; Section 16-5-109.D.1.a.ii: state that the rational method may be used only for sizing individual culverts or storm drains that are not part of a pipe network or system and have a contributing drainage area of 10 acres or less; Sections 16-10-103.E.2 and 16-10-103.G.2: delete health club/spa from examples under Indoor Commercial Recreation and add health club/spa as an example under Other Commercial Services; Section 16-10-103.G.2: add 'screened' in front of 'outdoor storage' in the Bicycle Shop definition; Section 16-10-102.J.1: make revisions to clarify what this category is meant to contain; Appendix D:D-6.F.23: add a requirement that dumpsters be screened in keeping with the Design Guide; Appendix D:D-6: require that dumpsters be

screened and that setbacks be shown on the site plan for Minor Development Plan Reviews; Appendix D:D-7.D: require that dumpsters be screened setbacks be shown on the site plan for Major Development Plan Reviews; Table 16-4-102.A.6: change Outdoor Commercial Recreation Uses Other than Water Parks from Permitted by Condition to Special Exception uses in the zoning districts where they are currently allowed; Section 16-3-105.E, Table 16-4-102.A.6, Section 16-4-102.B, Table 16-5-107.D.1 and 16-10-103.I.2: add grinding as a use and provide standards and a definition; Section 16-2-103.D.4, Section 16-3-105.I, 16-3-105.K, Table 16-3-106.G.4 and 16-5-105.I.7.c: fix incorrect references; Table 16-5-102.C: fix an incorrect footnote; and 16-5-109.D.1.d: reflect the new name of a checklist.

Staff presented the proposed amendments as described in the Commission's agenda package. The Commission discussed one proposed amendment at a time. Following the discussion of each amendment, Chairman Kristian opened the meeting for public comments. Following the public comments, the Commission voted on the proposed amendments.

#### Proposed Amendment

- This change will clarify the language to make it clear that a final plat will not be stamped for recording of the subdivision with Beaufort County until a final Certificate of Compliance (C of C) has been issued.

Commissioner McGowan moved to forward this amendment to Town Council with a recommendation of approval. Commissioner O'Neil seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will allow an Indoor Commercial Recreation use as an allowed use in the CC zoning district.

Commissioner Theodore moved to forward this amendment to Town Council with a recommendation of approval. Commissioner McGowan seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This will allow projects that fall within the COR but are not visible from the OCRM Baseline or the OCRM Critical Line to be reviewed through the Minor Corridor Review Procedure.

Commissioner Theodore moved to forward this amendment to Town Council with a recommendation of approval. Commissioner Scanlon seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will add HVAC units to the table of allowable setback encroachments.

Vice Chairman Stevens moved to forward this amendment to Town Council with a recommendation of approval. Commissioner O'Neil seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will clarify that stormwater requirements are applicable to any land disturbing activity that both disturbs ½ acre of land or greater and is within ½ mile of coastal receiving waters.

Commissioner McGowan moved to forward this amendment to Town Council with a recommendation of approval. Commissioner Scanlon seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will add the SCDHEC National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) and the SCDHEC Ocean & Coastal Resource Management (OCRM) Coastal Zone Consistency Certification (CZC) Heightened Stormwater Management Requirement to the list of acceptable reference guides.

Commissioner Perry moved to forward this amendment to Town Council with a recommendation of approval. Vice Chairman Stevens seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will state that the rational method (one of two accepted hydrological methodologies for computing surface runoff) may be used only for sizing individual culverts or storm drains that are not part of a pipe network or system and have a contributing drainage area of 10 acres or less.

Commissioner Scanlon moved to forward this amendment to Town Council with a recommendation of approval. Commissioner McGowan seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will delete health club/spa from examples under Indoor Commercial Recreation.
- This change will add health club/spa as an example under Other Commercial Services.

Vice Chairman Stevens moved to forward this amendment to Town Council with a recommendation of approval. Commissioner Scanlon seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will add “screened” before “outdoor storage” in the Bicycle Shop definition.

Commissioner Scanlon moved to forward this amendment to Town Council with a recommendation of approval. Commissioner Perry seconded. The motion passed with a vote of 8-0-0.

#### Proposed Amendment

- This change will add a requirement that dumpsters be screened in keeping with the Design Guide.

Vice Chairman Stevens moved to forward this amendment to Town Council with a recommendation of approval. Commissioner Scanlon seconded. The motion passed with a vote of 8-0-0.

Proposed Amendment

- This change will require that setbacks be shown on the site plan.

Commissioner McGowan moved to forward this amendment to Town Council with a recommendation of approval. Commissioner O'Neil seconded. The motion passed with a vote of 8-0-0.

Proposed Amendment

- This change will require that outdoor commercial recreation uses be approved by special exception.

The Commission asked that the LMO Committee review the special exception condition that requires outdoor commercial recreation uses have access to a minor arterial.

Commissioner Scanlon moved to forward this amendment to Town Council with a recommendation of approval. Commissioner McGowan seconded. The motion passed with a vote of 8-0-0.

Proposed Amendment

- These amendments will establish grinding as a standalone use and will provide for where it is allowed, establish conditions, required parking spaces and a definition.

Commissioner Scanlon moved to forward this amendment to Town Council with a recommendation of approval. Vice Chairman Stevens seconded. The motion passed with a vote of 8-0-0.

Proposed Ministerial Amendments

Commissioner Scanlon moved to forward these amendments to Town Council with a recommendation of approval. Commissioner Perry seconded. The motion passed with a vote of 8-0-0.

## **10. Commission Business**

### **a. US 278 Gateway Corridor Committee Update**

David Johnson, Chairman of the US 278 Corridor Committee, presented statements regarding the focus and scope of the Committee, the status of their work and community efforts, and a timeline for making their recommendation to the Town Council and the SCDOT. The Commission thanked Mr. Johnson for his presentation.

**b. Committee Assignments** – The item was included in the Commission's agenda package.

## **11. Chairman's Report**

Chairman Kristian noted the Our Plan Development Team met on Monday and went through the vision pillars. The Team is planning to bring forward information to the Comprehensive Plan Committee sometime in April.

**12. Committee Report**

The Gullah-Geechee Land & Cultural Preservation Task Force is anticipating work from Staff on the work plan that was approved by Town Council.

**13. Staff Reports**

**a. Workforce Housing Update**

Mr. Colin presented the update. The Public Planning Committee (PPC) will meet tomorrow at 9:00 a.m. to review the Town Council approved elements for workforce housing: development incentives and programs which promote commercial conversion; develop a “sliding scale” density bonus program linking the amount of workforce units to the amount of bonus; develop criteria and conditions under which unrestricted Town-owned land may be used to facilitate the development of workforce housing; and evaluate the development of, and participation in, a regional housing trust in coordination with the Southern Lowcountry Regional Board. Staff will return to the PPC on January 23 at 3:00 p.m. with a more detailed work plan. Any recommendations to change the LMO will be sent to the LMO Committee.

**14. Adjournment**

The meeting was adjourned at 4:30 p.m.

**Submitted by:** Teresa Haley, Secretary

**Approved:** [DATE]

DRAFT



# TOWN OF HILTON HEAD ISLAND

## *Community Development Department*

**TO:** Planning Commission  
**FROM:** Anne Cyran, *AICP, Senior Planner & PC Coordinator*  
**DATE:** February 12, 2020  
**SUBJECT:** Planning Commission Quarterly Report: October – December 2019

The October 2, December 4, and December 18 meetings were cancelled due to a lack of agenda items.

### LMO Amendments & Applications

| <b>Land Management Ordinance (LMO) Amendments:<br/>2019 General Amendments – Set 1</b>  | <b>Reviewed November 20, 2019</b>   |
|---|---|
| 16-2-103.B.2.e.i, 16-2-103.C.2.f.i, and 16-2-103.D.3.f.i<br>Eliminate the requirement for a resolution for denial of text amendments, zoning map amendments, and planned unit developments  | Voted 7-0-0 to recommend this amendment <b>not</b> move forward for adoption.   |
| 16-4-102.B.1.c<br>Allow the use of RVs as residences in an RV park  | Voted 7-0-0 to forward to Town Council with a recommendation of approval.   |
| 16-7-104.B and 16-7-104.C<br>Allow changes to nonconforming signs   | Voted 7-0-0 to forward to Town Council with a recommendation of approval.   |
| 16-10-103.E.1<br>Provide specific direction as to what uses are permitted as indoor and outdoor commercial recreation uses  | Voted 7-0-0 to recommend this amendment <b>not</b> move forward for adoption.   |
| Appendix B: B-2 – Map 16, and B-3<br>Smooth out the Beachfront Line and Critical Protection Area Line on 23 Salt Spray Lane   | Voted 7-0-0 to forward to Town Council with a recommendation of approval.   |
| 16-5-102.B.2.d, 16-5-103.B.2.c, 16-5-103.D.1, 16-5-115.E (new section for Zero Lot Line Residential Subdivisions), 16-10-103.A.2 and 16-10-105<br>Develop specific standards for zero lot line subdivisions, amend the definition of multifamily, create a definition for townhouse, and amend the definition for zero lot line subdivision | Voted 7-0-0 to forward to Town Council with a recommendation of approval with the following change: The 50% maximum impervious coverage requirement shall be based on the entire development. |
| 16-5-103.F, 16-5-103.H.2, 16-5-115.C, 16-5-115.D, 16-6-104.B, 16-6-104.D, Table 16-6-104.F.1, 16-6-104.G, 16-6-104.J, and 16-10-105<br>Provide greater protection of trees and vegetation on sites  | Voted 7-0-0 to forward to Town Council with a recommendation of approval.   |



**Planning Commission Quarterly Report: October – December 2019**

02/12/2020

Page 2

| <b>Land Management Ordinance (LMO) Amendments:<br/>Proposed Amendments to the RD Zoning District</b>  | <b>Reviewed November 6, 2019</b>   |
|---|--|
| <ul style="list-style-type: none"> <li>• Delete 1 bedroom units from Interval Occupancy.</li> <li>• Change how the density for Hotel and Interval Occupancy uses is calculated from units to gross floor area (GFA).</li> <li>• Reduce the maximum building height of Non-Single Family Development on all properties to 60 feet above mean sea level with no more than five stories (including habitable and parking levels) for all buildings on each property.</li> <li>• Require that building height not exceed the tree height on the same or adjacent properties.</li> </ul> | Voted 8-0-0 to return to the LMO Committee to address the concerns discussed at the meeting including setback standards. |

| <b>Subdivision Applications</b>  | <b>Status</b>   |
|--|---|
| <b>SUB-002046-2019, 12 Hickory Lane</b><br>Minor subdivision of a 0.5-acre parcel into two lots. | Applied on October 1, 2019<br>Approved on November 26, 2019 |
| <b>SUB-002143-2019, 18 Hickory Lane</b><br>Minor subdivision of a 0.8-acre parcel into two lots. | Applied on October 15, 2019<br>Under review                 |

**Committees & Task Force**

| <b>LMO Committee</b> |   |
|----------------------|---|
| October 16, 2019     | Discussed 2019 General Amendments – Set 1                                     |
| October 21, 2019     | Discussed proposed amendments to the RD (Resort Development) Zoning District  |
| October 30, 2019     | Discussed 2019 General Amendments – Set 1 and 2019 General Amendments – Set 2 |
| December 4, 2019     | Discussed proposed amendments to the RD (Resort Development) Zoning District  |

| <b>Gullah-Geechee Land &amp; Cultural Preservation Task Force</b>     |  |
|---|--|
| The November 18, December 2, and December 16 meetings were cancelled. |  |
| October 14, 2019  | Discussed Work Plan for Top Priority Gullah Geechee Report Recommendations |
| October 21, 2019  | Discussed Work Plan for Top Priority Gullah Geechee Report Recommendations |
| November 4, 2019  | Discussed Work Plan for Top Priority Gullah Geechee Report Recommendations |

**Capital Improvement Projects**

| <b>Pathways</b>  | <b>Status</b>  |
|--|--|
| Along South Forest Beach (SFB) Drive from Coligny Circle to Tanglewood Drive   | <ul style="list-style-type: none"> <li>• Under construction.</li> <li>• Projected completion: April 2020.</li> </ul> |
| Along Tanglewood Drive from SFB Drive to Cordillo Parkway  | Substantially complete.  |
| Along eastbound US 278 between the US 278/Shelter Cove Lane intersection near Hickory Tavern and the US 278/Shelter Cove Lane intersection near Beaufort County Sheriff’s Office | Complete.  |

| <b>Roadway Improvements</b>                           | <b>Status</b>  |
|---|--|
| US 278 Corridor Improvements in the Shelter Cove Area | <ul style="list-style-type: none"> <li>• Under construction.</li> <li>• Projected completion: May 2020.</li> </ul> |

**Planning Commission Quarterly Report: October – December 2019**

02/12/2020

Page 3

|   |  |
|---|--|
| Street Light Pilot Project  | <ul style="list-style-type: none"> <li>• Currently under contract.</li> <li>• Projected completion: April 2020.</li> </ul> |
| Pope Avenue & Lagoon Road Intersection Improvements                 | Complete.  |
| Squire Pope Road & William Hilton Parkway Intersection Improvements | On hold as SCDOT's US 278 Corridor Redevelopment project moves forward.  |
| Dirt Road Paving: Pine Field Road                                   | Researching titles and requesting right-of-way donations.  |
| Dirt Road Paving: Mitchelville Lane                                 | Researching titles and requesting right-of-way donations.  |

| <b>Park Development</b>  | <b>Status</b>  |
|--|--|
| Lowcountry Celebration Park<br>(Coligny Area Redevelopment Initiative) | <ul style="list-style-type: none"> <li>• Under construction.</li> <li>• Projected completion: Fall 2020</li> </ul> |

| <b>Existing Facilities and Infrastructure</b> | <b>Status</b>   |
|---|---|
| Cordillo Tennis Courts Redevelopment, Phase 2 | On hold.  |
| Fire Station #2 (Sea Pines)                   | <ul style="list-style-type: none"> <li>• Contractor selected.</li> <li>• Projected start: March 2020</li> <li>• Projected completion: April 2021</li> </ul> |

| <b>New Facilities and Infrastructure</b> | <b>Status</b> |
|--|---------------|
| F&R Computer Systems Upgrades            | Ongoing.      |

| <b>Beach Management &amp; Monitoring</b> | <b>Status</b> |
|--|---------------|
| Physical and Biological Monitoring       | Ongoing.      |

# Memo



**To:** Planning Commission  
**From:** Darrin Shoemaker, Traffic and Transportation Engineer (Voice (843)341-4774)  
(Cell (843)384-5021)  
**Via:** Teri Lewis, Deputy Director of Community Development  
**cc:** Town Council  
**Date:** 2/13/2020  
**Re:** 2019 Traffic Monitoring & Evaluation Report

---

**Recommendation:** It is recommended that the Commission review and consider the subject annual report, elicit comment at a public meeting, and formally endorse the report. It is further recommended that the Planning Commission provide its comments on the report and any supplemental recommendations to Town Council in accordance with Section 16-2-103.J.10.c.ii of the Land Management Ordinance (LMO).

**Summary:** This report and recommendation are prepared and respectfully submitted to the Planning Commission in accordance with the requirements outlined in Section 16-2-103.J.10 of the Town's Land Management Ordinance (LMO). The report summarizes trends relating to traffic demand within the Town, including June weekday traffic demand on intersections and major arterials within the Town, and analyses of all of the Town's signalized intersections. As required by the LMO, the report includes mitigation recommendations for those instances where intersections are found to be deficient relative to the goals. The only intersection found deficient relative to the Town's goals as outlined in the LMO in June 2019 was that of William Hilton Parkway with Squire Pope Road and Chamberlin Drive. Sea Pines Circle was not counted nor analyzed in 2019. Traffic counts taken during June 2019 on the Town's major arterials were down 2.5 percent relative to comparable counts taken in June 2018, following a 2.5 percent increase identified in the previous 2018 report. June demand on the Town's arterials has increased at an effective annual rate of 0.9 percent per annum since June 2014.

**Background:** Section 16-2-103.J.10 of the LMO provides that this report will be prepared and submitted annually by the LMO Official to the Planning Commission for their review, consideration, and discussion at a public meeting. The report is based on traffic counts that are collected annually by the Engineering Division each June on a typical weekday that is intended to approximate the 45<sup>th</sup>-highest

(over)

traffic volume day of the calendar year, the Town's benchmark for design purposes. All counts in 2019 were collected on either Tuesday, June 4<sup>th</sup>, 2019 or Wednesday, June 5<sup>th</sup>, 2019. The traffic counts collected annually and summarized herein also become the Town's background (or "existing") dataset for use by staff and consultants in preparing Traffic Impact Analysis Plan studies that are required as a result of development for submission to the Town in accordance with the LMO.

**To:** Hilton Head Island Planning Commission

**From:** Darrin A. Shoemaker, Traffic and Transportation Engineer

**Via:** Jeff Buckalew, Town Engineer  
Scott Liggett, Director of Public Projects & Facilities/Chief Engineer  
Teri Lewis, LMO Official

**Cc:** Town Council  
Steve Riley, Town Manager  
Shawn Colin, Director of Community Development

**Date:** February 12<sup>th</sup>, 2020

**Re:** 2019 TRAFFIC MONITORING AND EVALUATION REPORT

### **PART ONE – EXECUTIVE SUMMARY**

The Town collected three days' worth of 24-hour bi-directional traffic counts at ten locations on designated major arterials in June 2019, covering a Tuesday, Wednesday, and Thursday, June 4<sup>th</sup> through June 6<sup>th</sup>. Based exclusively on these 24-hour counts, aggregate demand decreased 2.5 percent over the comparable numbers recorded in June 2018, which represented a 2.5 percent increase over those collected in June 2017. Hence, the 24-hour counts taken in June of 2019 were very similar to those recorded two years earlier in June 2017, and were lower than comparable counts taken in June in a number of previous years. The aggregate demand recorded was 4.6 percent higher than the comparable demand recorded five years ago in June 2014, equating to effective growth in June traffic demand on the Town's major arterials of just less than one percent, or 0.9 percent, per annum during the most recent five years of June data collection. The Town also collected morning and afternoon peak hour turning movement counts at all signalized intersections within the Town. Based on these counts, composite morning peak hour volume on the signalized intersections within the Town decreased 3.4 percent over that recorded in June 2018, but composite afternoon peak hour demand increased 1.6 percent compared to the previous year. This trend relative to morning and afternoon peak hour demands is the reverse of that identified in June 2018, when morning peak hour demands were up and afternoon peak hour demands were down relative to June 2017. It also continues a trend that has developed in recent years, with morning demand up and afternoon demand down one year, and the reverse being true with morning demand down and afternoon volume up

in the following year. South Carolina Department of Transportation (SCDOT) figures for calendar year 2019 averages will be released later in early 2020, but their calendar-year-average 24-hour counts conducted on major and minor arterials and collector facilities throughout the island in calendar year 2018 reflect a composite 1.1 percent decrease over comparable figures collected in 2017, and a decrease of over three percent from the comparable figures collected five years earlier in 2013. The SCDOT calendar-year-average figures, however, indicate that average daily demand on the bridges connecting Hilton Head Island to the mainland is up over nearly seven-and-one-half percent over their comparable figure from 2013, a rate of increase that is consistent with the Town's findings via monitoring of the SCDOT's real-time count station data located on Jenkins Island. Federal Highway Administration (FHWA) figures indicate that aggregate June 2019 traffic demand decreased 0.3 percent nationally and regionally within the southeast compared with June 2018. The southeast region consists of all coastal states from Delaware to Florida and also West Virginia. The percentage decrease was slightly greater, 0.4 percent, within the state of South Carolina in June 2019 compared with June 2018. Despite the decreases in aggregate demand recorded in 2019 over 2018, total vehicle-miles traveled nationally in June 2019 remained 6.2 percent greater than those recorded in June 2014, five years earlier.

Again in June 2019, the only signalized intersection found to be non-compliant with the Town's operational goals as outlined in the Land Management Ordinance (LMO) was the intersection of William Hilton Parkway with Squire Pope Road and Chamberlin Drive, an intersection that has been identified as being deficient relative to operational goals numerous times during the previous two decades. This intersection was found to be deficient during both the morning and afternoon peak hours in June 2019. The last time that any other signalized intersection within the Town was found to be operating out of compliance with the LMO goals was in 2013.

The LMO requires that Sea Pines Circle be counted and analyzed in calendar years that are multiples of five. Staff has elected to exceed this requirement by ensuring that Sea Pines Circle is counted and analyzed in all even years. But Sea Pines Circle was not counted nor analyzed in 2019. See the 2018 Traffic Monitoring & Evaluation Report for the Town's most recent counts and resulting operational analyses for Sea Pines Circle.

## **PART TWO – INTRODUCTION**

As required by Section 16-2-103.J.10 of the Town's LMO, this report will summarize 2019 traffic volume demand on the Town's major roadway network and

recommend improvements to mitigate operating conditions identified as being non-compliant with the Town's adopted operational goals, which are outlined in Section 16-5-106.C of the LMO. The minimum requirements of the report are also outlined in Section 16-2-103.J.10 of the LMO as follow: 1) Summary of June 2019 weekday morning and afternoon peak hour turning movement counts for all signalized intersections within the Town 2) Summary of twenty-four hour volume demand on the Town's major arterial network 3) Historical trends during the previous five years 4) Description of existing operating conditions as compared with the adopted traffic goals by utilizing the analysis methodology outlined in the current (2016) edition of the Transportation Research Board's *Highway Capacity Manual*, and how these conditions have changed since the preparation of the 2018 Traffic Monitoring and Evaluation Report, and 5) Recommendations on improvements to mitigate any existing conditions found to be non-compliant with the Town's goals.

The Town's adopted traffic goals are outlined in Section 16-5-106.C of the LMO. To satisfy the goals, each signalized intersection within the Town must operate at a volume-to-capacity ratio of 0.9 or lower and with an average total delay-per-vehicle of 55.0 seconds or less during both the morning and afternoon peak hours of an average June weekday, figures which are applicable to the intersection's operation as a whole. The Town's LMO requires that morning peak volume hour and afternoon peak volume hour be evaluated and analyzed annually for each signalized intersection. The LMO also outlines an operational goal for roundabout intersections, although no analysis relative to roundabouts was conducted for this year's report.

This report will examine the morning and afternoon weekday peak hour turning movement demand at signalized intersections within the Town in accordance with the definition of "peak hour" offered in Section 16-10-105 of the LMO. The LMO requires that this report be based on data collected on a typical June weekday in order to avoid identifying deficiencies based on atypically high traffic volume days such as major summer holiday weekends or major traffic-generating events such as the RBC Heritage Presented by Boeing golf tournament or Concours D'Elegance. The Town retained a traffic counting contractor to collect the data on a weekday during the first complete week in June, traditionally selected to approximate the 45<sup>th</sup> highest volume day of the year that is cited as the roadway design standard in the LMO. The counts summarized in this report were collected only on Tuesdays, Wednesdays, or Thursdays in order to emulate the typical weekday cited in the LMO for analysis purposes. All of the morning and afternoon peak hour turning movement count data summarized in Appendix A was collected on the same calendar day, Tuesday, June 4<sup>th</sup>, 2019, save for the turning movement counts at the intersection of William Hilton Parkway with Queens Folly Road and King Neptune Drive, which were conducted on Wednesday, June 5<sup>th</sup>.

The 24-hour count data summarized in Table One of this report on page seven was collected by pneumatic tube mechanical counters on three consecutive days from Tuesday, June 4<sup>th</sup> through Thursday, June 6<sup>th</sup>, and represents an average demand for these three days. Town staff monitored traffic conditions on these dates to ensure that the collected data was not influenced by atypical events such as adverse weather, road construction, or unforeseen incidents such as traffic collisions. As required by the LMO, this report includes historical data for these 24-hour counts that enable the reader to draw conclusions based on five-year volume trends in addition to the morning and afternoon peak hour turning movement counts collected at individual intersections each June. All of the traffic counts collected in June 2019 were judged by staff to be consistent with expectations based on previous counts, and none of the collected data was found to be aberrant and/or unsuitable for analysis purposes. The data set was certified by the LMO Official as being the official background data to be employed for analysis purposes within this report and for use as background data in the preparation of traffic impact studies on September 11<sup>th</sup>, 2019.

The operational goals for all signalized intersections as outlined in Section 16-5-106.C of the LMO are based on the intersection's volume-to-capacity (v/c) ratio and the average total delay experienced by motorists based on operating conditions during the weekday morning and afternoon peak traffic volume hour. The volume-to-capacity ratio is essentially a percentage of the intersection's capacity to discharge traffic that is being demanded by motorized and non-motorized traffic. The denominator in this ratio ("c"), the signalized intersection's capacity, is dependent to a large extent on the lanes available at the intersection, the manner in which they are assigned to specific movements of traffic, their width, signal timing, and the number of conflicting bicycle and pedestrian movements. Other factors affecting capacity are more subtle, such as vertical grades, variability in traffic flow within the peak hour, how evenly demands are distributed over multiple lanes serving the same movements, and the influence on operations from neighboring traffic signals. The numerator in the ratio ("v") is the intersection's hourly vehicular demand adjusted to account for a variety of factors such as variability in demand within the peak volume hour and the percentage of heavy vehicles in the traffic stream.

The Town's operational goals are a v/c ratio that does not exceed 0.9 during the morning or afternoon peak volume hours, or ninety percent of the intersection's theoretical hourly capacity based on the intersection and traffic signal parameters outlined in the previous paragraph, as well as an average total delay of 55 seconds or less experienced by motorists when passing through the intersection during the peak volume hours being analyzed. The 55-second delay figure is the maximum average delay at the overall intersection that corresponds with Level-of-Service "D" in the *Highway Capacity Manual*, a measure of operational effectiveness commonly cited by



traffic engineers as corresponding with the limit of acceptable operations during peak volume hours in built-up or urban areas. Total delay experienced by a motorist at a traffic signal or rotary intersection is comprised of stopped delay, when a motorist is physically stopped in traffic, and non-stopped delay, which results from acceleration, deceleration, or advancing at a slower pace than what would be considered a “free-flow” speed. The total delay experienced by a motorist at a traffic signal or roundabout is the actual time required to pass through the intersection from the time that a motorist brakes in advance of queued traffic until free-flow speed is reestablished on the downstream side of the intersection less the time that would’ve been required to traverse the roadway segment at free-flow speed if no intersection, traffic signal, or conflicting traffic were present to impede flow. Total delay may therefore be experienced by motorists that are forced to slow for congestion even if they are ultimately not required to bring their vehicle to a stop.

Each time a traffic signal changes, one group of motorists must come to a stop while flow must be reestablished on a different group of traffic lanes. There are routinely a couple of seconds where no one at all is moving. Therefore, a signalized intersection's capacity can theoretically be increased by changing traffic signals less frequently, thereby keeping traffic flowing to the extent practicable and reducing the frequency of signal changes with their associated starts and stops. Traffic signals within the Town change somewhat infrequently (usually every two to three minutes) during peak volume hours in order to help ensure that capacity is increased and the Town's capacity-based operating goals are met. Changing signals less frequently, however, means that motorists may be confronted with red signals for longer periods of time, and this typically increases the average delay experienced by motorists. Therefore, the Town's operational goals are competing goals that require a degree of balance in the way that the signals are operated, ensuring that capacity is not inordinately impacted by changing the signals too frequently nor delay inordinately increased by changing the signals too infrequently.

### **PART THREE – TURNING MOVEMENT COUNTS AT SIGNALIZED INTERSECTIONS – JUNE 2019 PEAK VOLUME HOURS**

Turning movement counts for all twenty-four signalized intersections within the Town during the intersection's morning and afternoon peak volume hours were conducted on Tuesday, June 4<sup>th</sup> or Wednesday, June 5<sup>th</sup>, 2019. These forty-eight turning movement counts are summarized in diagrammatic form in Appendix A. Each

turning movement diagram depicts a total peak hour intersection demand and the demand on each traffic movement during this peak volume hour, identified within 15-minute increments. Separate counts of pedestrians and bicyclists crossing each intersection approach were also collected and are shown on the diagrams. On each of the diagrams, the percentage change in the June 2019 traffic movement volume relative to the comparable June 2018 figure is rounded to the nearest whole percent, excepting instances where the hourly volume demand on the movement was less than fifty vehicles in both 2018 and 2019. The percentage change in the total intersection volume relative to the previous June 2018 count is shown in the center of each diagram, rounded to the nearest tenth of one percent. This percentage change in demand on the entire intersection from the previous June 2018 count is also summarized in Table Three on page nine of this report. Where pedestrian or bicycle crossing activity was observed, these demands are shown adjacent to the vehicular volume data for each approach. The bicycle and pedestrian volume data reflects total number of crossings but do not distinguish the specific direction of the crossing. The pedestrian and bicycle counts shown in the diagram are for street crossings by off-street users only. The Town also counted movements by on-street bicyclists, but these were typically negligible demands that are combined with motor vehicles in the count diagrams and during subsequent analysis. For purposes of consistency, and because William Hilton Parkway is oriented in varying alignments relative to cardinal directions as it traverses the Town, the off-island (westbound) direction is shown to the right of each diagram for William Hilton Parkway and the on-island direction toward Sea Pines Circle is shown to the left. Palmetto Bay Road and Pope Avenue are generally oriented in a north-south alignment, and the diagrams for these roadways as well as Sea Pines Circle show the direction toward the Charles Fraser toll bridge at the top of the diagram, and the on-island direction toward Coligny Circle at the bottom of the diagram.

#### **PART FOUR – AVERAGE DAILY DEMAND ON MAJOR TOWN ARTERIALS AND INTERSECTIONS**

Average twenty-four hour traffic demand at strategic locations on major arterials within the Town as counted on Tuesday, June 4<sup>th</sup> through Thursday, June 6<sup>th</sup>, 2019 is shown in Table One on the following page. Comparable figures are shown for each of the ten count locations throughout the Town for each year from 2014 through 2019. The 2014 column readily enables five-year comparisons as required by the LMO. The *average annual rate of change* during the previous five years for each location is shown in the far right column. When reviewing Table One, the word east or south may also be read as “on-island side of” and the word west may be read as “off-

island side of” in each instance. A map showing the exact location of each count location shown in Table One is included as Appendix B.

Table Two on the following page shows similar data supplied by the South Carolina Department of Transportation (SCDOT) for average daily traffic demand on US 278 on Jenkins Island near the J. Wilton Graves Bridge spanning Skull Creek for each year from 2013 through 2018. These figures represent calendar year averages, and the SCDOT typically releases figures for the previous calendar year in late spring each year. Hence, their 2019 figures have not been publicly released at the time of this report. The Town’s June 24-hour counts typically generate figures that average approximately ten percent higher than SCDOT’s calendar year averages due to seasonal demand variations. The total traffic volume counted in June 2019 was 2.5 percent lower than that counted in June 2018, but was 4.6 percent higher than that counted five years previous in June 2014.

**TABLE ONE**

**24-HOUR BI-DIRECTIONAL TRAFFIC DEMAND – JUNE 2014-2019**

| Map Ref.                         | Location                                  | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 5-year %change/yr. |
|----------------------------------|---|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|
| 1)                               | Wm. Hilton Pkwy. at J. Wilton Graves Br.  | 58,355         | 65,445         | 62,510         | 60,602         | 62,620         | 61,434         | +1.0               |
| 2)                               | Wm. Hilton Pkwy. west of Cross Is. Pkwy.  | 48,042         | 62,797         | 53,474         | 54,881         | 56,601         | 55,691         | +3.0               |
| 3)                               | Wm. Hilton Pkwy. east of Whooping Crane   | 44,009         | 45,554         | 46,382         | 46,056         | 46,449         | 45,626         | +0.7               |
| 4)                               | Wm. Hilton Pkwy. east of Coggins Pt. Rd.  | 32,264         | 32,920         | 33,908         | 33,607         | 34,095         | 33,215         | +0.6               |
| 5)                               | Wm. Hilton Pkwy. west of Queens Folly Rd  | 39,460         | 41,637         | 40,267         | 40,457         | 40,603         | 39,794         | +0.2               |
| 6)                               | Wm. Hilton Pkwy. west of Arrow Road       | 29,190         | 25,496         | 25,745         | 29,773         | 29,046         | 28,097         | -0.8               |
| 7)                               | Pope Avenue south of New Orleans Rd.      | 29,544         | 33,361         | 31,999         | 30,252         | 33,137         | 31,085         | +1.0               |
| 8)                               | Palmetto Bay Rd. south of Pt. Comfort Rd. | 24,941         | 24,850         | 22,431         | 26,126         | 26,959         | 26,476         | +1.2               |
| 9)                               | Sol Blatt Jr. XIP south of W.Hilton Pkwy. | 15,833         | 17,194         | 16,232         | 17,377         | 17,929         | 17,064         | +1.5               |
| 10)                              | Sol Blatt Jr. Cross-Is. at Toll Plaza     | 24,034         | 25,151         | 25,390         | 26,655         | 27,578         | 27,024         | +2.4               |
| <b>TOTAL OF ALL TEN STATIONS</b> |   | <b>349,398</b> | <b>370,624</b> | <b>361,924</b> | <b>365,786</b> | <b>375,017</b> | <b>365,506</b> | <b>+0.9</b>        |

Composite Rate of Change – 2018-2019 = -2.5 % \*

Composite Rate of Change – 2017-2018 = +2.5 % \*

Effective Composite Annual Rate of Change – 2014-2019 = +0.9 % \*

\*All three rates based *exclusively* on data in Table One

## TABLE TWO

### SCDOT 24-HOUR AVERAGE BI-DIRECTIONAL DEMAND ON HHI BRIDGES (calendar year average – AADT)

|                     |  |              |
|---------------------|--|--------------|
| <b>2013 - 52200</b> |  |              |
| <b>2014 - 53200</b> | <b>% change 2017 vs. 2016:</b>                 | <b>+2.9%</b> |
| <b>2015 - 54700</b> | <b>% change 2018 vs. 2017:</b>                 | <b>-0.4%</b> |
| <b>2016 - 54700</b> | <b>Avg. annual rate of change 2013 – 2018:</b> | <b>+1.5%</b> |
| <b>2017 - 56300</b> |  |              |
| <b>2018 - 56100</b> |  |              |

Based exclusively on the 24-hour counts summarized in Table One, the average annual rate of change in aggregate June traffic demand during the most recent five year period from 2014 to 2019 has been an increase of 0.9 percent, a figure that is less than the 1.5 percent average growth rate indicated by the SCDOT's calendar year average demand on the bridges connecting Hilton Head Island to the mainland during the most recent five-years of data that cover the years 2013 to 2018. This discrepancy is partly due to small decreases in motor-vehicle travel recorded nationally, regionally, and statewide in June 2019 compared with June 2018, and the lack of availability of the SCDOT's 2019 data as of the time of this report.

Appendix C attached to this report is a report released by the Federal Highway Administration (FHWA) in August 2019 that summarizes trends in volume demand on the nation's roadways nationwide, regionally, and within the state of South Carolina as updated through June 2019. The report indicates that nationally, vehicle-miles traveled during the month of June have increased at an effective annual rate of 1.2% during the most recent 5-year period. But this rate of increase is less than the approximate one-and-one-half percent per year annual rate of change in demand reported nationally within the 2018 Traffic Monitoring & Evaluation Report, again attributable to slight decreases in demand recorded in June 2019 versus June 2018. A decrease in vehicle-miles traveled of 0.4% was recorded statewide in South Carolina in June 2019 compared with June 2018. The southeast region of the United States, comprised of all states on the Atlantic seaboard from Delaware south to Florida and including West Virginia, experienced a similar but slightly smaller decrease in total vehicle-miles traveled of 0.3% in June 2019 relative to June 2018. The comparable July 2019 FHWA report contains updated figures for June 2019 that did not indicate any significant revisions to the "preliminary" numbers reflected in the attached June report.

Table Three below shows the total combined vehicular, bicycle, and pedestrian morning and peak hour demand on each of the Town's twenty-four signalized intersections in June 2019, and the percentage change from the comparable June 2018 figure. Based exclusively on the data contained in Table Three below, aggregate morning peak hour volume demand at signalized intersections decreased 3.4 percent from June 2018 to June 2019, while afternoon peak hour volume increased 1.6 percent over that recorded in June 2017. These figures continue a trend identified in recent years where morning peak hour demand trends in the opposite direction of afternoon peak hour demand, only for the trends to reverse the following year. The 2018 *Traffic Monitoring & Evaluation Report* reflected a Town-wide increase in morning peak hour demand of nearly five percent and a decrease in the afternoon peak hour demand of nearly three percent relative to the previous year's comparable counts. The reason for this trend of alternating increases and decreases in the signalized intersection turning movement count totals from year to year is not immediately clear.

**TABLE THREE**

**PEAK HOUR SIGNALIZED INTERSECTION VOLUME – June 2019**

|  | AM           |              |             | PM           |              |             |
|--|--------------|--------------|-------------|--------------|--------------|-------------|
|  | 2019 Vol.    | 2018 Vol.    | %Chg.       | 2019 Vol.    | 2018 Vol.    | %Chg.       |
| William Hilton Pkwy. / Squire Pope Rd.       | 4476         | 4459         | +0.4        | 5472         | 5262         | +4.0        |
| William Hilton Pkwy. / Spanish Wells Rd.     | 4384         | 4328         | +1.3        | 5090         | 5054         | +0.7        |
| William Hilton Pkwy. / Gumtree Rd.           | 3508         | 3554         | -1.3        | 4414         | 4309         | +2.4        |
| William Hilton Pkwy. / Wilborn Rd.           | 3068         | 3291         | -6.8        | 3906         | 3783         | +3.3        |
| William Hilton Pkwy. / Pembroke Dr.          | 2976         | 3094         | -3.8        | 3695         | 3645         | +1.4        |
| William Hilton Pkwy. / Whooping Crane Way    | 3279         | 3390         | -3.3        | 4179         | 4015         | +4.1        |
| William Hilton Pkwy. / Beach City Rd.        | 3141         | 3211         | -2.2        | 3925         | 3813         | +2.9        |
| William Hilton Pkwy. / Mathews Dr. (north)   | 2869         | 2971         | -3.4        | 3857         | 3797         | +1.6        |
| William Hilton Pkwy. / Dillon Rd.            | 2438         | 2521         | -3.3        | 3287         | 3201         | +2.7        |
| William Hilton Pkwy. / Coggin Point Rd.      | 2254         | 2284         | -1.3        | 2956         | 2940         | +0.5        |
| William Hilton Pkwy. / Beachwood Dr.         | 1931         | 2100         | -8.0        | 2597         | 2546         | +2.0        |
| William Hilton Pkwy. / Mathews / Folly Field | 2750         | 2943         | -6.6        | 3753         | 3730         | +0.1        |
| William Hilton Pkwy. / Singleton Beach Rd.   | 2459         | 2573         | -4.4        | 3308         | 3305         | +0.1        |
| William Hilton Pkwy. / Shelter Cove Lane     | 2397         | 2495         | -3.9        | 3292         | 3289         | +0.1        |
| William Hilton Pkwy. / Queens Folly Rd.      | 2596         | 2732         | -5.0        | 3899         | 3681         | +5.9        |
| William Hilton Pkwy. / Queens Way            | 2022         | 2113         | -4.3        | 2907         | 2911         | -0.1        |
| William Hilton Pkwy. / Shipyard / Wexford    | 2047         | 2258         | -9.3        | 3042         | 3077         | -1.1        |
| William Hilton Pkwy. / New Orleans Rd.       | 1868         | 1956         | -4.4        | 2733         | 2732         | +0.0        |
| William Hilton Pkwy. / Arrow Rd.             | 1797         | 1944         | -7.6        | 2554         | 2546         | +0.3        |
| Pope Ave. / New Orleans / Office Park        | 1958         | 2027         | -3.4        | 2913         | 2874         | +1.4        |
| Pope Ave. / Cordillo Pkwy.                   | 1831         | 1958         | -6.5        | 2644         | 2724         | -2.9        |
| Pope Ave. / Lagoon Road                      | 982          | 1027         | -4.4        | 1686         | 1684         | +0.1        |
| Palmetto Bay Rd. / Target Rd.                | 2223         | 2212         | +0.5        | 2747         | 2774         | -1.0        |
| Palmetto Bay Rd. / Arrow / Point Comfort     | 2389         | 2345         | +1.9        | 2786         | 2786         | +4.2        |
| <b>TOTAL</b>                                 | <b>61643</b> | <b>63786</b> | <b>-3.4</b> | <b>81759</b> | <b>80478</b> | <b>+1.6</b> |

## PART FIVE – DESCRIPTION OF OPERATING CONDITIONS RELATIVE TO ADOPTED SERVICE GOALS

Analyses of the Town’s signalized intersections are based on the traffic volume data collected during the morning and afternoon peak volume hours counted on Tuesday, June 4<sup>th</sup>, 2019 and Wednesday, June 5<sup>th</sup>, 2019. The analyses were conducted in accordance with the current 2016 edition of the Transportation Research Board’s *Highway Capacity Manual* as required by the LMO. It should be noted that the HCM methodology isolates the peak 15-minute volume period within the peak hour being analyzed, and bases the analysis results on projected conditions within this peak quarter-hour period, not the average condition experienced within the peak volume hour. Hence, the analysis results portray conditions during the highest-volume 15-minute period within the peak volume hours that are summarized in the diagrams in Appendix A.

A summary of existing volume-to-capacity ratios and average total delay per vehicle resulting from analyses conducted of morning peak hour conditions in June 2019 is shown in Table Four on page eleven. Table Four also includes comparable results for June 2018, June 2014, and June 2009 to enable comparisons with conditions identified last year, five years ago, and ten years ago. The same information for the afternoon peak hour is summarized in Table Five on page twelve. Values that are non-compliant with the Town’s operational goals are shown in bold. It should be noted that the results in Tables Four and Five reflect June 2019 operating conditions save for the newly-signalized intersection of Pope Avenue with Lagoon Road, which was not yet signalized in June 2019. The analyses results reported for this intersection in Tables Four and Five superimpose June 2019 demands on the now-existing traffic signal control established in December 2019 and its associated timing and settings. It should also be noted that the then-current edition of the *Highway Capacity Manual* employed to develop the 2009 analyses shown in the far right column of Tables Four and Five was the now-superseded 2000 edition, and that methodologies employed for the 2009 analyses have been revised in subsequent 2010 and 2016 editions. This may partly account for significant changes in intersection performance that do not appear to be the result of capital improvements or modifications to the traffic signal’s operation made in the interim.

**TABLE FOUR – MORNING PEAK HOUR  
INTERSECTION VOLUME-TO-CAPACITY RATIOS AND AVERAGE TOTAL DELAY PER VEHICLE –  
JUNE 2019 AND COMPARABLE 2018, 2014 AND 2009 FIGURES**

|  | 2019        |      | 2018 |            | 2014              |      | 2009                  |      |
|--|-------------|------|------|------------|-------------------|------|-----------------------|------|
|  | v/c         | dpv  | v/c  | dpv        | v/c               | dpv  | v/c                   | dpv  |
| WHP w/ Squire Pope Rd/Chamberlin Drive             | <b>0.94</b> | 19.7 | 0.85 | 18.3       | 0.86              | 18.3 | 0.76                  | 18.4 |
| WHP w/ Spanish Wells Rd./Wild Horse Road           | 0.67        | 14.1 | 0.64 | 13.7       | 0.65              | 12.4 | 0.79                  | 19.0 |
| WHP w/ Gumtree Road/XIP Ramps                      | 0.84        | 37.2 | 0.78 | 31.5       | 0.78              | 26.4 | 0.84                  | 53.9 |
| WHP w/ Wilborn Road/Jarvis Park Road               | 0.74        | 5.0  | 0.77 | <b>5.7</b> | 0.81              | 13.4 | 0.81                  | 25.8 |
| WHP w/ Pembroke Dr./Museum Street                  | 0.63        | 14.6 | 0.62 | 8.6        | 0.65              | 29.6 | 0.71                  | 20.0 |
| WHP w/ Whooping Crane Way/Indigo Run Dr.           | 0.71        | 19.0 | 0.80 | 24.8       | 0.59              | 19.7 | 0.65                  | 29.4 |
| WHP w/ Beach City Rd./Gardner Dr.                  | 0.66        | 17.0 | 0.72 | 15.7       | 0.57              | 16.7 | 0.62                  | 22.9 |
| WHP w/ Mathews Drive (north)                       | 0.53        | 21.3 | 0.55 | 21.6       | 0.49              | 19.8 | 0.57                  | 39.2 |
| WHP w/ Dillon Road                                 | 0.47        | 12.8 | 0.55 | 14.2       | 0.52              | 20.0 | 0.62                  | 24.5 |
| WHP w/ Coggins Point Rd.                           | 0.44        | 13.0 | 0.44 | 15.1       | 0.37              | 27.5 | 0.52                  | 38.8 |
| WHP w/ Beachwood Dr.                               | 0.38        | 1.8  | 0.40 | 1.6        | 0.33              | 1.6  | 0.38                  | 8.7  |
| WHP w/ Folly Field Rd./Mathews Dr.                 | 0.49        | 20.6 | 0.49 | 21.6       | 0.39              | 22.4 | 0.48                  | 27.9 |
| WHP w/ Singleton Beach Rd.                         | 0.48        | 3.4  | 0.53 | 2.8        | 0.43              | 1.9  | 0.51                  | 4.4  |
| WHP w/ Shelter Cove Lane                           | 0.53        | 10.1 | 0.57 | 8.0        | 0.46              | 24.4 | 0.45                  | 21.7 |
| WHP w/ Queens Folly Rd./King Neptune Dr.           | 0.57        | 9.7  | 0.66 | 19.6       | 0.49              | 17.1 | 0.57                  | 30.7 |
| WHP w/ Queens Way                                  | 0.40        | 4.2  | 0.42 | 4.5        | 0.35              | 5.2  | <i>Not signalized</i> |      |
| WHP w/ Shipyard Dr./Wexford Dr.                    | 0.48        | 15.1 | 0.49 | 15.2       | 0.41              | 10.4 | 0.52                  | 24.7 |
| WHP w/ New Orleans Rd.                             | 0.48        | 7.6  | 0.47 | 11.3       | 0.48              | 8.2  | 0.38                  | 12.3 |
| WHP w/ Arrow Road                                  | 0.37        | 18.6 | 0.42 | 17.1       | 0.44              | 14.5 | 0.47                  | 22.6 |
| Pope Ave. w/ New Orleans/Office Park Rds.          | 0.40        | 20.4 | 0.47 | 38.0       | 0.36              | 20.9 | 0.56                  | 36.1 |
| Pope Ave. w/ Cordillo Parkway                      | 0.36        | 24.2 | 0.51 | 24.4       | 0.42              | 27.0 | 0.46                  | 28.3 |
| Pope Ave. w/ Lagoon Road                           | 0.24        | 9.1  |      | <b>NOT</b> | <b>SIGNALIZED</b> |      |                       |      |
| Palmetto Bay Road w/ Target Road                   | 0.51        | 12.0 | 0.48 | 12.2       | 0.45              | 13.2 | 0.53                  | 24.0 |
| Palmetto Bay Road w/ Arrow Road/Point Comfort Road | 0.60        | 19.4 | 0.61 | 20.0       | 0.53              | 14.0 | 0.58                  | 25.6 |

v/c – volume-to-capacity ratio

dpv – average total delay per vehicle in seconds

WHP-William Hilton Parkway

**TABLE FIVE – AFTERNOON PEAK HOUR  
INTERSECTION VOLUME-TO-CAPACITY RATIOS AND AVERAGE TOTAL DELAY PER VEHICLE –  
JUNE 2019 AND COMPARABLE 2018, 2014 AND 2009 FIGURES**

|  | 2019        |             | 2018                  |             | 2014        |             | 2009                  |             |
|--|-------------|-------------|-----------------------|-------------|-------------|-------------|-----------------------|-------------|
|  | v/c         | dpv         | v/c                   | dpv         | v/c         | dpv         | v/c                   | dpv         |
| WHP w/ Squire Pope Rd/Chamberlin Drive             | <b>1.18</b> | <b>84.7</b> | <b>1.10</b>           | <b>65.8</b> | <b>1.10</b> | <b>59.3</b> | <b>0.97</b>           | <b>80.4</b> |
| WHP w/ Spanish Wells Rd./Wild Horse Road           | 0.64        | 25.3        | 0.74                  | 20.0        | 0.74        | 21.5        | 0.74                  | 23.6        |
| WHP w/ Gumtree Road/XIP Ramps                      | 0.80        | 35.2        | 0.76                  | 34.2        | 0.82        | 28.4        | 0.70                  | 48.6        |
| WHP w/ Wilborn Road/Jarvis Park Road               | 0.80        | 30.9        | 0.77                  | 7.9         | 0.74        | 7.3         | 0.90                  | 18.4        |
| WHP w/ Pembroke Dr./Museum Street                  | 0.74        | 23.3        | 0.70                  | 18.6        | 0.67        | 30.0        | 0.86                  | 27.1        |
| WHP w/ Whooping Crane Way/Indigo Run Dr.           | 0.79        | 19.7        | 0.78                  | 26.5        | 0.67        | 19.0        | 0.90                  | 29.4        |
| WHP w/ Beach City Rd./Gardner Dr.                  | 0.73        | 24.8        | 0.70                  | 19.6        | 0.64        | 11.9        | 0.83                  | 21.1        |
| WHP w/ Mathews Drive (north)                       | 0.69        | 22.0        | 0.67                  | 25.2        | 0.62        | 26.0        | 0.78                  | 34.9        |
| WHP w/ Dillon Road                                 | 0.73        | 14.7        | 0.70                  | 14.2        | 0.63        | 21.0        | 0.72                  | 21.4        |
| WHP w/ Coggins Point Rd.                           | 0.62        | 9.8         | 0.66                  | 10.0        | 0.60        | 14.8        | 0.75                  | 27.2        |
| WHP w/ Beachwood Dr.                               | 0.51        | 1.8         | 0.46                  | 1.9         | 0.44        | 2.4         | 0.52                  | 8.7         |
| WHP w/ Folly Field Rd./Mathews Dr.                 | 0.73        | 28.1        | 0.72                  | 27.8        | 0.58        | 24.9        | 0.79                  | 43.5        |
| WHP w/ Singleton Beach Rd.                         | 0.49        | 3.5         | 0.55                  | 3.7         | 0.50        | 2.9         | 0.68                  | 6.3         |
| WHP w/ Shelter Cove Lane                           | 0.57        | 15.7        | 0.60                  | 15.6        | 0.55        | 27.3        | 0.62                  | 29.2        |
| WHP w/ Queens Folly Rd./King Neptune Dr.           | 0.70        | 17.1        | 0.69                  | 28.5        | 0.62        | 30.0        | 0.86                  | 41.7        |
| WHP w/ Queens Way                                  | 0.51        | 7.8         | 0.53                  | 6.6         | 0.46        | 6.8         | <i>Not Signalized</i> |             |
| WHP w/ Shipyard Dr./Wexford Dr.                    | 0.64        | 19.1        | 0.58                  | 15.5        | 0.61        | 10.6        | 0.71                  | 20.9        |
| WHP w/ New Orleans Rd.                             | 0.68        | 15.1        | 0.70                  | 19.7        | 0.66        | 18.0        | 0.56                  | 19.1        |
| WHP w/ Arrow Road                                  | 0.46        | 27.6        | 0.53                  | 28.2        | 0.52        | 24.1        | 0.67                  | 34.5        |
| Pope Ave. w/ New Orleans/Office Park Rds.          | 0.63        | 19.4        | 0.66                  | 40.7        | 0.62        | 28.8        | <b>0.91</b>           | 44.2        |
| Pope Ave. w/ Cordillo Parkway                      | 0.56        | 32.7        | 0.57                  | 33.6        | 0.49        | 34.1        | 0.73                  | 45.8        |
| Pope Ave. w/ Lagoon Road                           | 0.50        | 23.1        | <b>NOT SIGNALIZED</b> |             |             |             |                       |             |
| Palmetto Bay Road w/ Target Road                   | 0.58        | 21.5        | 0.64                  | 17.9        | 0.55        | 16.7        | 0.71                  | 28.3        |
| Palmetto Bay Road w/ Arrow Road/Point Comfort Road | 0.72        | 26.1        | 0.69                  | 22.0        | 0.62        | 21.8        | 0.78                  | 30.5        |

v/c – volume-to-capacity ratio

dpv – average total delay per vehicle in seconds

WHP-William Hilton Parkway



As shown in bold in Table Five, the intersection of William Hilton Parkway with Squire Pope Road and Chamberlin Drive is the only signalized intersection identified as failing to meet the Town's operational goals in June 2019, based on a volume-to-capacity ratio of 1.18 and an average delay of 84.7 seconds per vehicle, respectively, during the afternoon peak hour. The intersection was also analyzed as being non-compliant with the Town's operational goals during the morning peak hour, based on the analysis results indicating a 0.94 volume-to-capacity ratio. The analyses indicate that all other signalized intersections within the Town were fully compliant with the Town's goals during both the morning and afternoon peak volume hours. Analysis results indicating non-compliance with the Town's goals at this particular intersection in June while all other intersections are analyzed as being in compliance have become common in recent years.

**PART SIX – INTERSECTION OPERATING OUT OF COMPLIANCE WITH TOWN  
OPERATIONAL GOALS IN JUNE 2019 – WILLIAM HILTON PARKWAY WITH  
SQUIRE POPE ROAD AND CHAMBERLIN DRIVE**

As shown in Tables Four and Five, the intersection of William Hilton Parkway with Squire Pope Road and Chamberlin Drive is the only signalized intersection that was found to be failing to meet the Town's operational goals in June 2018, based on a volume-to-capacity ratio of 1.18 and an average delay-per-vehicle of 84.7 seconds calculated during the afternoon peak volume hour and a 0.94 volume-to-capacity ratio calculated during the afternoon peak hour. Both the volume-to-capacity ratio and average delay-per-vehicle based goals were satisfied during the morning peak hour in June 2018, but were not in compliance during the afternoon peak hour in June 2018.

The deficiency at this intersection during the afternoon peak volume hour is due primarily to the high volume demand on westbound William Hilton Parkway that is served by only two through lanes. A third westbound approach lane terminates at the intersection as an exclusive right-turn lane serving motorists turning onto Squire Pope Road. Further, the opposing left-turn demand onto Squire Pope Road is very high during peak volume periods, and this demand requires periodic service with a green left-turn signal arrow to avoid inordinate backups and recurring citizen complaints from motorists. This is particularly true during the afternoon peak volume hour, when the density of flow in the off-island through lanes prevents motorists waiting to turn left onto Squire Pope Road from identifying any gaps in flow to do so the large majority of the time when both directions of William Hilton Parkway are being served by circular green signals.

It has commonly been suggested that certain traffic movements, typically various left turns onto and off of William Hilton Parkway, be prohibited at this intersection in order that the signal may devote additional green time to serve through movements on Wm. Hilton Parkway. The eastbound left turn onto Squire Pope Road and the left turn off of Squire Pope Road are periodically served by the signal. It is suggested that a prohibition of either of these movements would warrant an engineering study of the intersection to determine if the traffic signal remains warranted. If one or more movement prohibitions are implemented temporarily and the signal is found to no longer be warranted as a result, the prohibitions may be effected with signing and marking revisions and temporary barricades, with the signal placed in an indefinite flashing operation. If movements are permanently prohibited, construction of raised median island or islands to prevent the eliminated movements are indicated, and if no longer found warranted, the traffic signal may be deconstructed and removed.

If it is desired to eliminate left turns from the side street approaches while maintaining the eastbound left-turn movement onto Squire Pope Road as well as the current traffic signal control, traffic signal phasing modifications to provide “protected only” left-turn signals are required in order to avoid generating the well-known “left-turn trap.” The reader may consult the Traffic and Transportation Engineer or look up “Yellow Trap” in a popular online encyclopedia for an explanation\*. “Protected only” left-turn signals display either a green, yellow, or red arrow signal at all times, and do not allow motorists to turn while yielding to opposing traffic. They eliminate the potential for the creation of the left-turn (yellow) trap by displaying a red arrow signal while William Hilton Parkway is being served with bi-directional green signals, thereby preventing a left-turning motorist from moving out across the stop line into the intersection in preparing to turn. The elimination of the ability to turn left onto Squire Pope Road or Chamberlin Drive while William Hilton Parkway is being served with green signals would have an adverse effect on intersection operation and likely partially negate the positive impact on operations resulting from the elimination of left-turn and through movements from the side streets.

Other suggested treatments commonly offered to improve operations at this intersection are substantial increases to the amount of green time provided to William Hilton Parkway and daily, time-based prohibitions of the arterial left-turn movements onto the side streets. The existing signal operation is already weighted very heavily in favor of efficiently serving William Hilton Parkway with green intervals of considerable length. Attempting to lengthen them further may generate red-light running from the side streets that would adversely impact safety as well as the effective green time afforded to William Hilton Parkway. If the signals serving William Hilton Parkway

\*See <https://www.wikipedia.org> – “Yellow Trap”

through motorists turn green and you cannot proceed due to side street or turning motorists continuing to enter the intersection following their receipt of a red signal, that constitutes a reduction in effective green time afforded to William Hilton Parkway that would partly negate an increase in actual green time.

Time-based left-turn prohibitions are often implemented in urban areas where no dedicated left-turn lane is present on a high volume street. In these instances, opposing traffic demand may be low enough during much of the day to avoid generating significant adverse operational effects to through traffic in the leftmost through lane. But at peak volume times when opposing volumes do not allow for regular adequate gaps to turn left, it is impractical to have a left-turning motorist sitting in the lane waiting to turn and blocking through traffic for long periods of time. Where dedicated left-turn lanes are present on the arterial, the lanes would need to be physically barricaded to prevent motorists from entering those lanes during the times that the turn prohibition is active. This would be required in order to promote compliance and to keep motorists from entering the dedicated left-turn lane in the median, encountering a prohibition, and then trying to move right back into the through lanes from a stop condition.

Placing the signal in a regularly scheduled flashing operation during peak volume periods has been suggested. While this was actually being done each weekday during morning peak volume periods in the late 1990's and as late as 2000, it is not recommended that the signal be placed intentionally in flashing mode for any significant duration or according to a fixed schedule without implementing the side street left-turn and through movement prohibitions discussed earlier. Intentionally placing the signal in a flashing operation without implementing the side-street movement prohibitions may result in substantial liability risk to the Town in the event of a collision occurring during the flashing operation.

Previous analyses have shown that the long-term and successful mitigation of this intersection in a manner that is compliant with the LMO goals includes the extension of the existing westbound right-turn lane through the intersection as a through lane that continues toward Jenkins Island and also the provision of an acceleration lane to allow motorists to turn right from Squire Pope Road onto off-island William Hilton Parkway without encountering a stop or yield condition. It is true that extending the third, outside through lane on eastbound William Hilton Parkway upstream further in advance of this intersection would significantly benefit morning peak volume period operations by encouraging a more equitable demand distribution across the three eastbound through lanes, but analyses of such an improvement have indicated that the benefit-cost value is low. It seems likely that the SCDOT's current gateway corridor master planning effort being undertaken in cooperation with the Town's Gateway Corridor Committee will ultimately address these geometric limitations and result in an improved intersection that is fully compliant with the LMO goals.

Further, it is considered counter-productive to proffer new recommendations toward the mitigation of the intersection considering the master planning of the corridor currently being conducted, as it is not currently possible to foresee impacts to the intersection's future traffic demands or geometric design in light of the various alternatives currently being evaluated by the SCDOT.

**APPENDIX A**

PEAK HOUR TURNING MOVEMENT DIAGRAMS  
FOR EACH SIGNALIZED  
INTERSECTION WITHIN THE TOWN

JUNE 2019





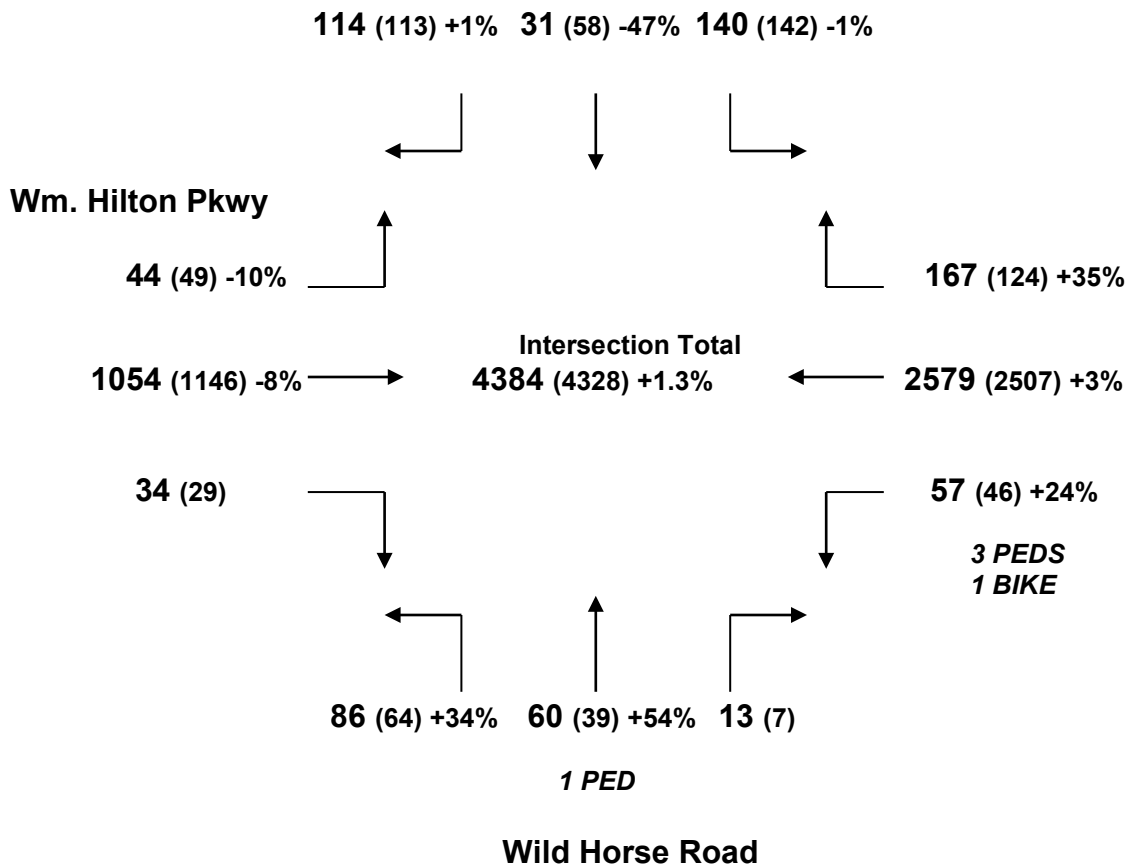
# William Hilton Parkway with Spanish Wells Road and Wild Horse Road

A.M. PEAK HOUR (7:30 to 8:30 a.m. – Tue. 6/4/19)

## Spanish Wells Road

← Sea Pines Circle

Mainland →



2019 (2018) %chg



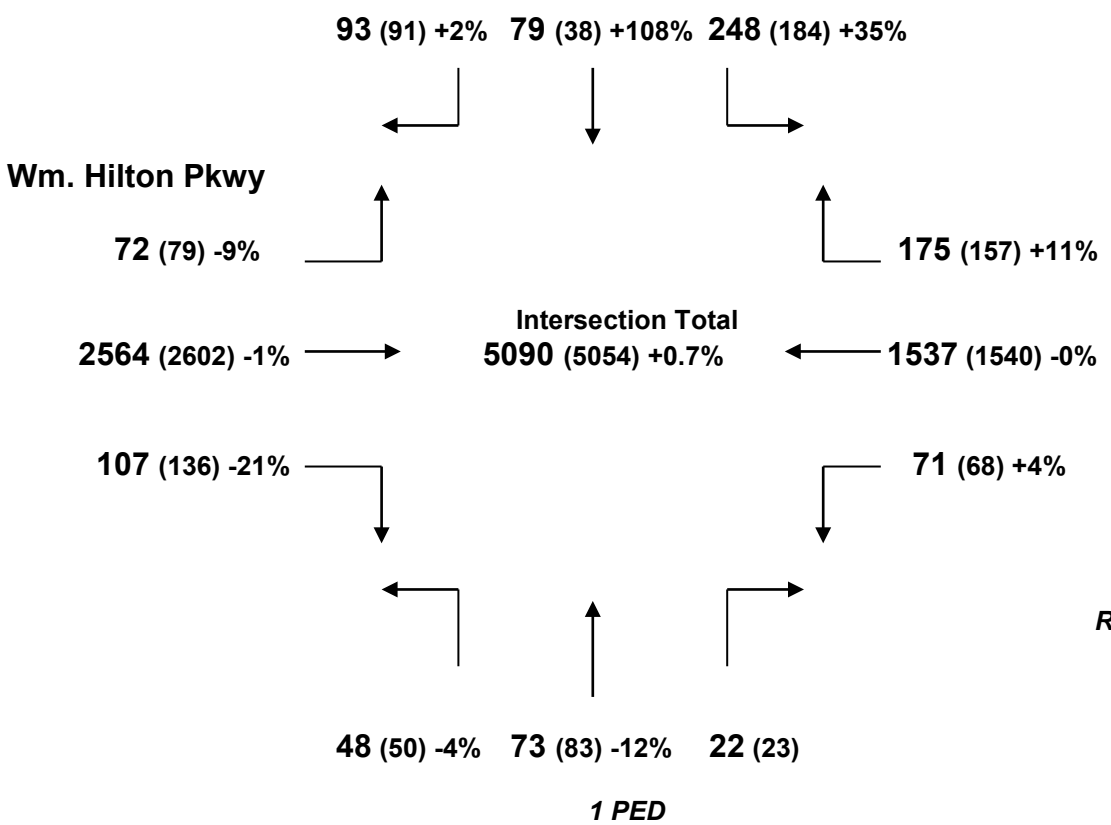
# William Hilton Parkway with Spanish Wells Road and Wild Horse Road

P.M. PEAK HOUR (4:30 to 5:30 p.m. – Tue. 6/4/19)

## Spanish Wells Road

← Sea Pines Circle

Mainland →



2019 (2018) %chg

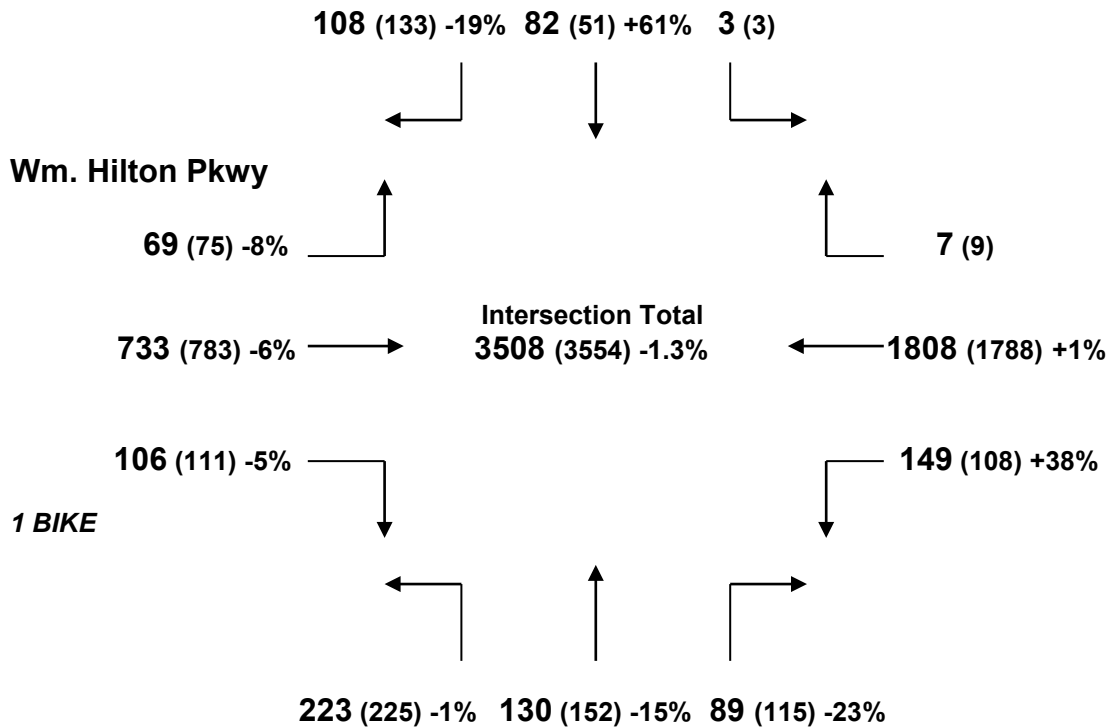
# William Hilton Parkway with Gum Tree Road and Cross Island Parkway

A.M. PEAK HOUR (7:15 to 8:15 a.m. – Tue. 6/4/19)

## Cross Island Expressway

← Sea Pines Circle

Mainland →



**NO PEDS  
RECORDED**

**Gumtree Road**

**2019 (2018) %chg**

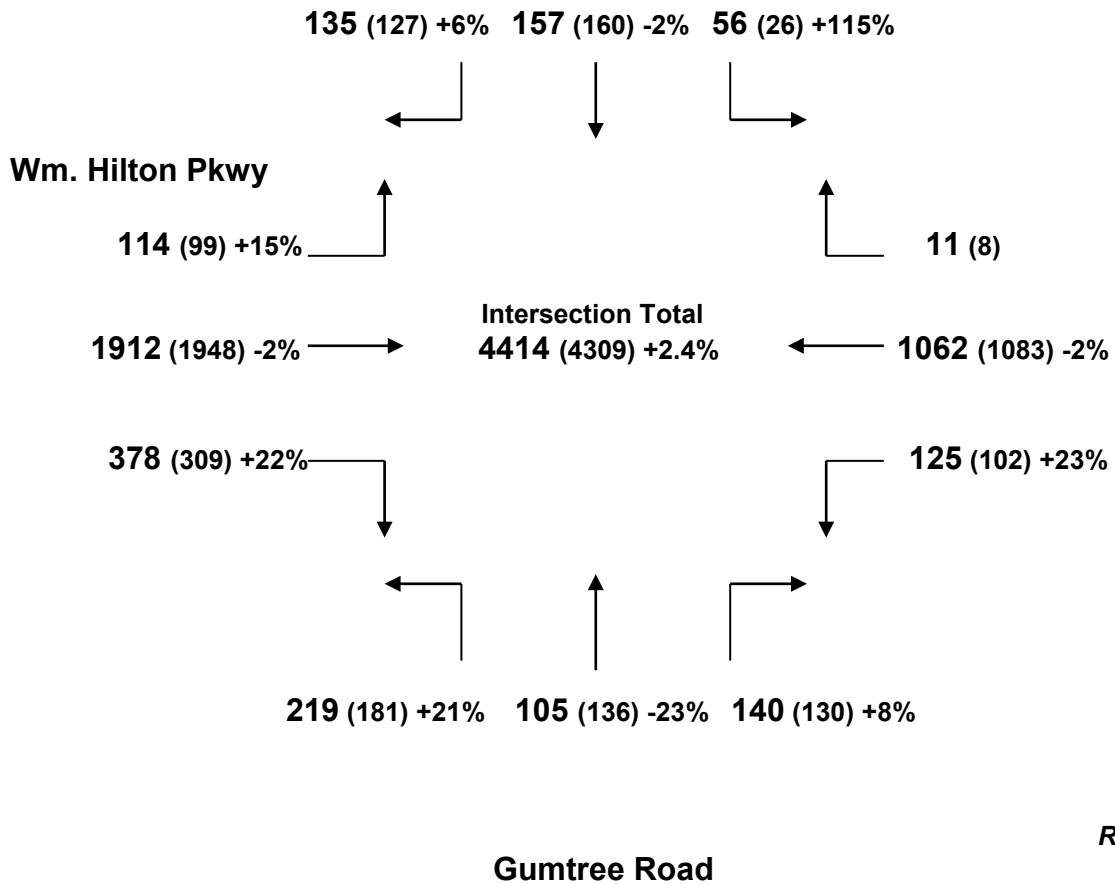
# William Hilton Parkway with Gum Tree Road and Cross Island Parkway

P.M. PEAK HOUR (4:45 to 5:45 p.m. – Tue. 6/4/19)

## Cross Island Expressway

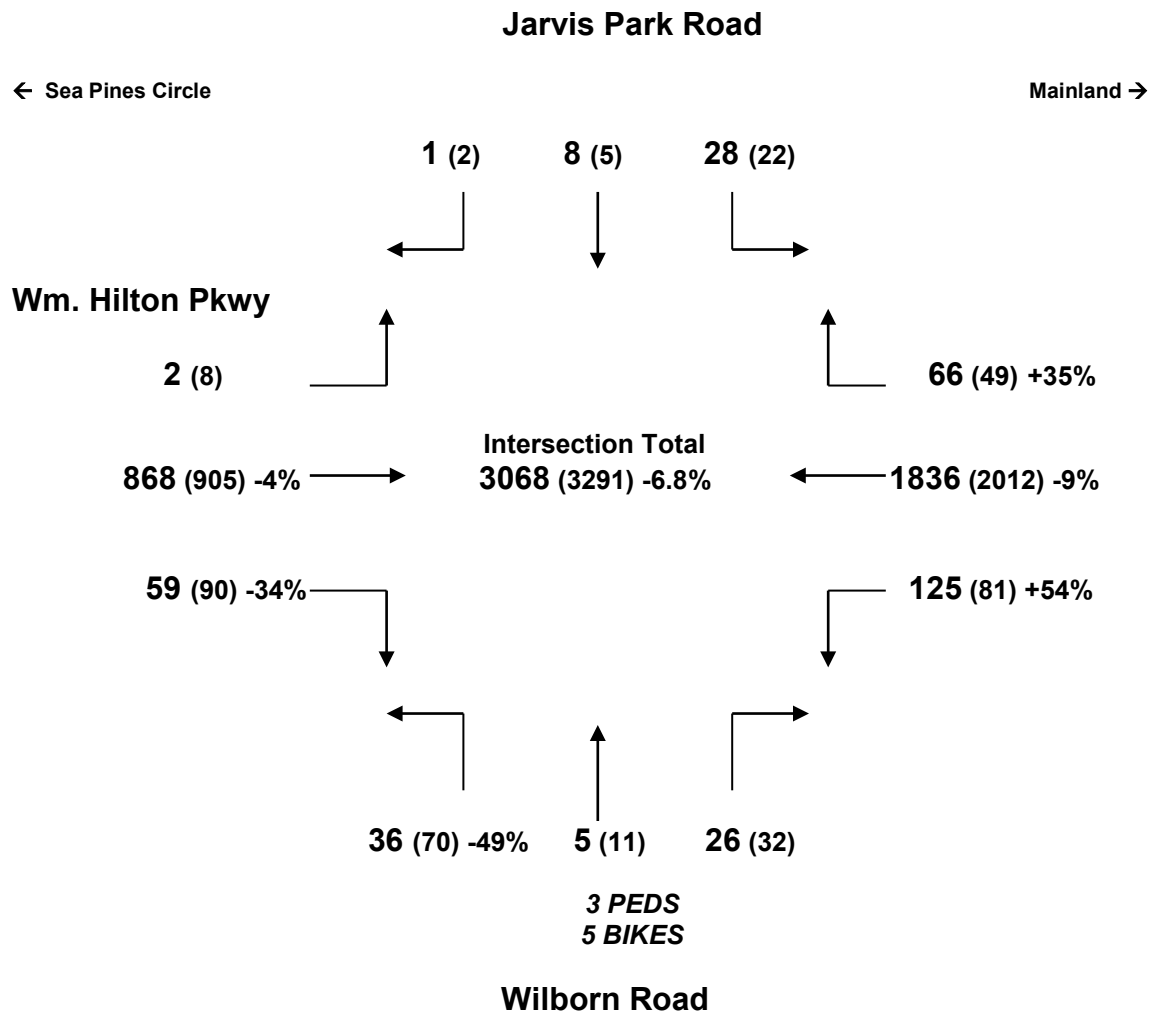
← Sea Pines Circle

Mainland →



# William Hilton Parkway with Wilborn Road and Jarvis Park Road

A.M. PEAK HOUR (7:30 to 8:30 a.m. – Tue. 6/4/19)

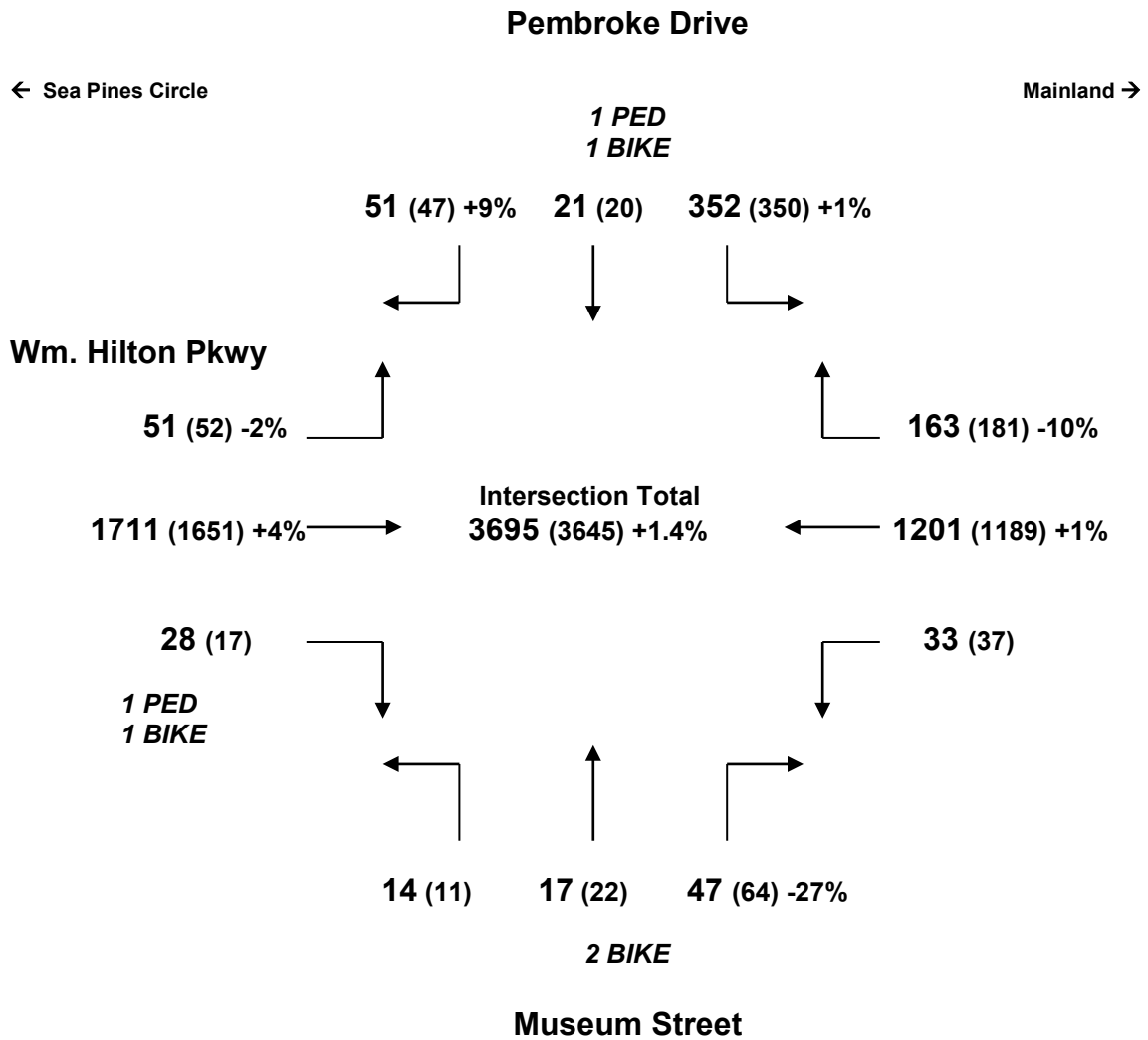


2019 (2018) %chg





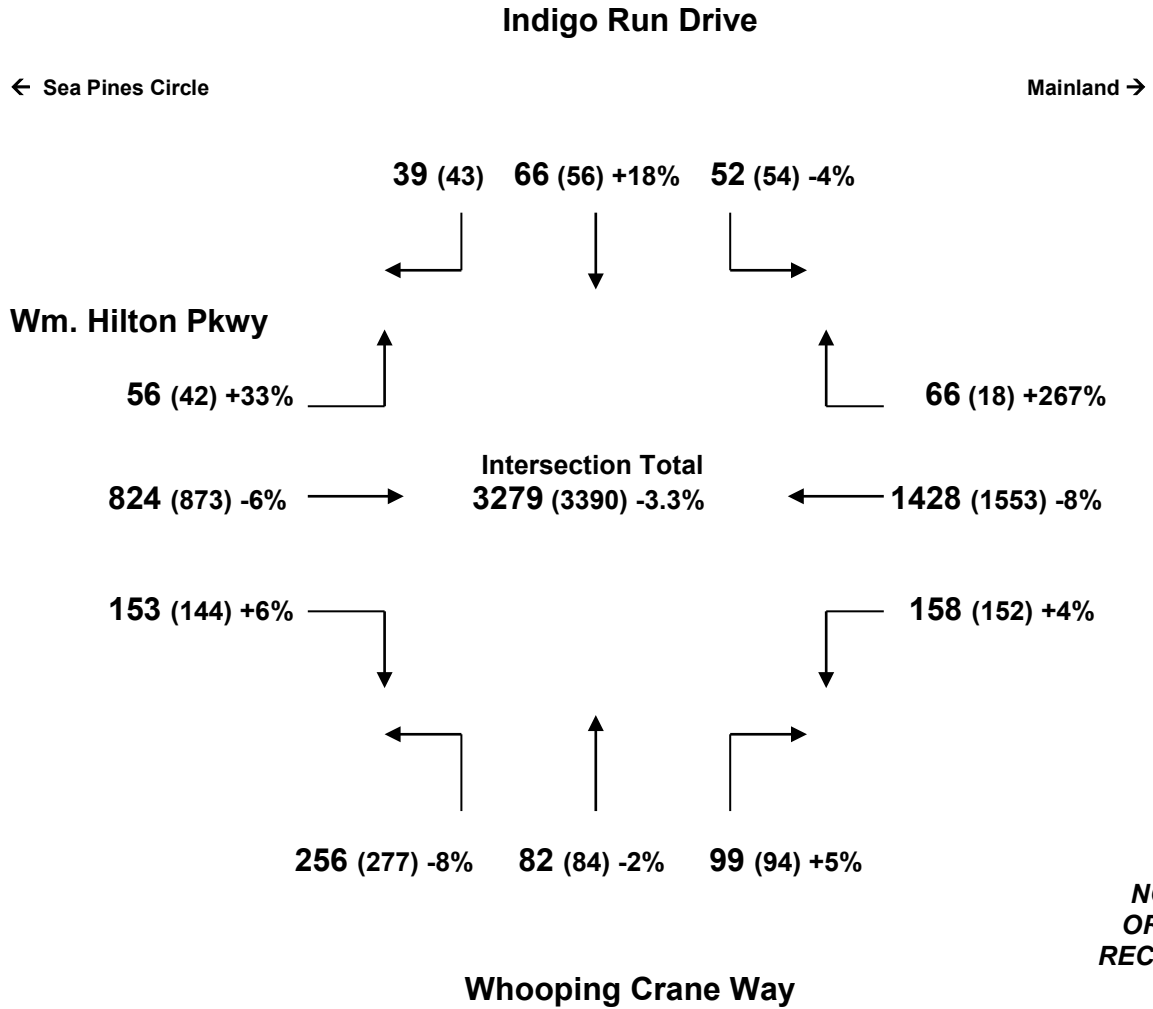
**William Hilton Parkway with Pembroke Drive  
and Museum Street**  
P.M. PEAK HOUR (4:45 to 5:45 p.m. – Tue. 6/4/19)



2019 (2018) %chg

# William Hilton Parkway with Indigo Run Drive and Whooping Crane Way

A.M. PEAK HOUR (8:00 to 9:00 a.m. – Tue. 6/4/19)

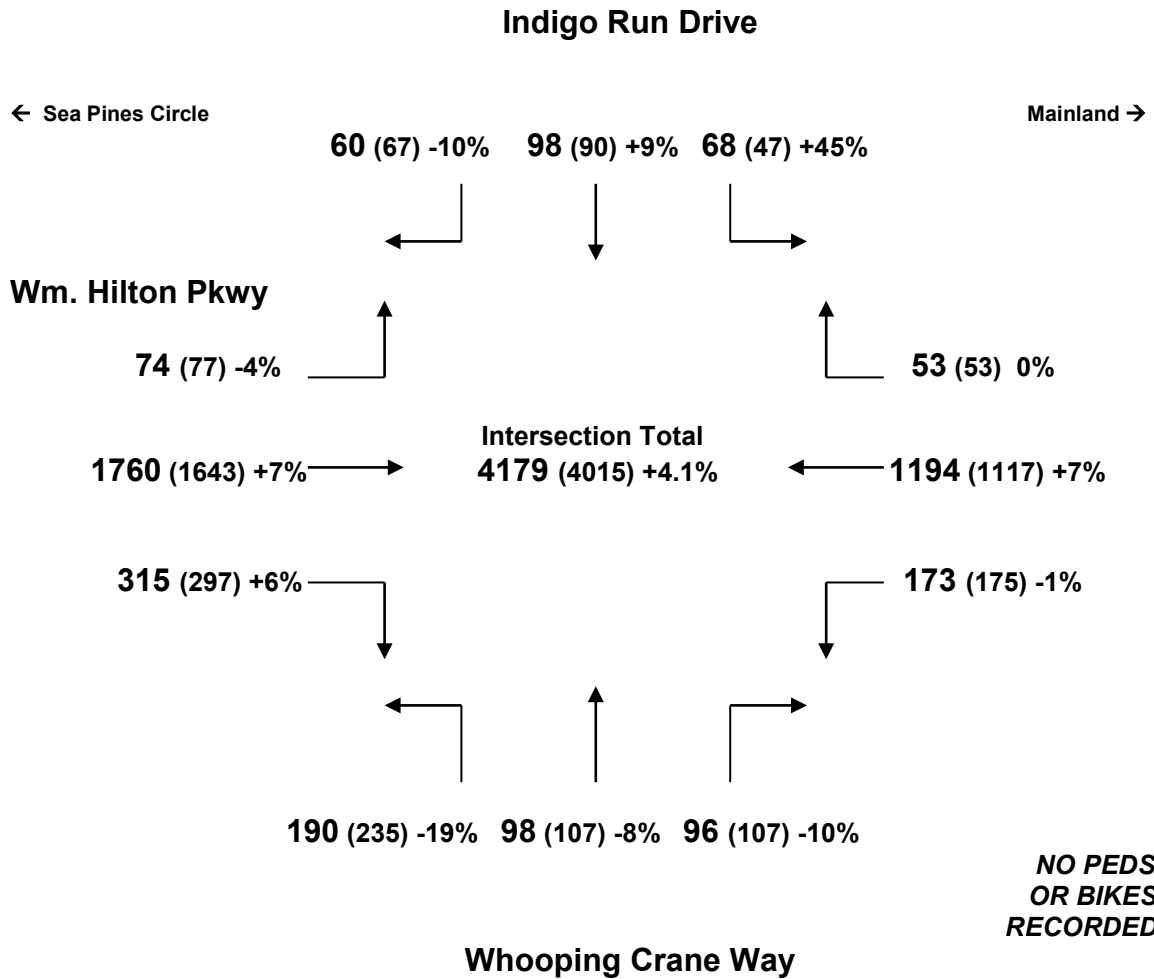


2019 (2018) %chg



# William Hilton Parkway with Indigo Run Drive and Whooping Crane Way

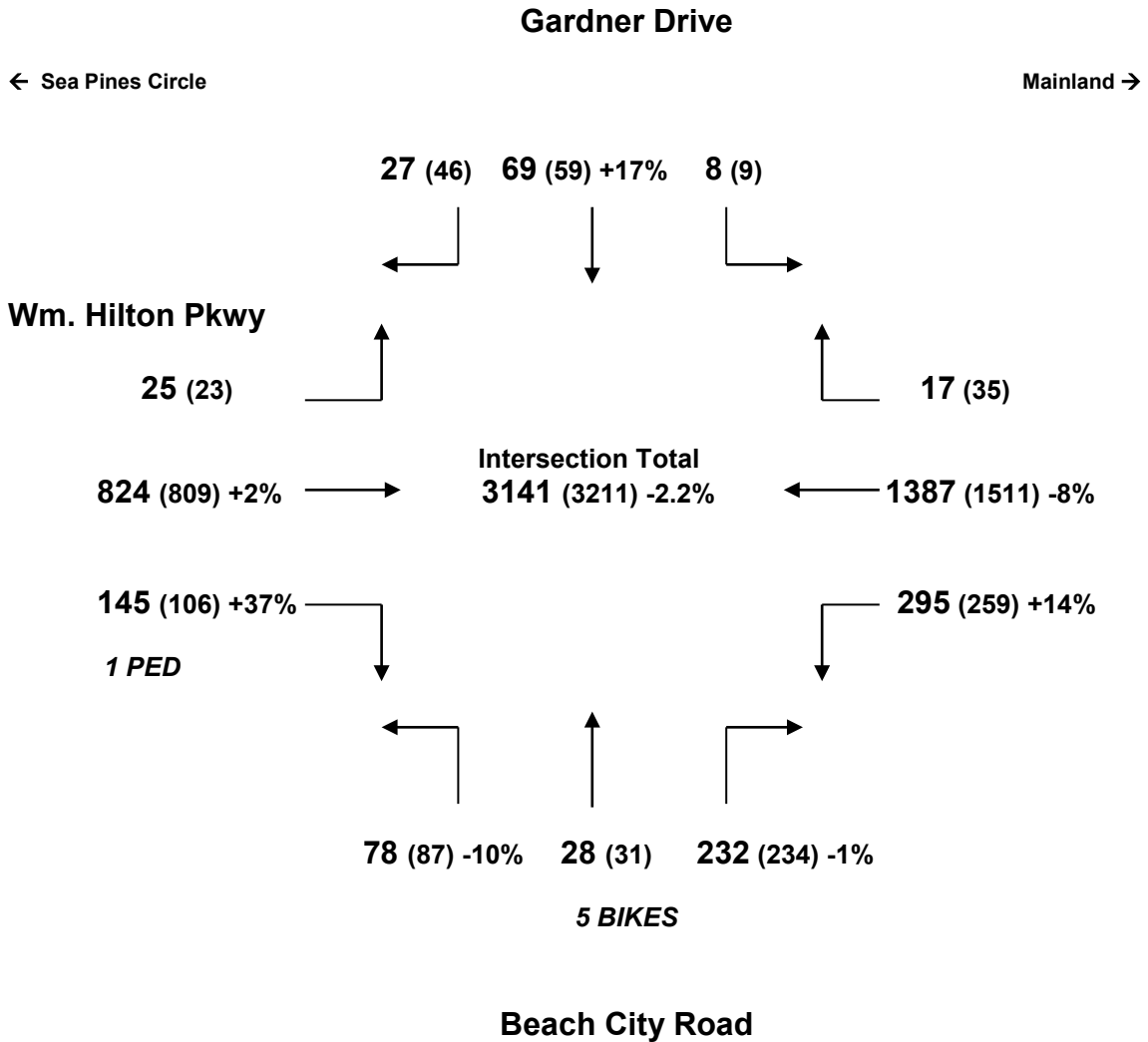
P.M. PEAK HOUR (4:00 to 5:00 p.m. – Tue. 6/4/19)



2019 (2018) %chg

# William Hilton Parkway with Beach City Road and Gardner Drive

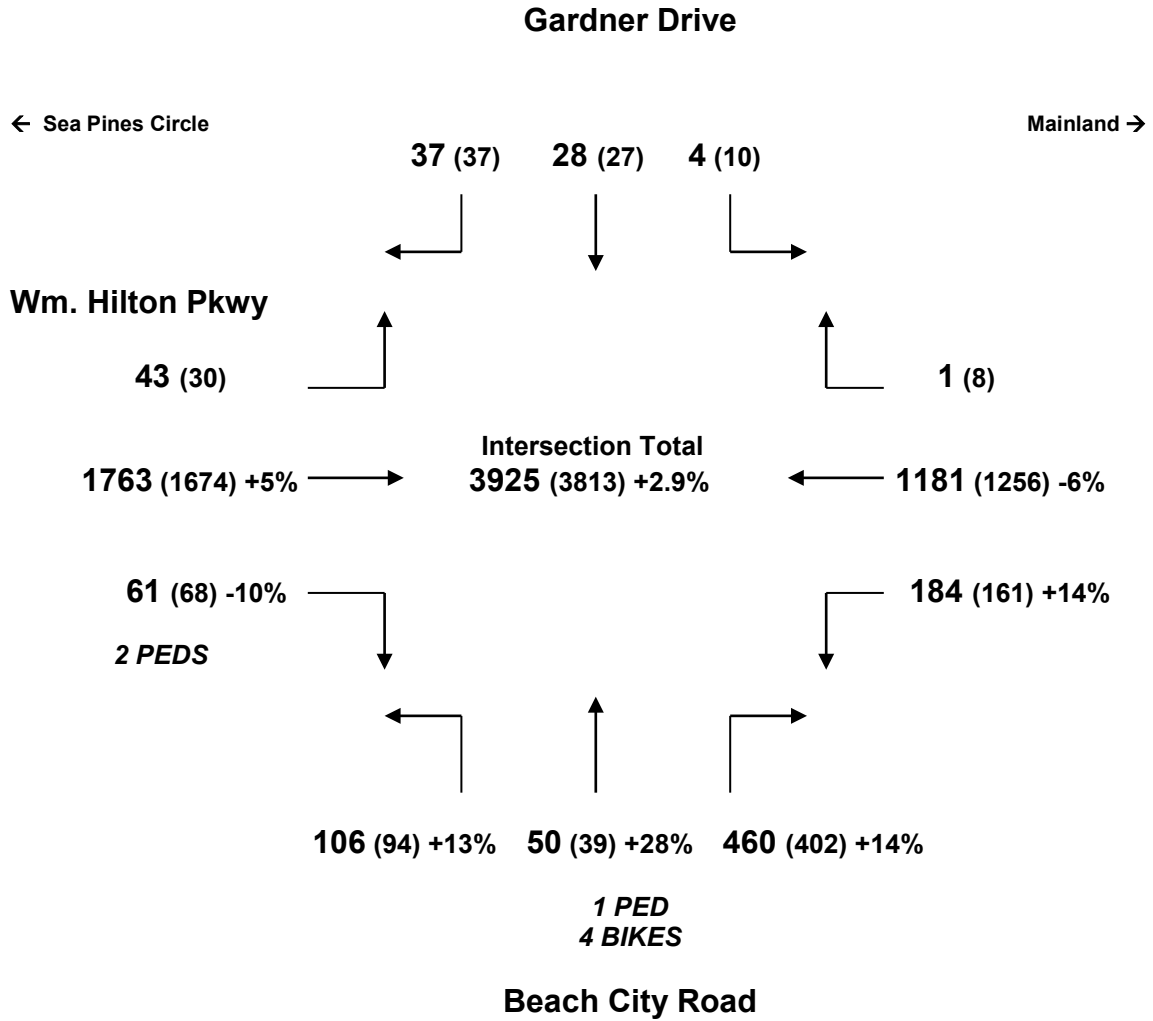
A.M. PEAK HOUR - (7:45 to 8:45 a.m. – Tue. 6/4/19)



2019 (2018) %chg

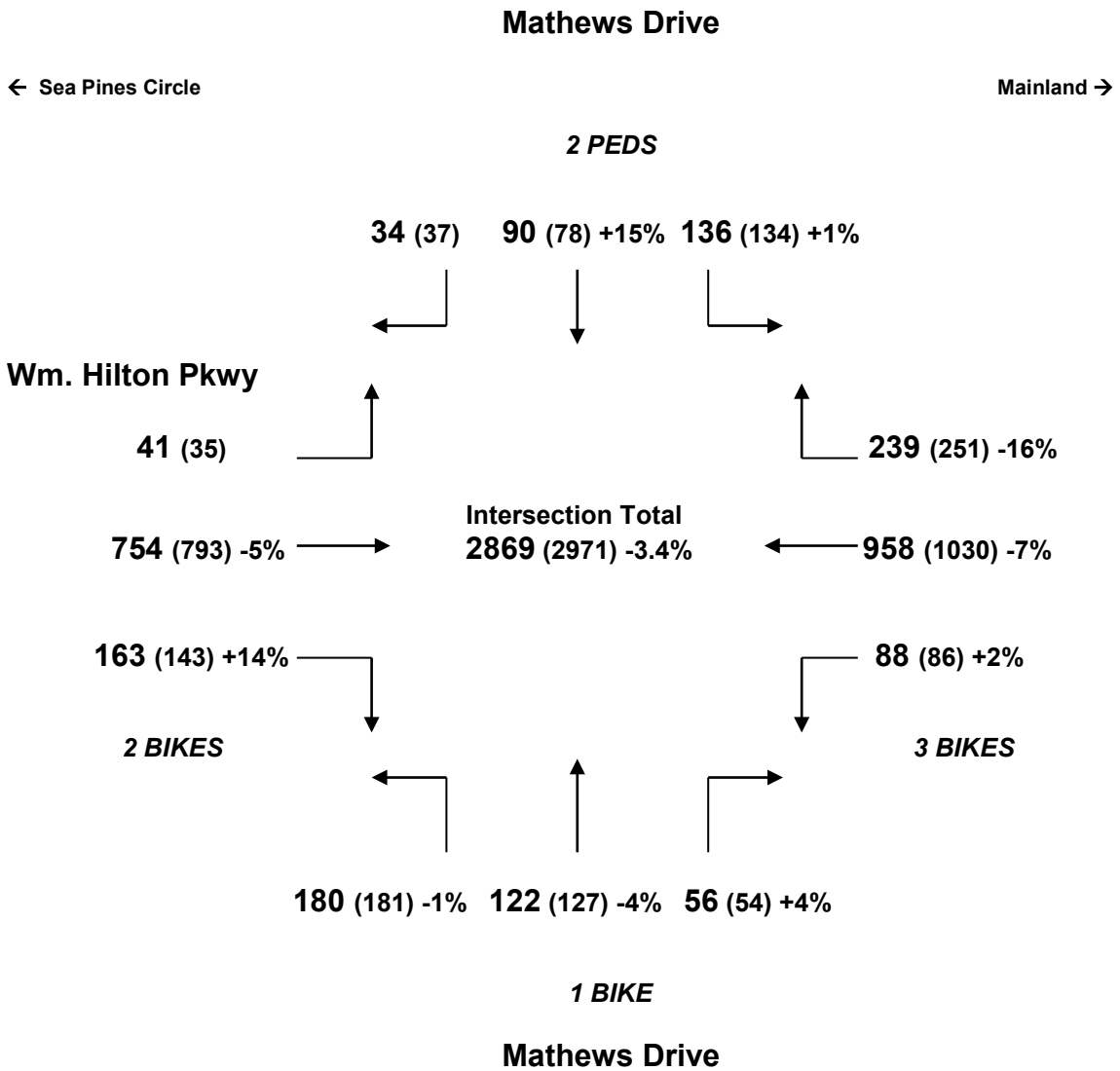
# William Hilton Parkway with Beach City Road and Gardner Drive

P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)



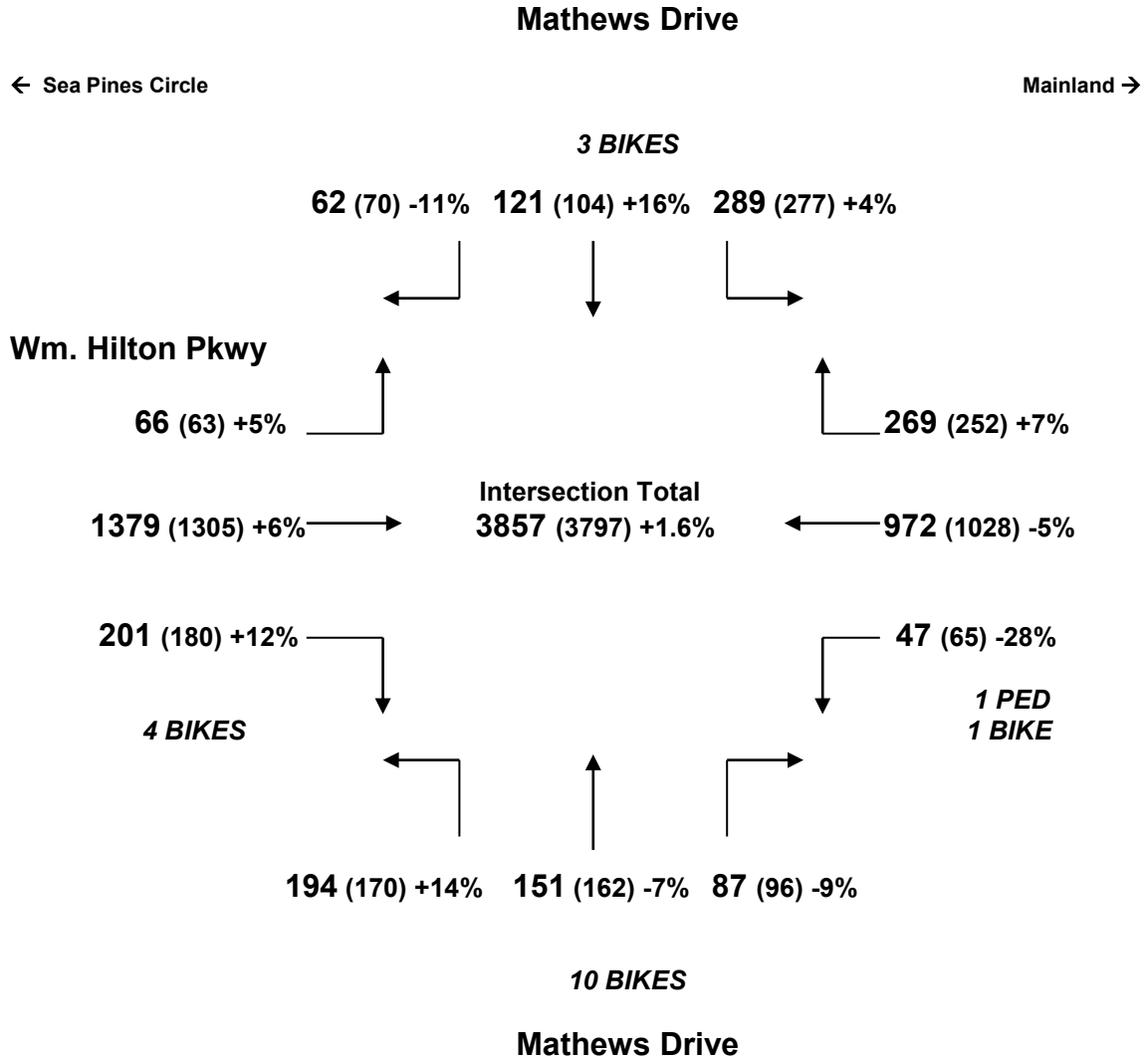
2019 (2018) %chg

### William Hilton Parkway with Mathews Drive (NORTHERN INTERSECTION) A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)



**2019 (2018) %chg**

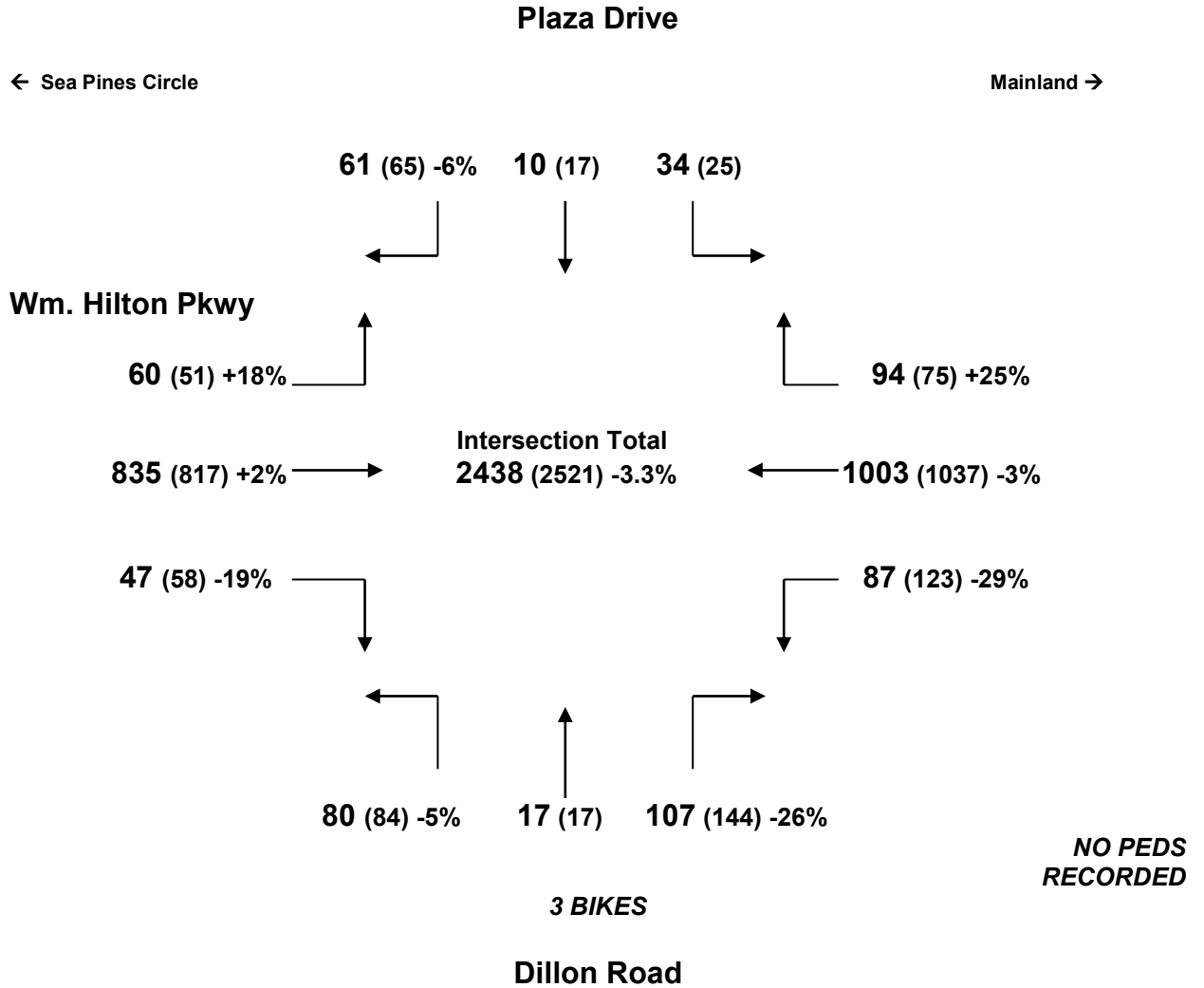
**William Hilton Parkway with Mathews Drive  
(NORTHERN INTERSECTION)  
P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)**



**2019 (2018) %chg**

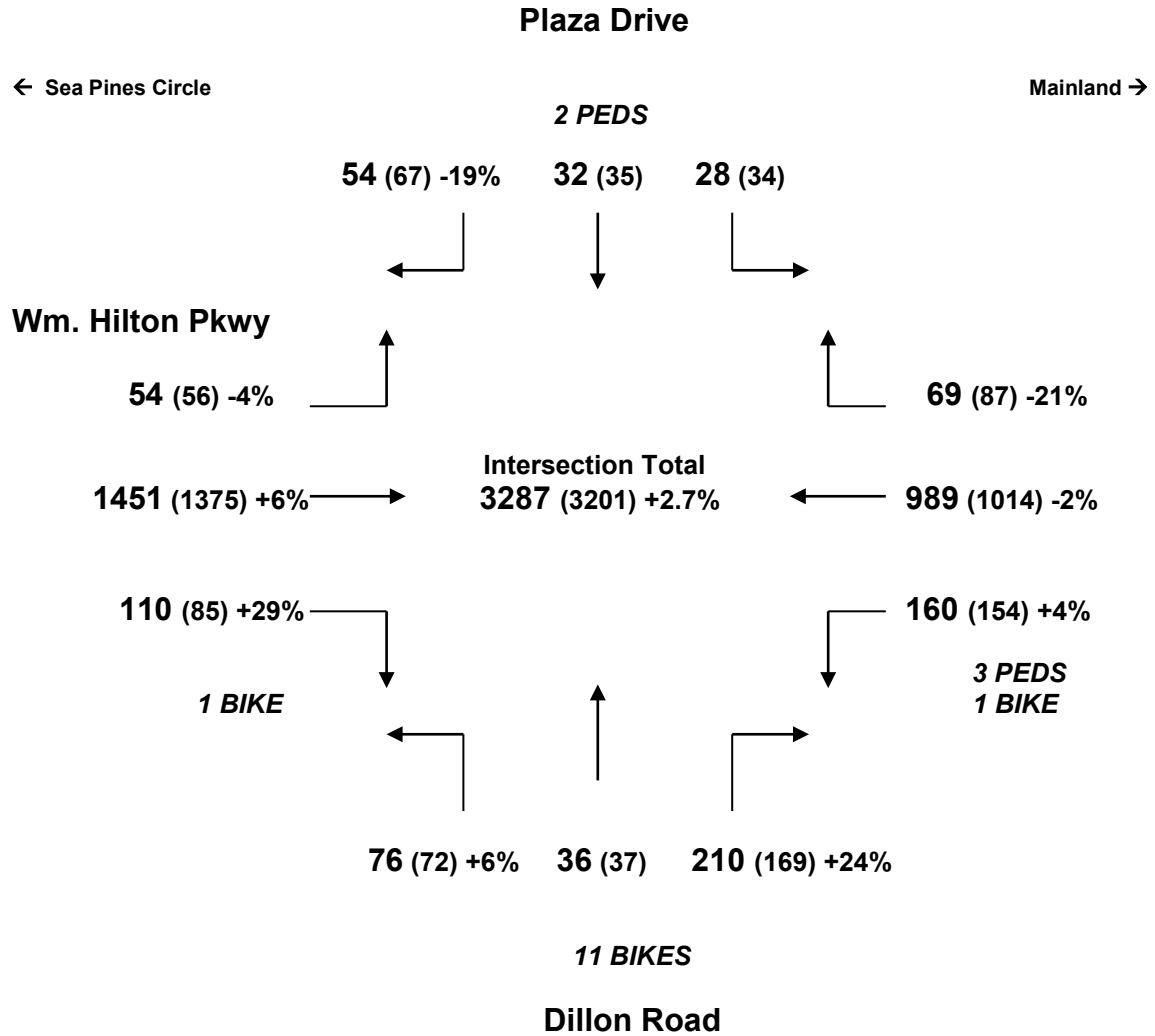
# William Hilton Parkway with Dillon Road and Port Royal Plaza

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)



2019 (2018)%chg

**William Hilton Parkway with Dillon Road  
and Port Royal Plaza**  
P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)



2019 (2018) %chg

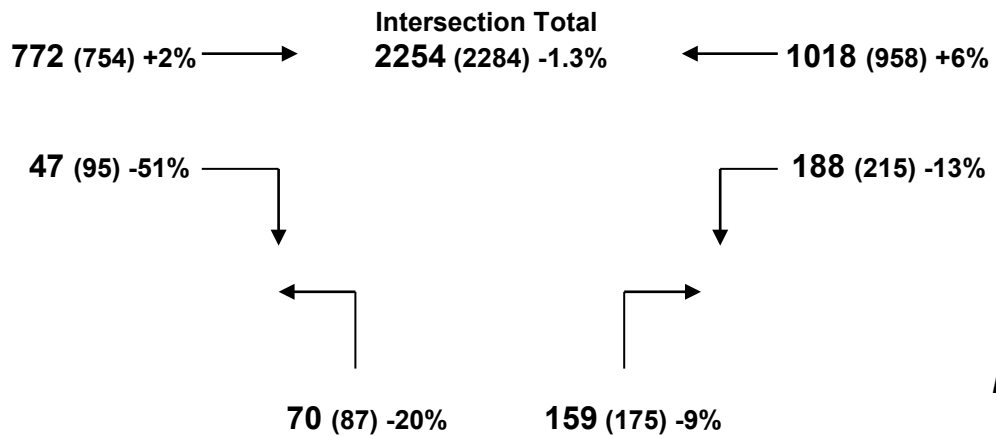
# William Hilton Parkway with Coggins Point Road

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

← Sea Pines Circle

Mainland →

## Wm. Hilton Pkwy



**NO PEDS  
OR BIKES  
RECORDED**

## Coggins Point Road

2019 (2018) %chg



# William Hilton Parkway with Coggins Point Road

P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)

← Sea Pines Circle

Mainland →

**Wm. Hilton Pkwy**

**1406 (1316) +7%** →      **Intersection Total 2956 (2940) +0.5%**      ← **961 (945) +2%**

**84 (92) -9%**      ↓      ↓      **191 (187) +2%**

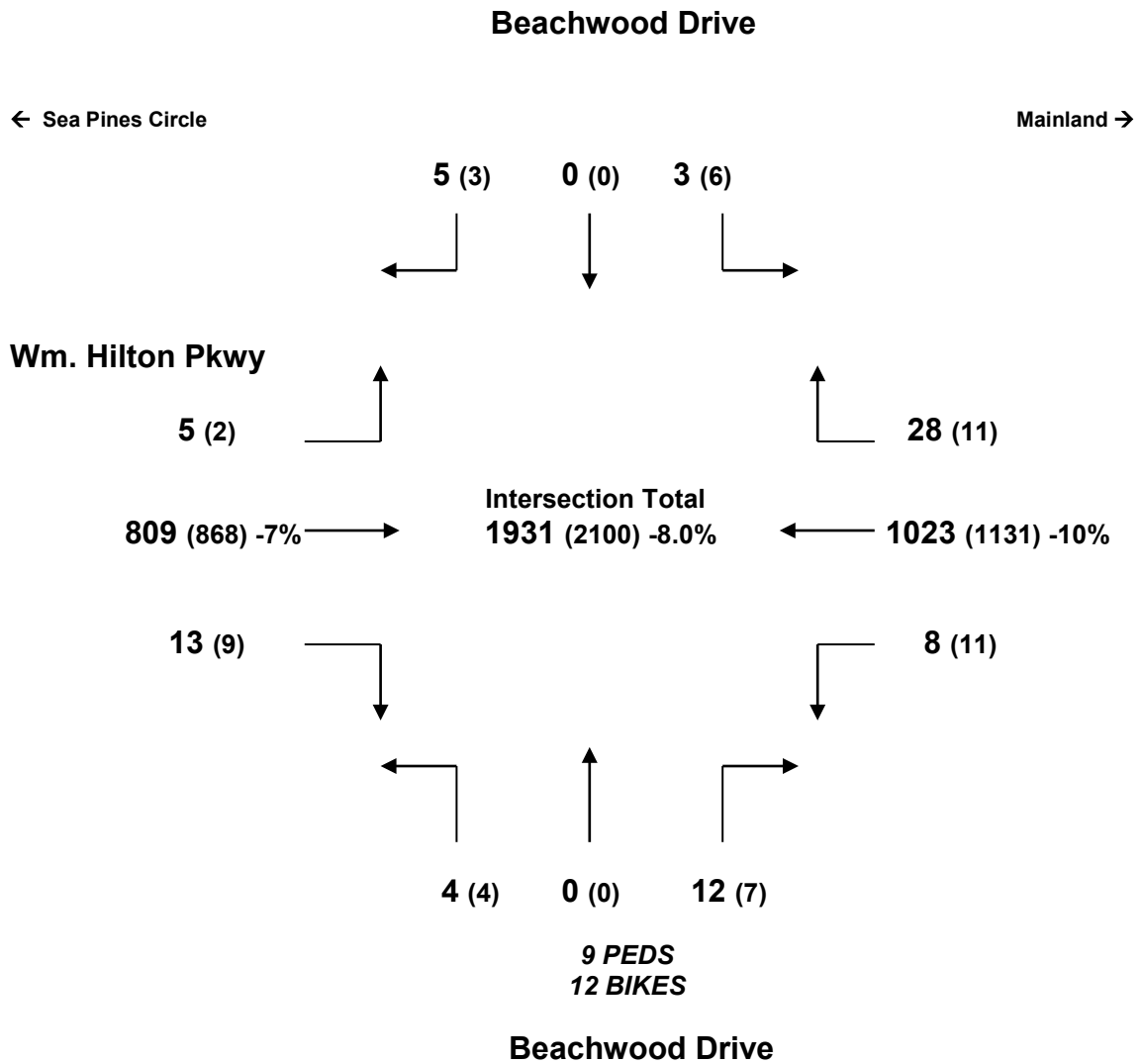
←      ↓      ↓      →  
**80 (149) -46%**      **234 (251) -7%**

**NO PEDS  
OR BIKES  
RECORDED**

**Coggins Point Road**

**2019 (2018) %chg**

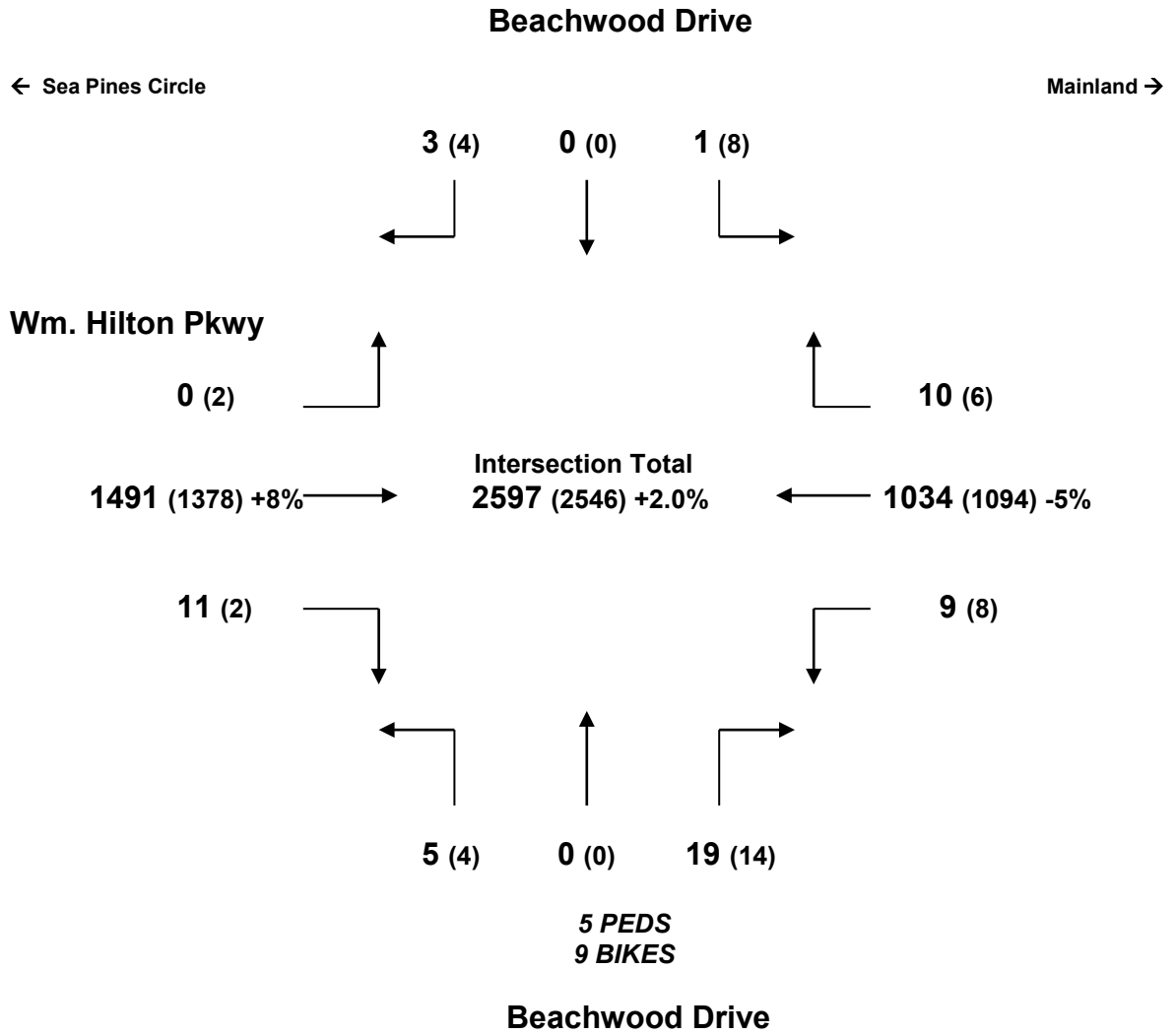
**William Hilton Parkway with Beachwood Drive**  
**A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)**



**2019 (2018) %chg**

# William Hilton Parkway with Beachwood Drive

P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)

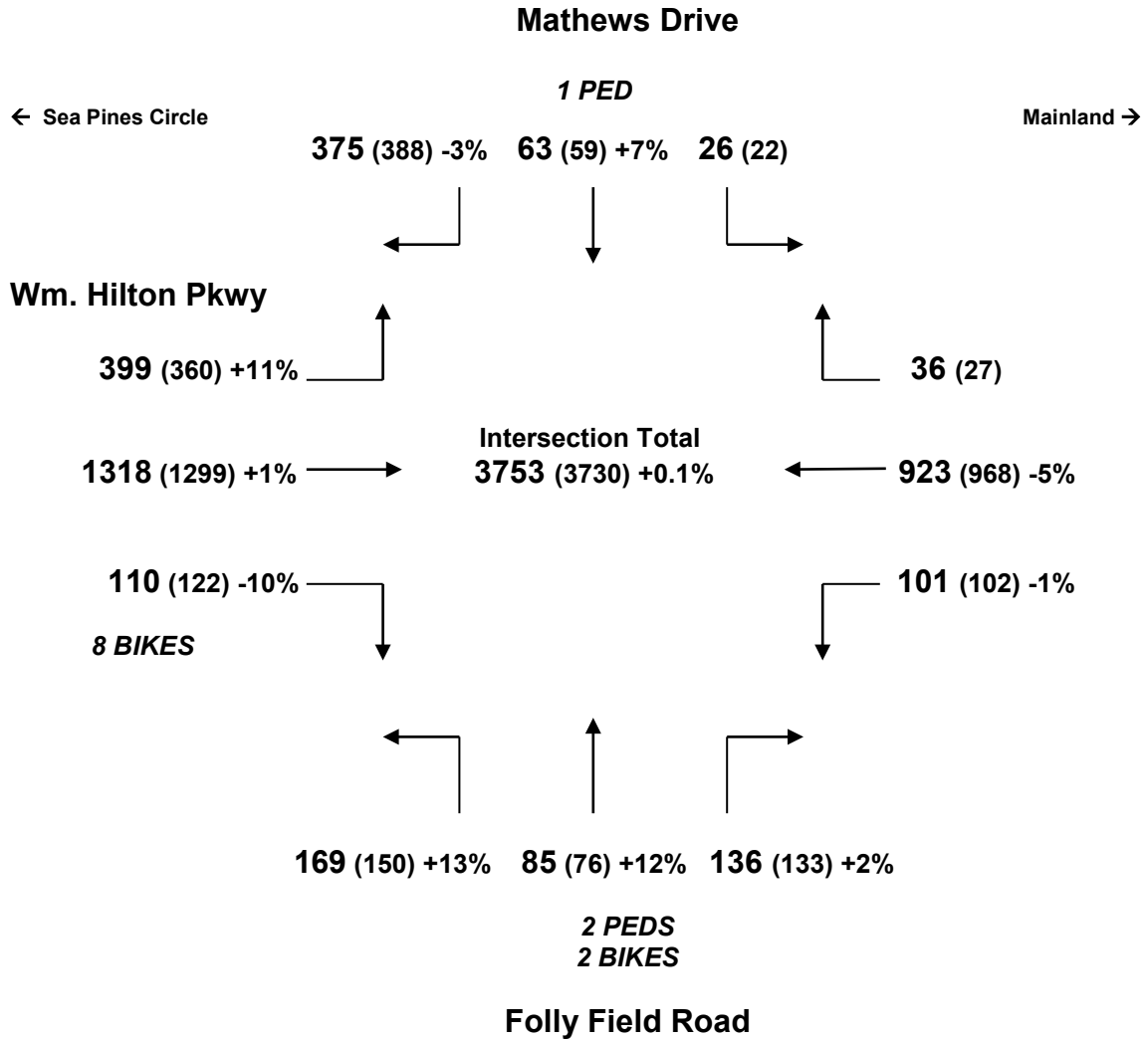


2019 (2018) %chg



# William Hilton Parkway with Mathews Drive and Folly Field Road

P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)



2019 (2018) %chg

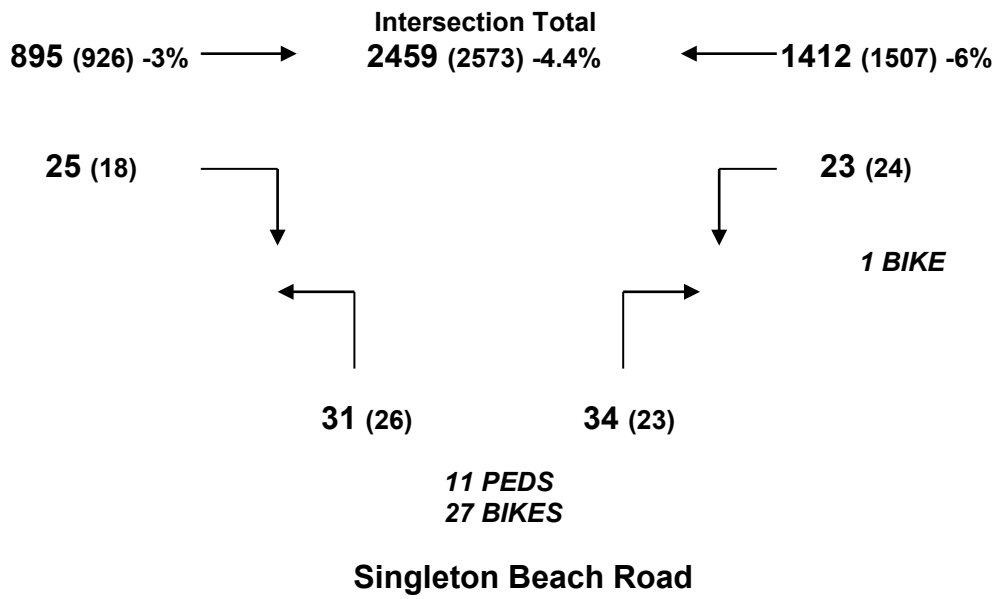
# William Hilton Parkway with Singleton Beach Road

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

← Sea Pines Circle

Mainland →

## Wm. Hilton Pkwy



2019 (2018) %chg

# William Hilton Parkway with Singleton Beach Road

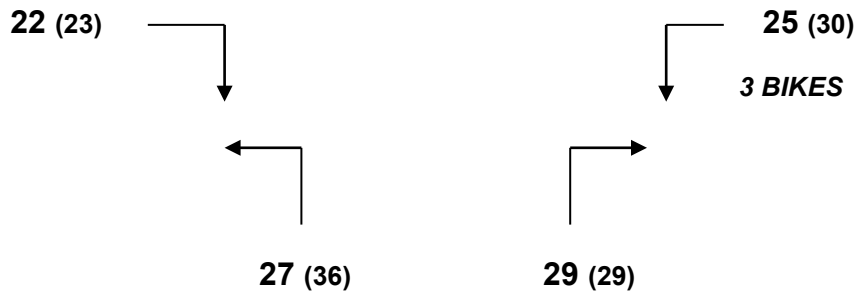
P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)

← Sea Pines Circle

Mainland →

## Wm. Hilton Pkwy

1754 (1656) +6% →      Intersection Total 3308 (3305) +0.1%      ← 1428 (1483) -4%



20 BIKES

**NO PEDS  
RECORDED**

## Singleton Beach Road

2019 (2018) %chg

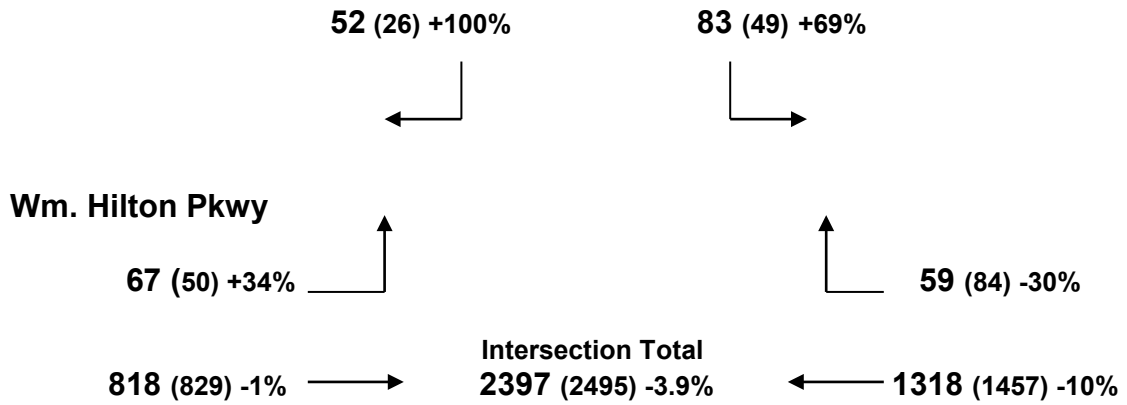
# William Hilton Parkway with Shelter Cove Lane

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

## Shelter Cove Lane

← Sea Pines Circle

Mainland →



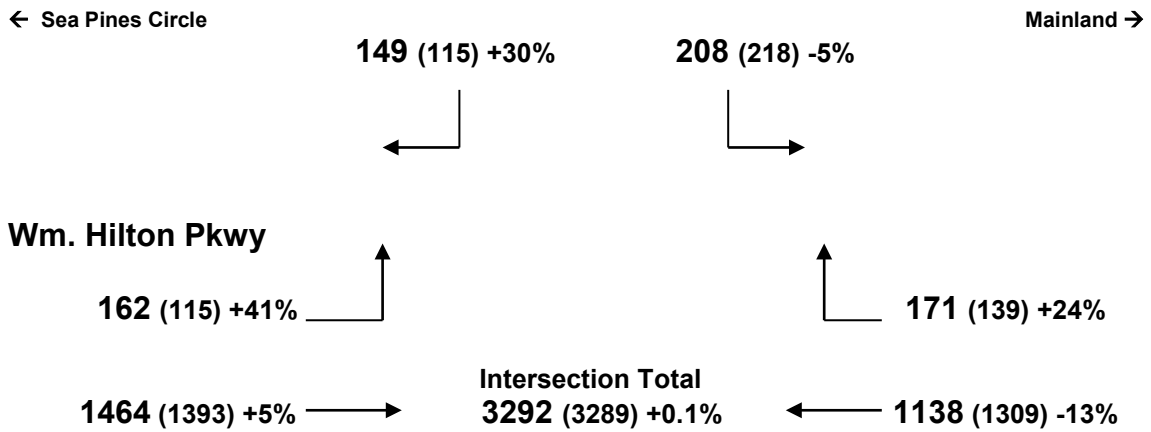
**NO PEDS  
OR BIKES  
RECORDED**

**2019 (2018) %chg**



**William Hilton Parkway with Shelter Cove Lane**  
**P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)**

**Shelter Cove Lane**

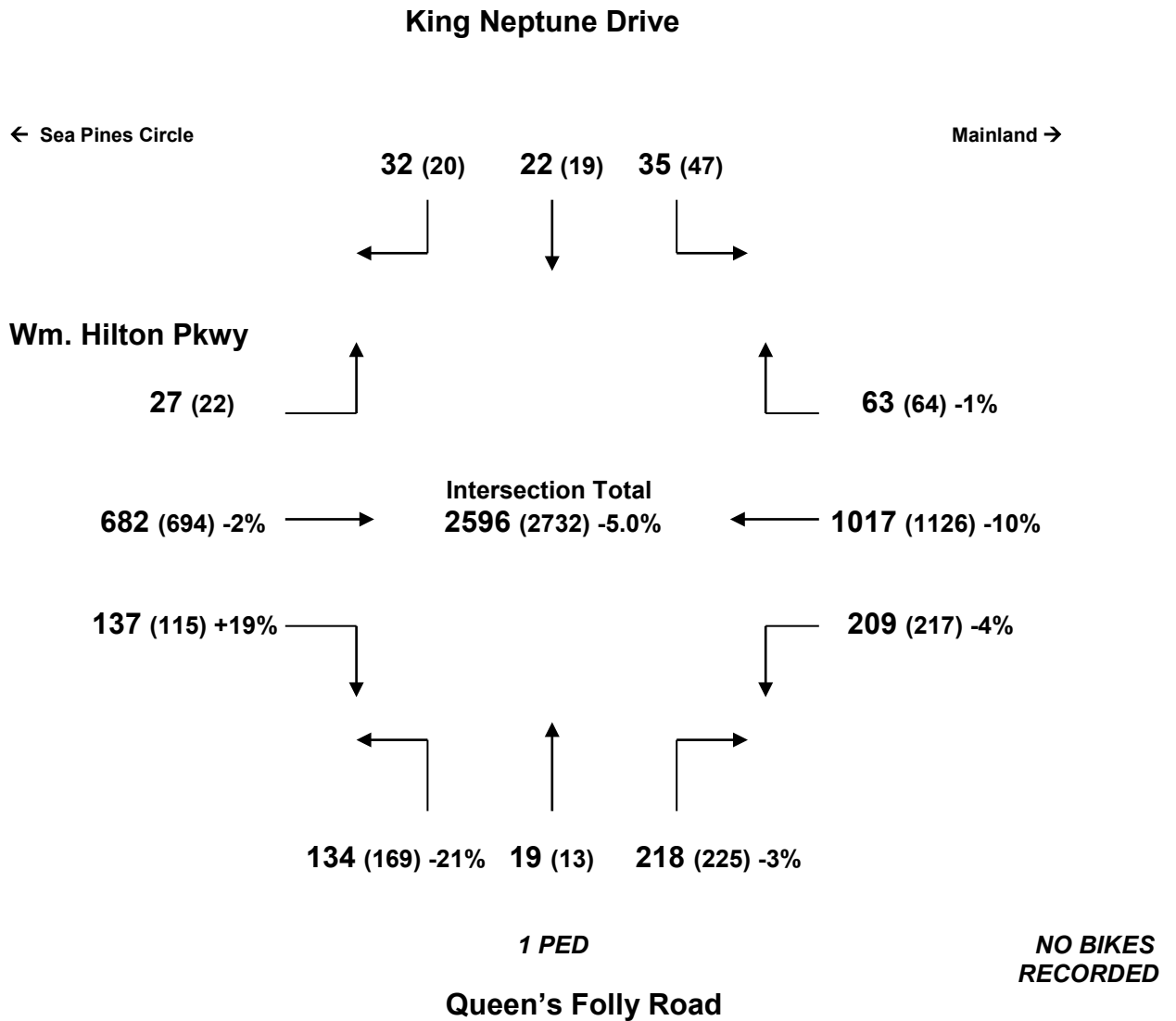


**NO PEDS  
OR BIKES  
RECORDED**

**2019 (2018) %chg**

# William Hilton Parkway with Queens Folly Road and King Neptune Drive

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Thu. 6/6/19)



**2019 (2018) %chg**

**William Hilton Parkway with Queens Folly Road  
and King Neptune Drive**  
**P.M. PEAK HOUR - (4:00 to 5:00 p.m. – Thu. 6/6/19)**

**King Neptune Drive**

← Sea Pines Circle

Mainland →

68 (67) +1%    49 (35)    116 (95) +22%



Wm. Hilton Pkwy

63 (58) +9%



70 (67) +4%

**Intersection Total**

3899 (3681) +5.9%

1207 (1129) +7%



← 1141 (1151) -1%

148 (167) -11%



325 (244) +33%



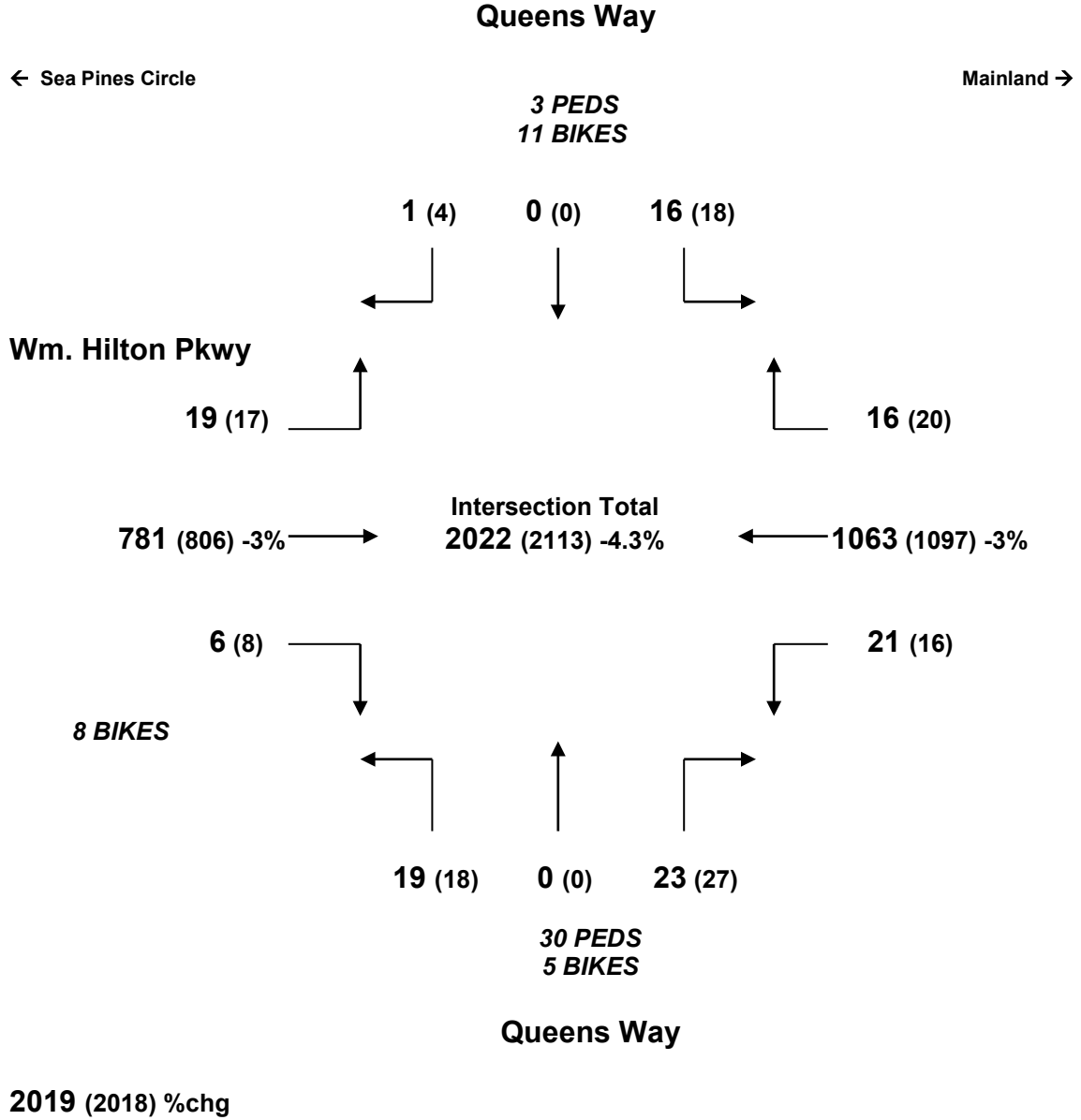
213 (240) -11%    58 (61) -5%    441 (367) +20%

**Queens Folly Road**

*NO PEDS  
OR BIKES  
RECORDED*

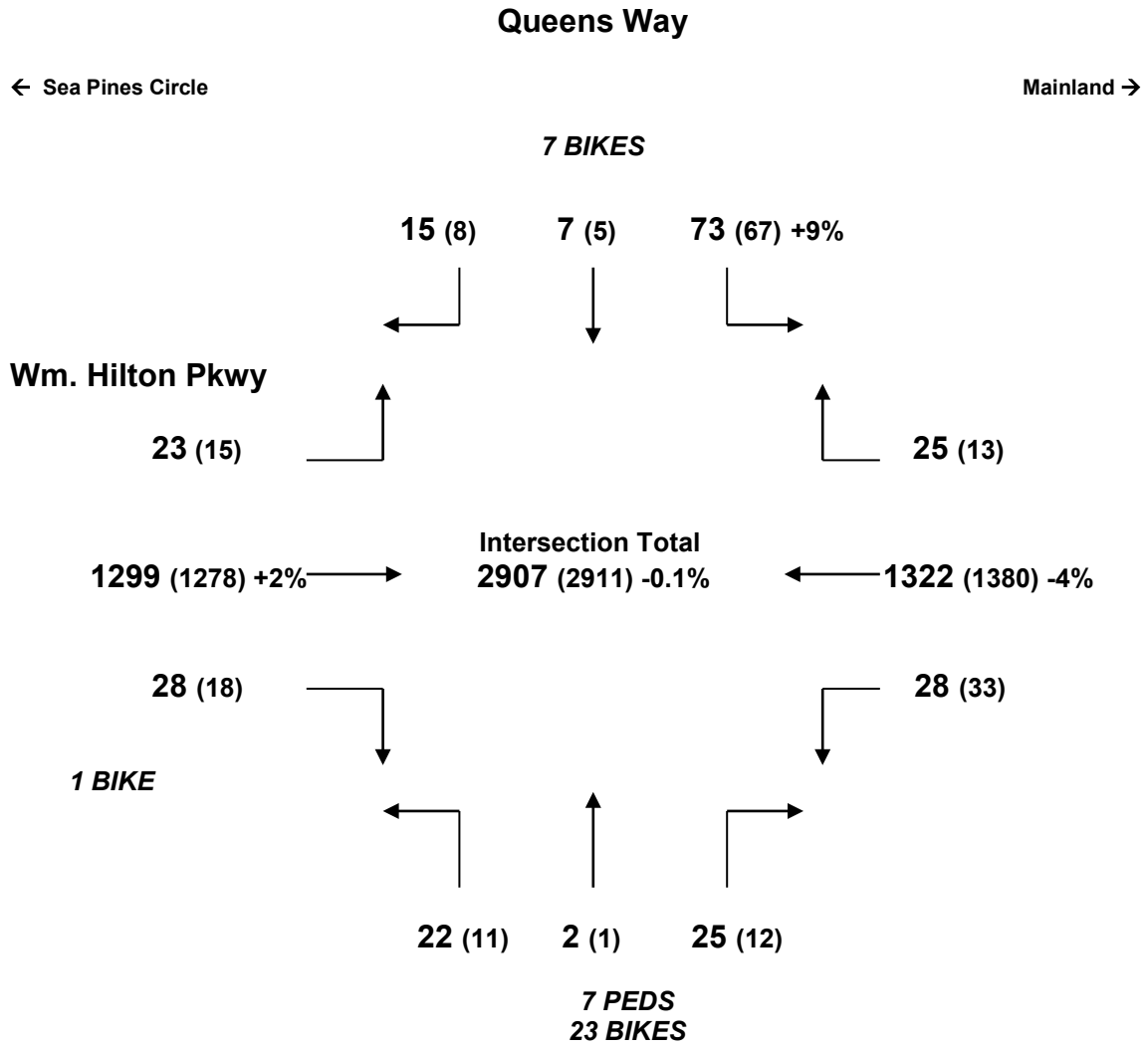
**2019 (2018) %chg**

**William Hilton Parkway with Queens Way**  
**A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)**



## William Hilton Parkway with Queens Way

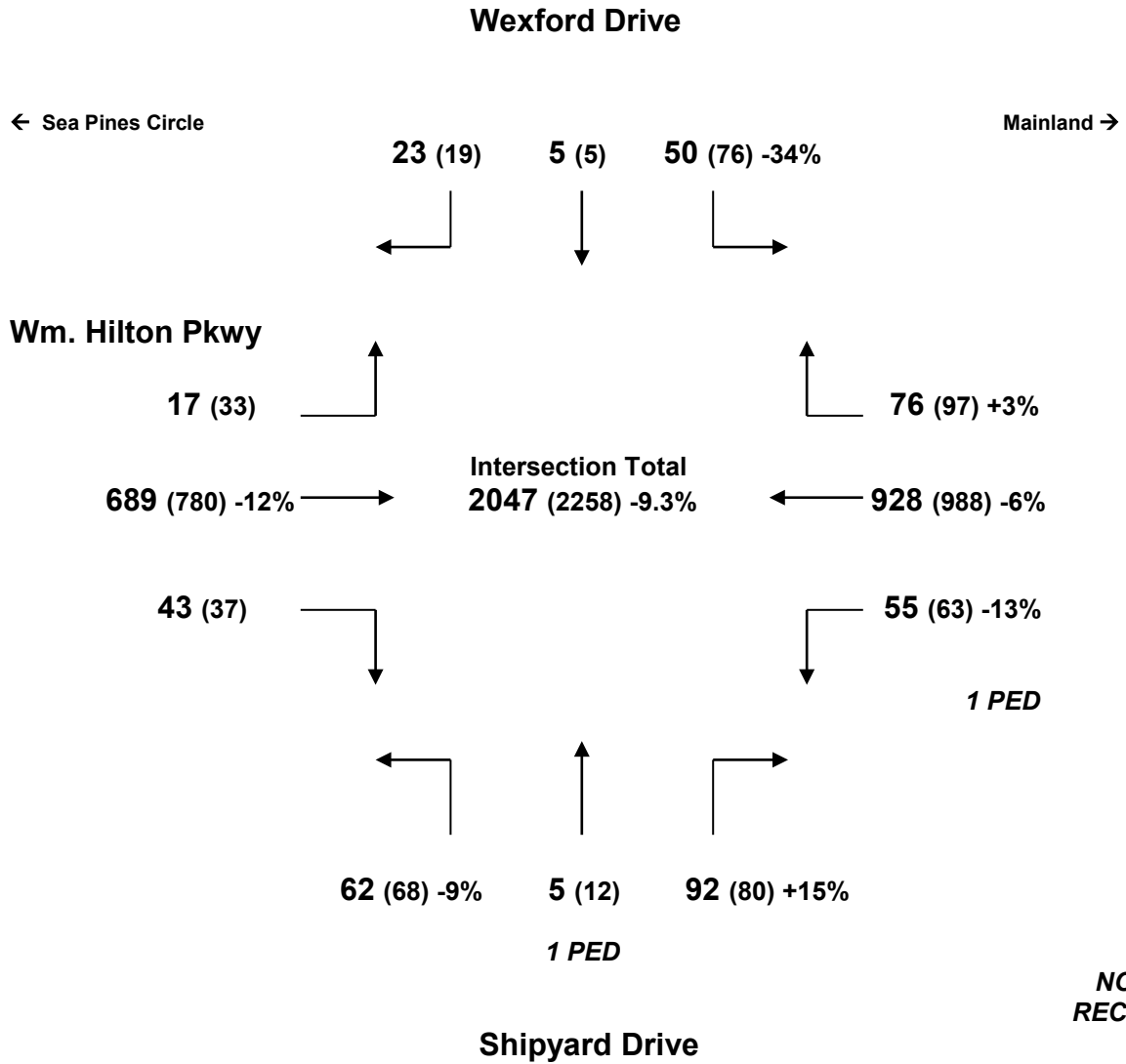
P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)



**2019 (2018) %chg**

# William Hilton Parkway with Shipyard Drive and Wexford Drive

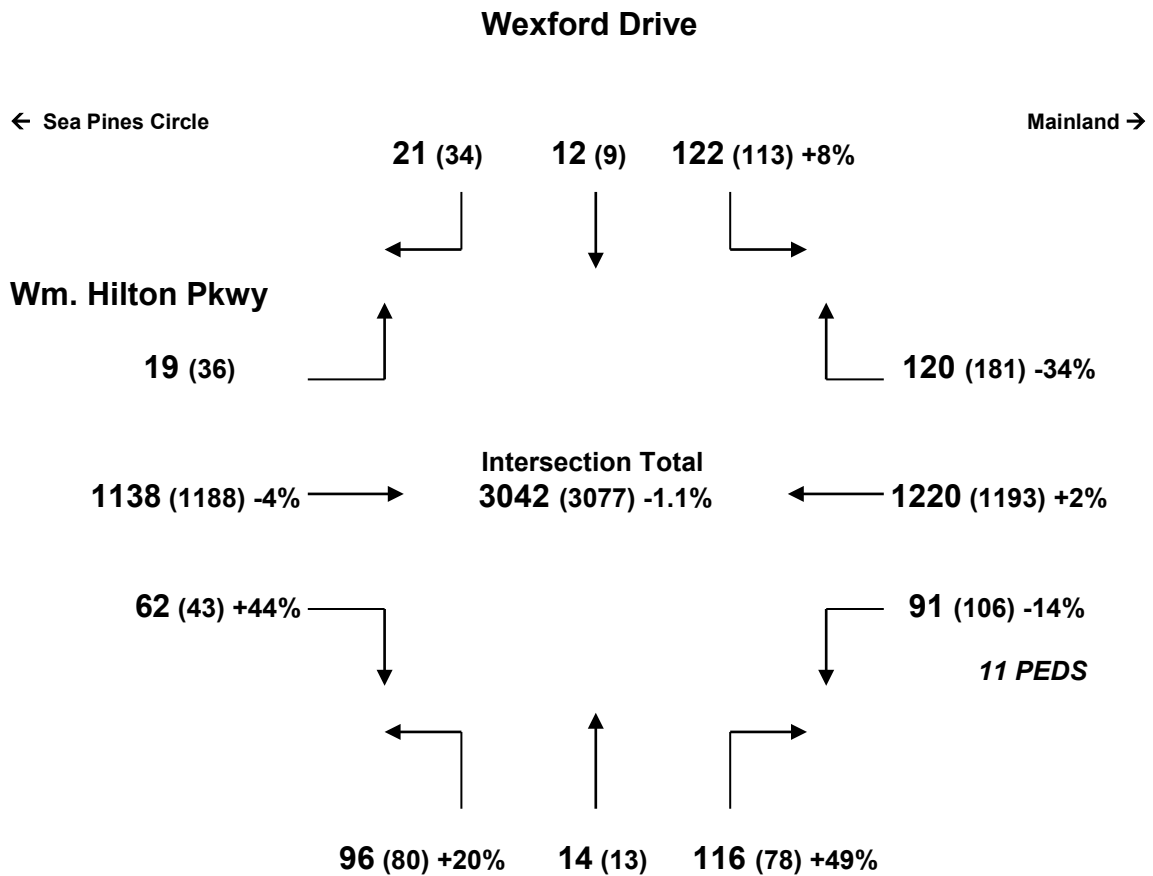
A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)



2019 (2018) %chg

# William Hilton Parkway with Shipyard Drive and Wexford Drive

P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)



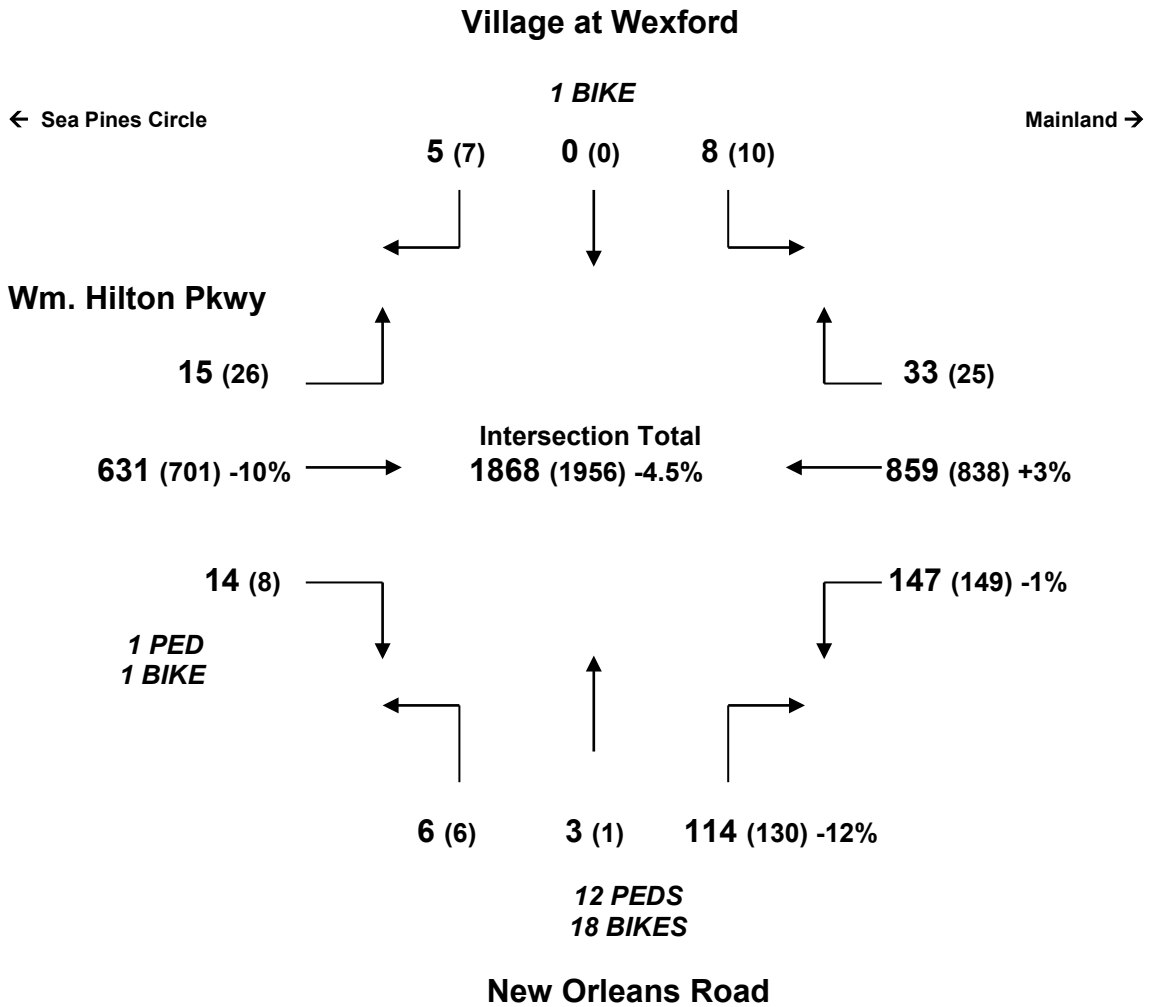
**Shipyard Drive**

**NO BIKES  
RECORDED**

**2019 (2018) %chg**

# William Hilton Parkway with New Orleans Road and Village at Wexford

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)



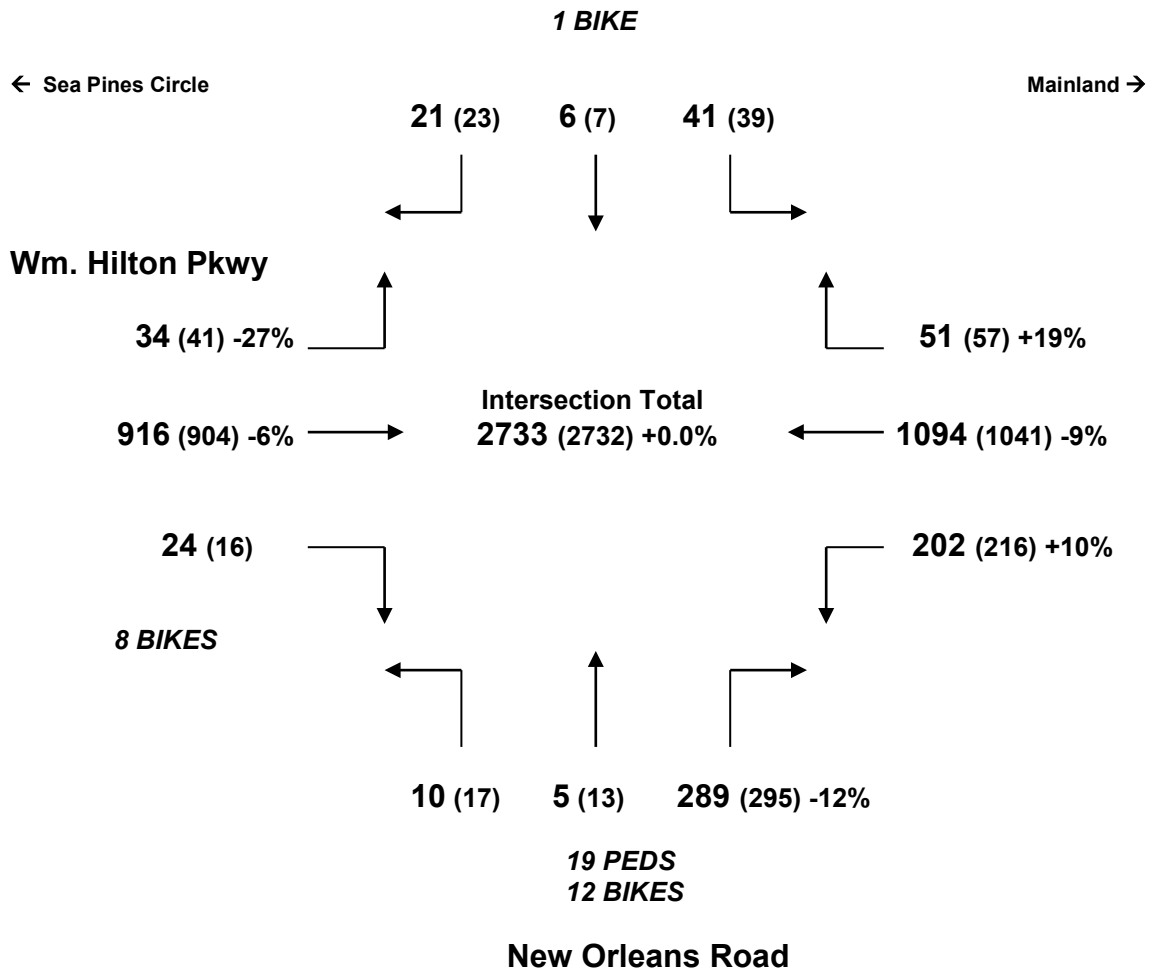
2019 (2018) %chg



# William Hilton Parkway with New Orleans Road and Village at Wexford

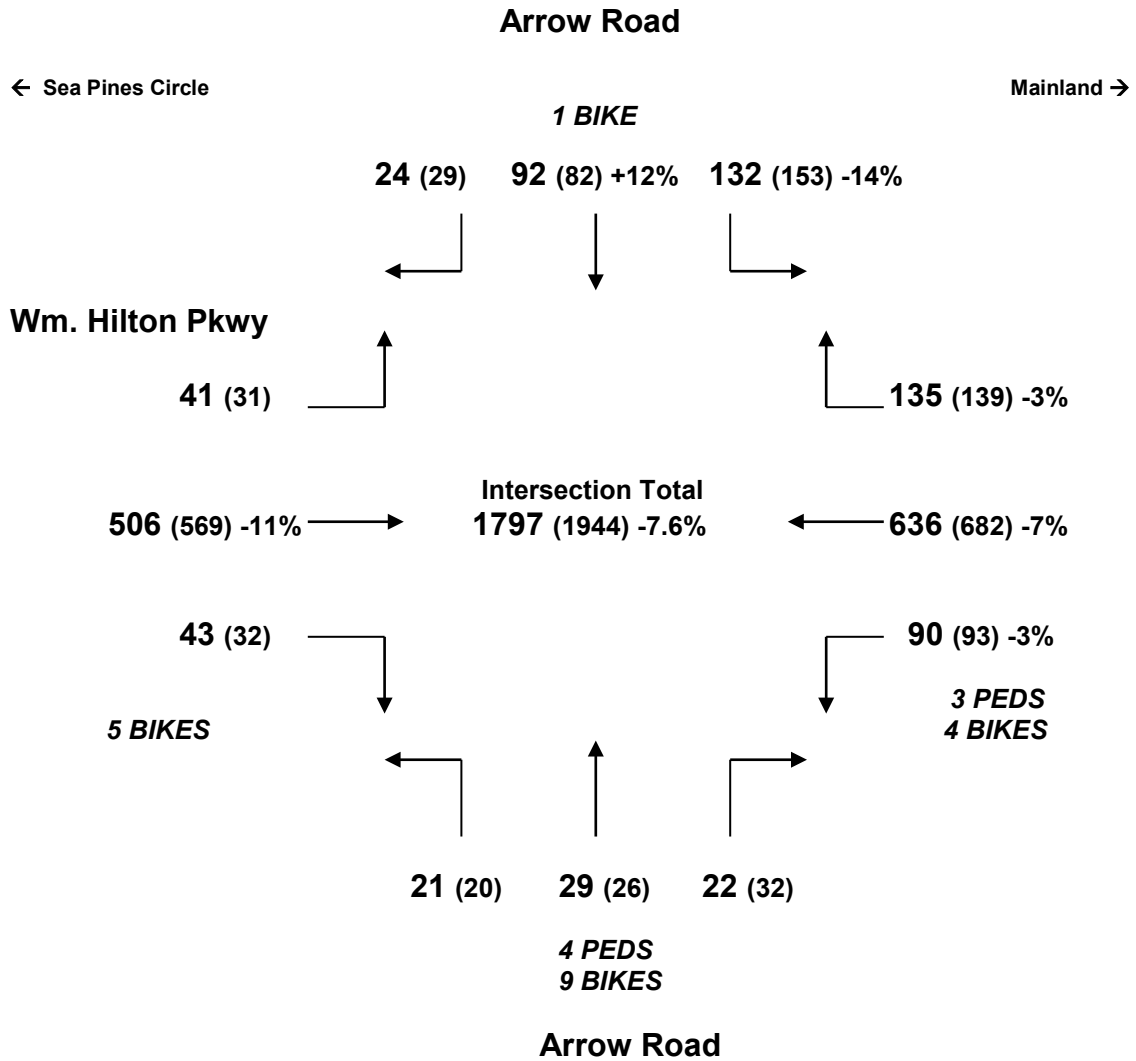
P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)

## Village at Wexford



2019 (2018) %chg

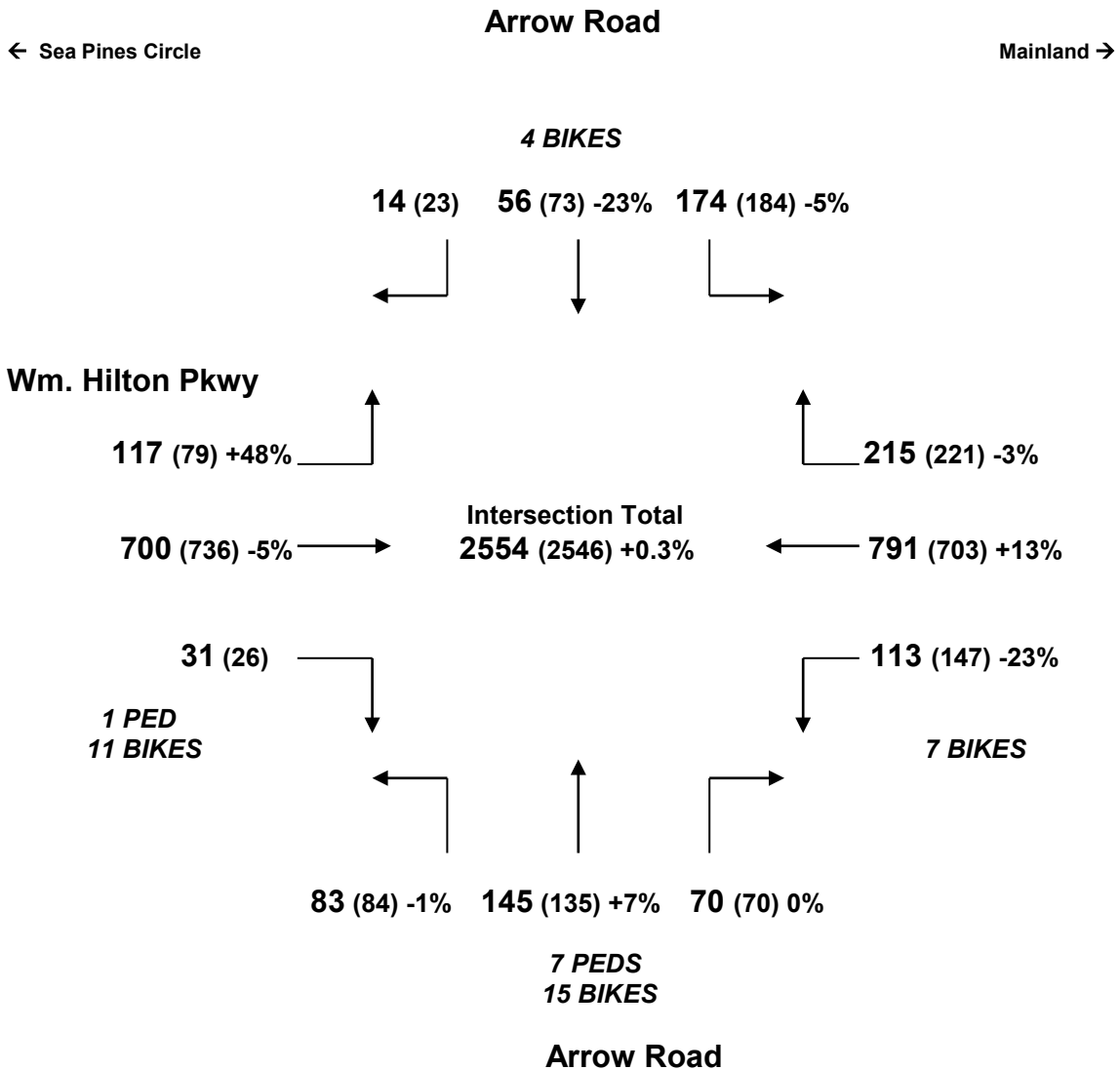
**William Hilton Parkway with Arrow Road**  
**A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)**



**2019 (2018) %chg**

# William Hilton Parkway with Arrow Road

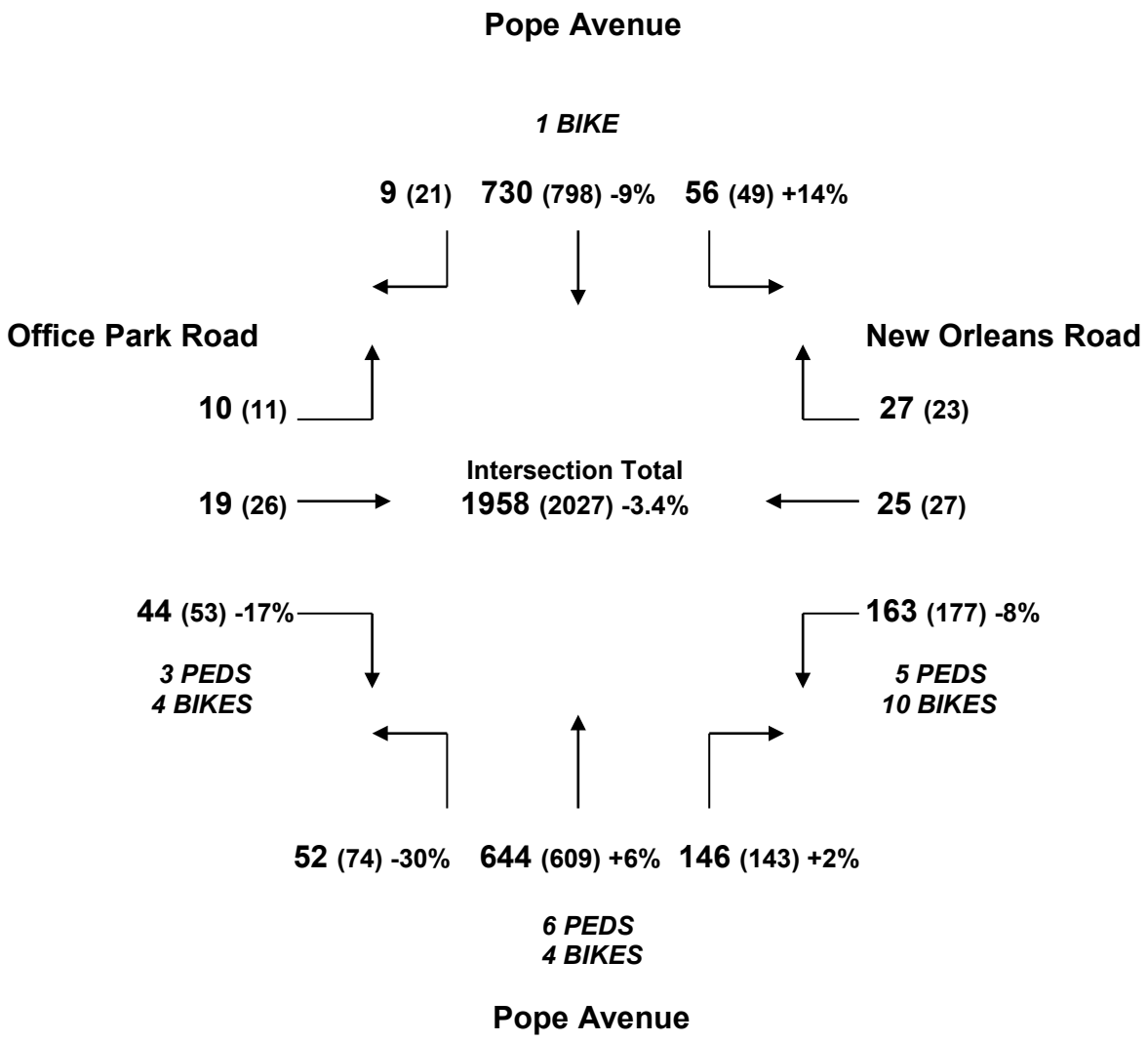
P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)



2019 (2018) %chg

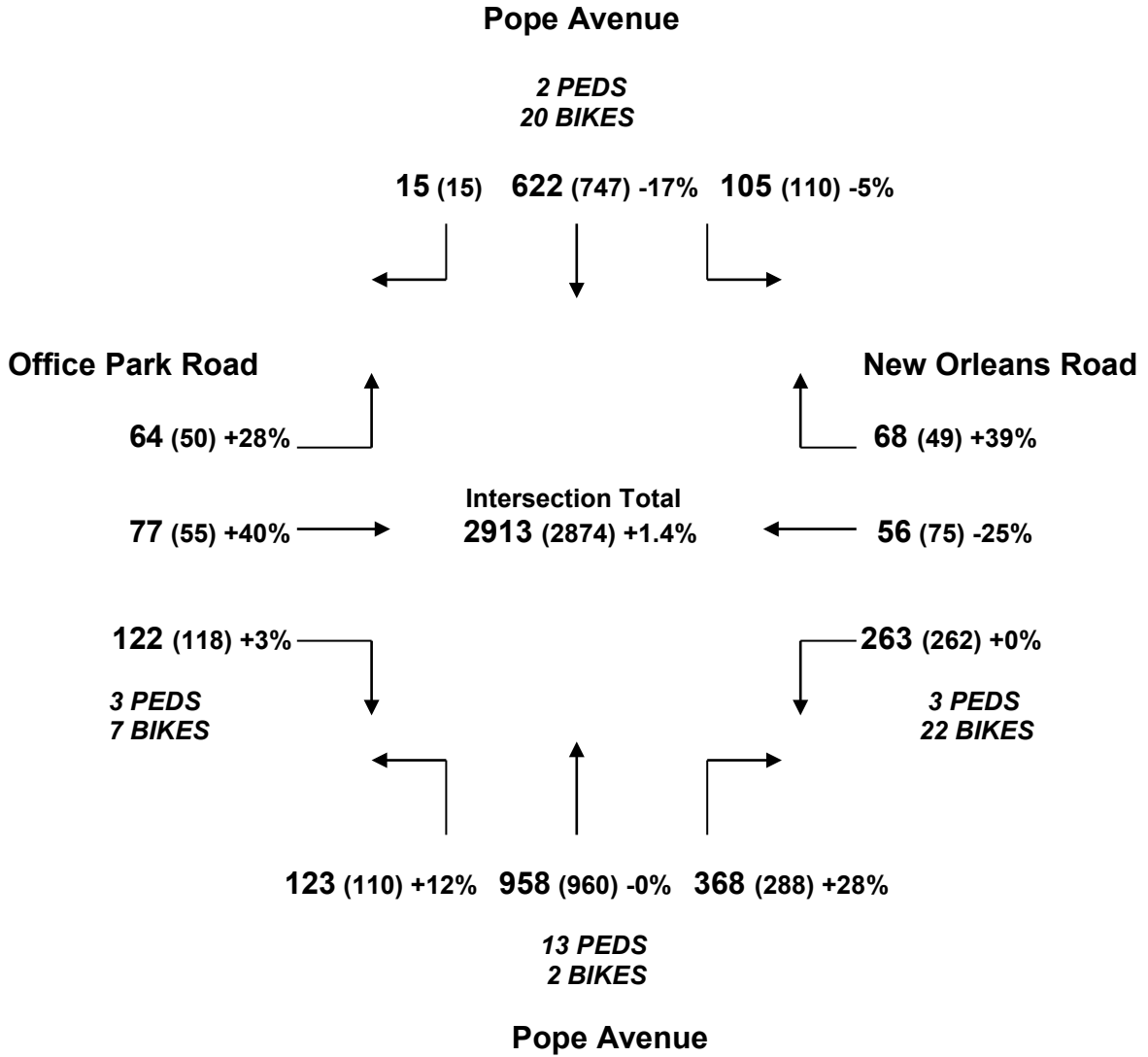
# Pope Avenue with New Orleans Road and Office Park Road

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)



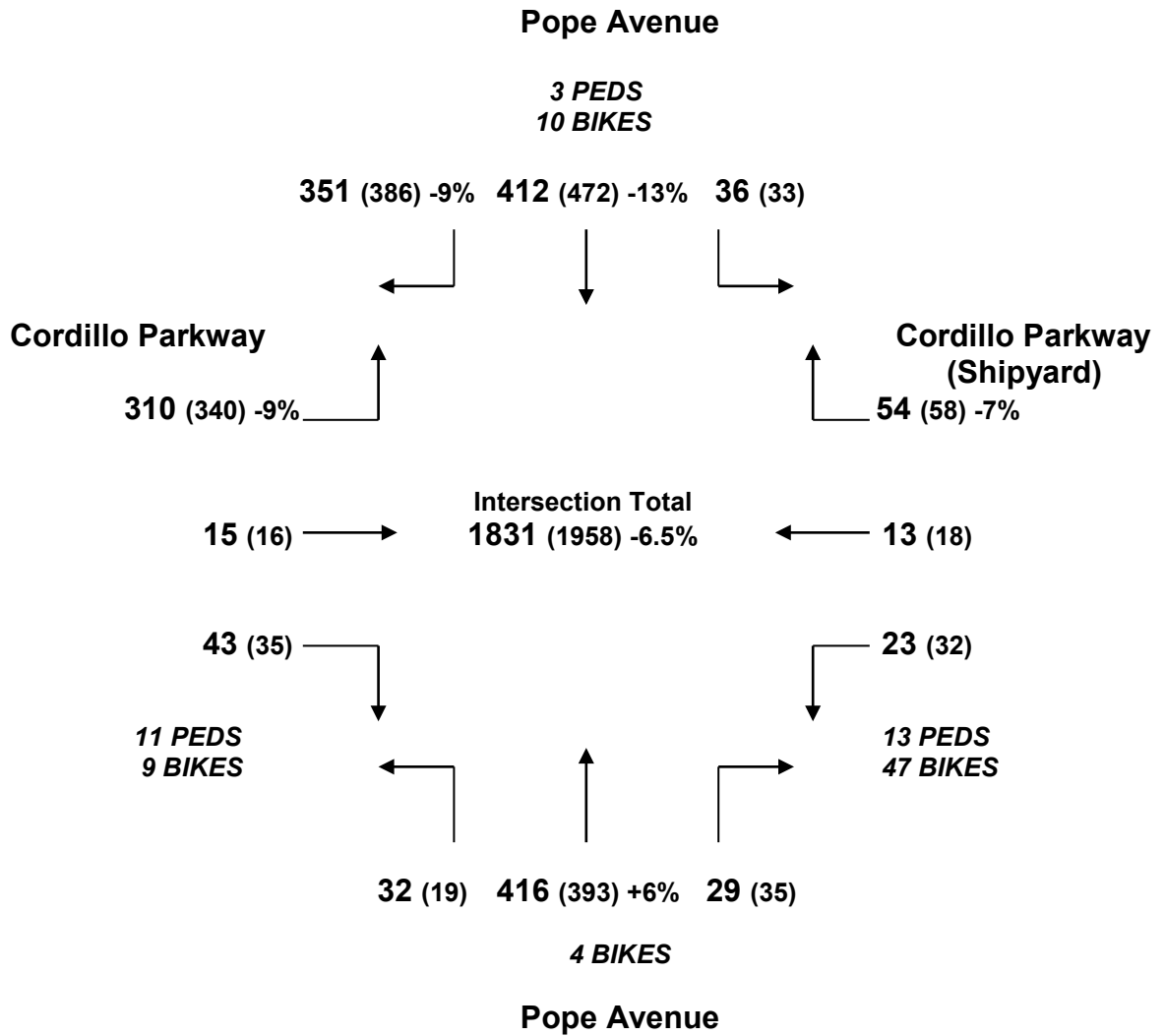
2019 (2018) %chg

**Pope Avenue with New Orleans Road  
and Office Park Road**  
P.M. PEAK HOUR - (4:00 to 5:00 p.m. – Tue. 6/4/19)



2019 (2018) %chg

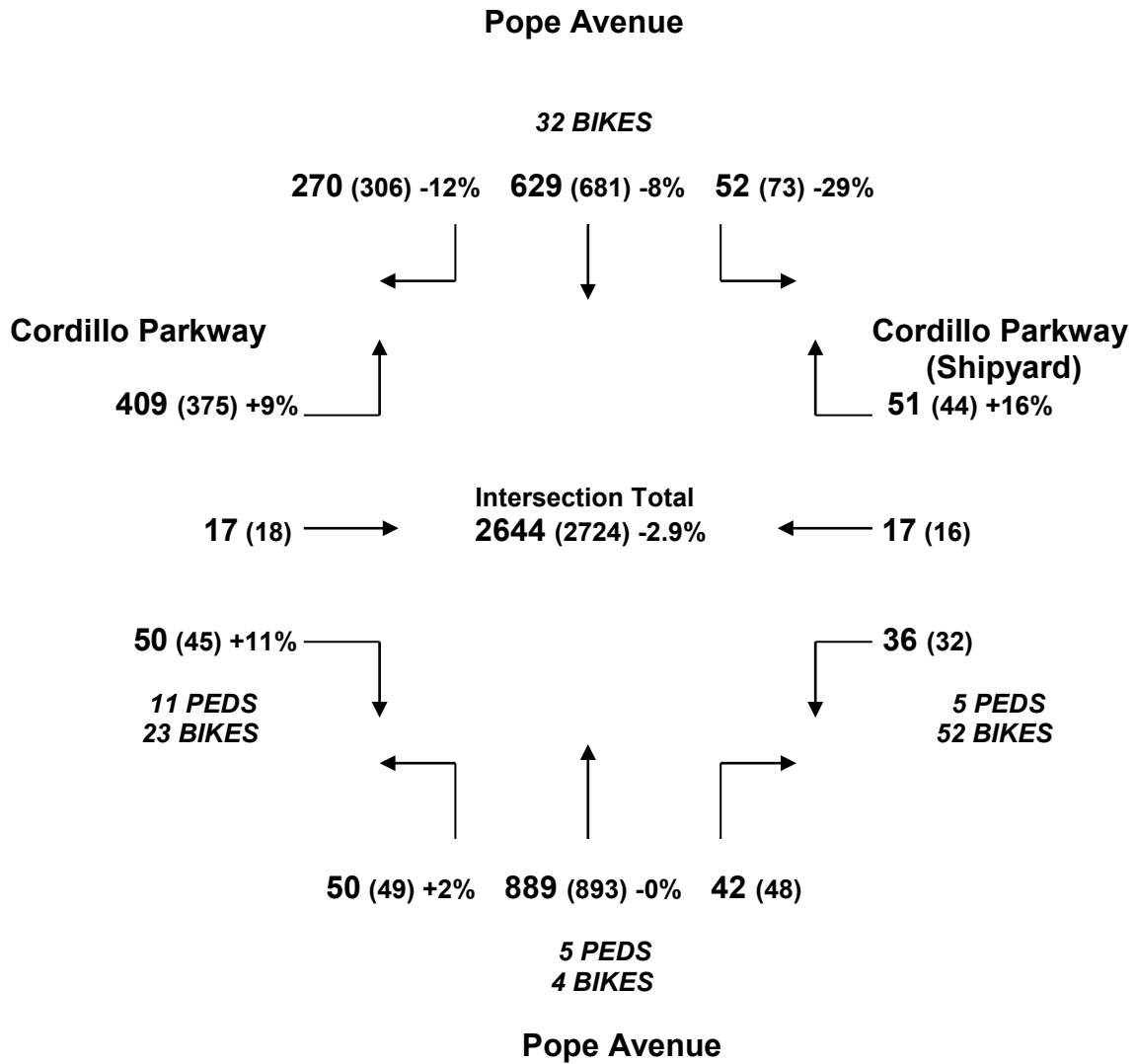
**Pope Avenue with Cordillo Parkway**  
**A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)**



2019 (2018) %chg

# Pope Avenue with Cordillo Parkway

P.M. PEAK HOUR - (4:00 to 5:00 p.m. – Tue. 6/4/19)

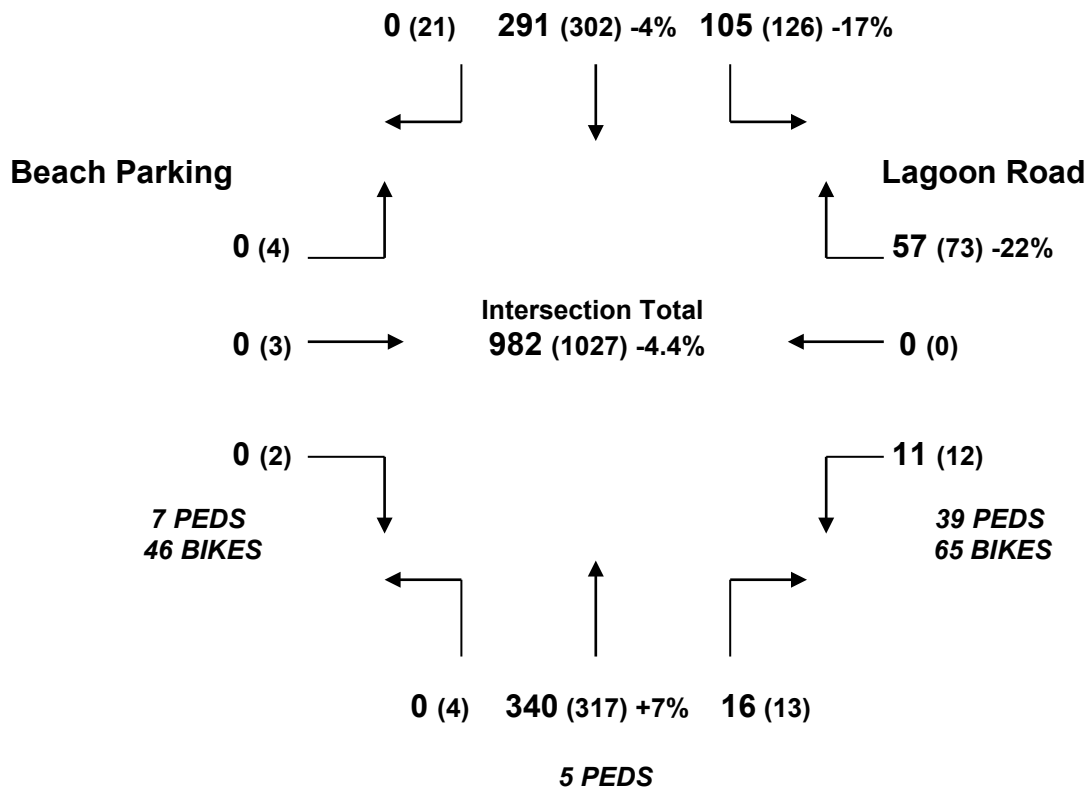


2019 (2018) %chg

# Pope Avenue with Lagoon Road

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

## Pope Avenue

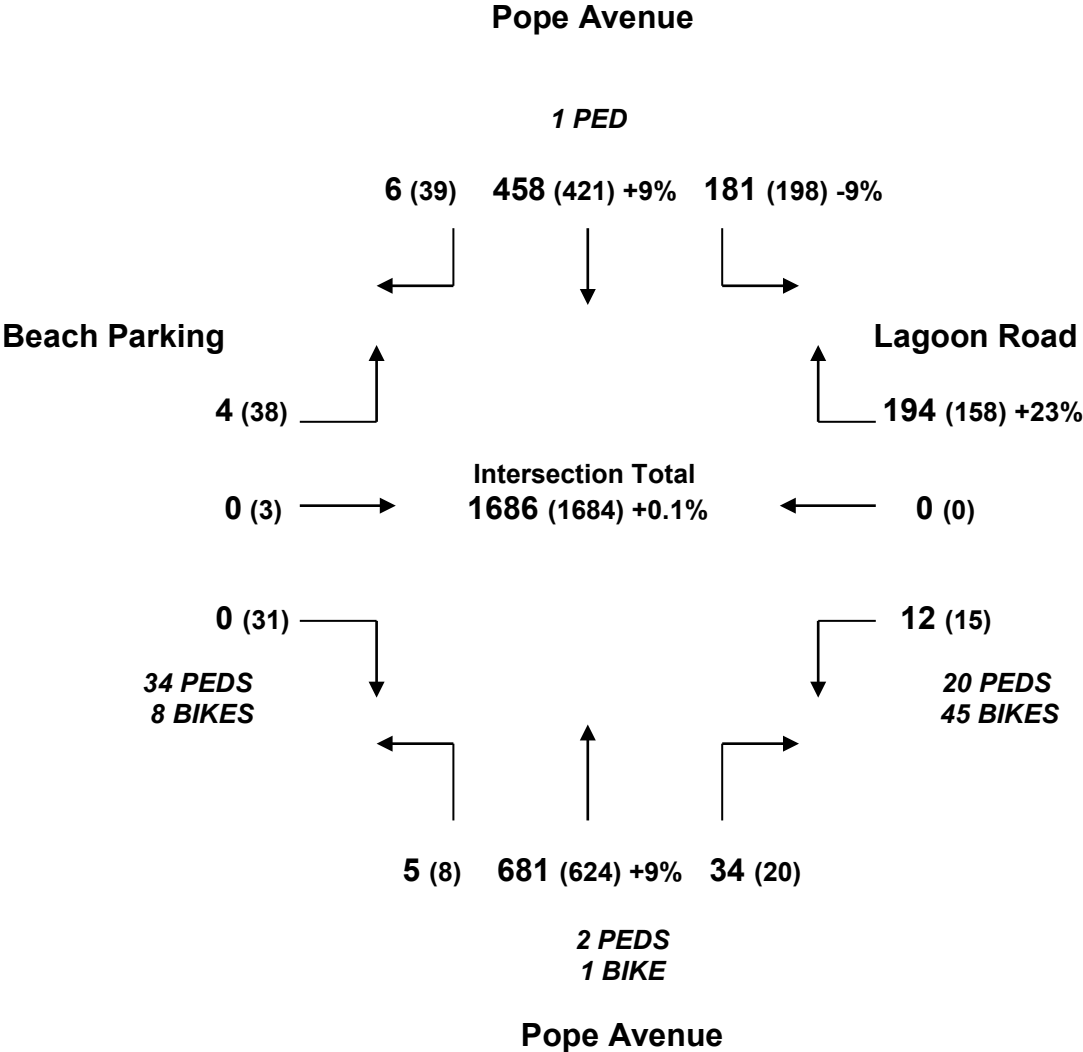


## Pope Avenue

2019 (2018) %chg



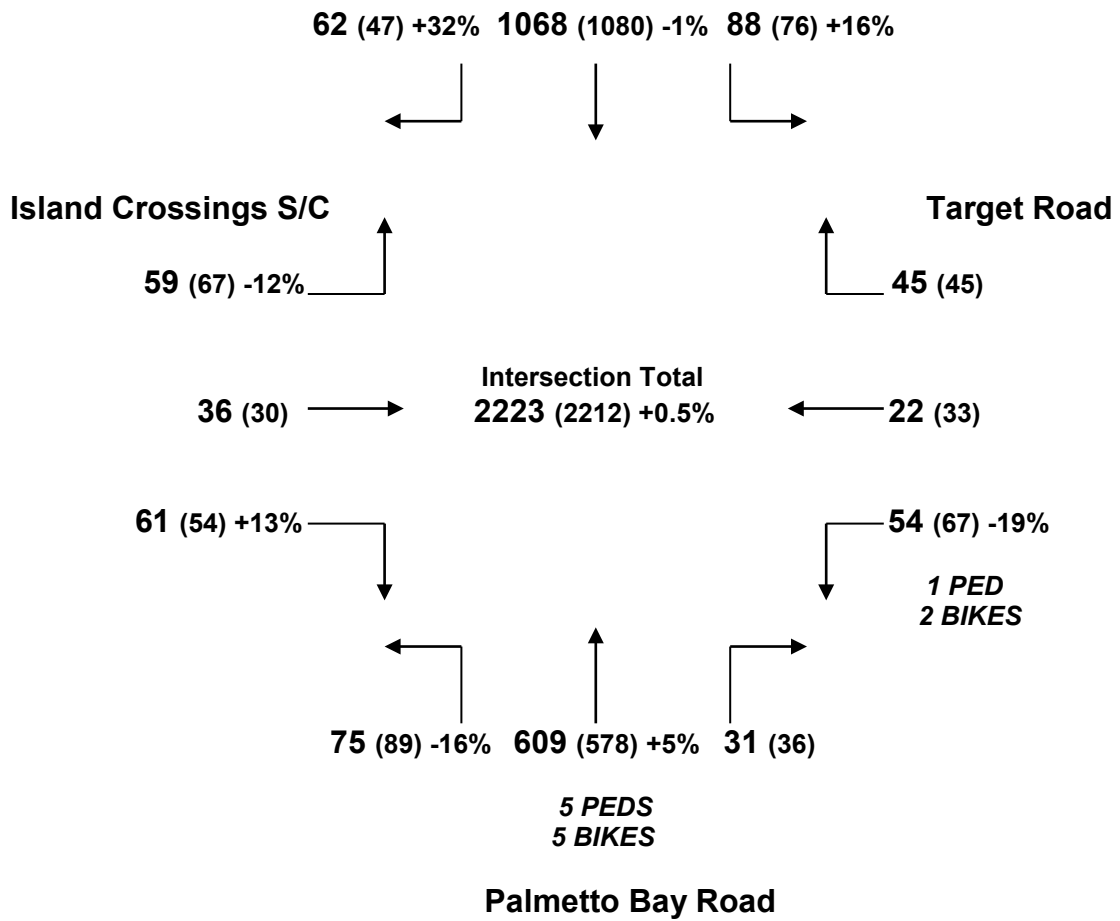
**Pope Avenue with Lagoon Road**  
**P.M. PEAK HOUR - (4:00 to 5:00 p.m. – Tue. 6/4/19)**



2019 (2018) %chg

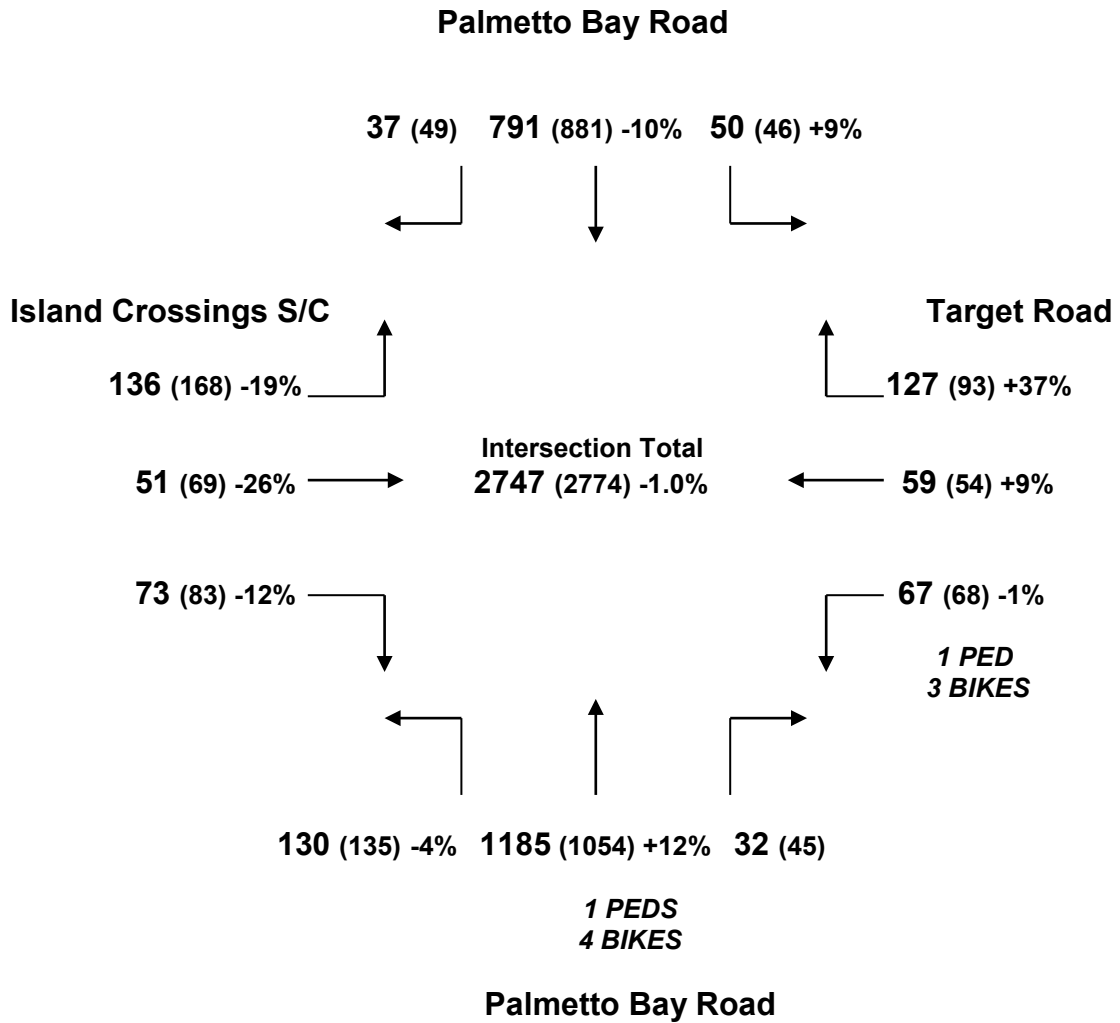
**Palmetto Bay Road with Target Road  
and Entrance to Island Crossings S/C**  
A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

**Palmetto Bay Road**



2019 (2018) %chg

**Palmetto Bay Road with Target Road  
and Entrance to Island Crossings S/C**  
P.M. PEAK HOUR - (4:30 to 5:30 p.m. – Tue. 6/4/19)

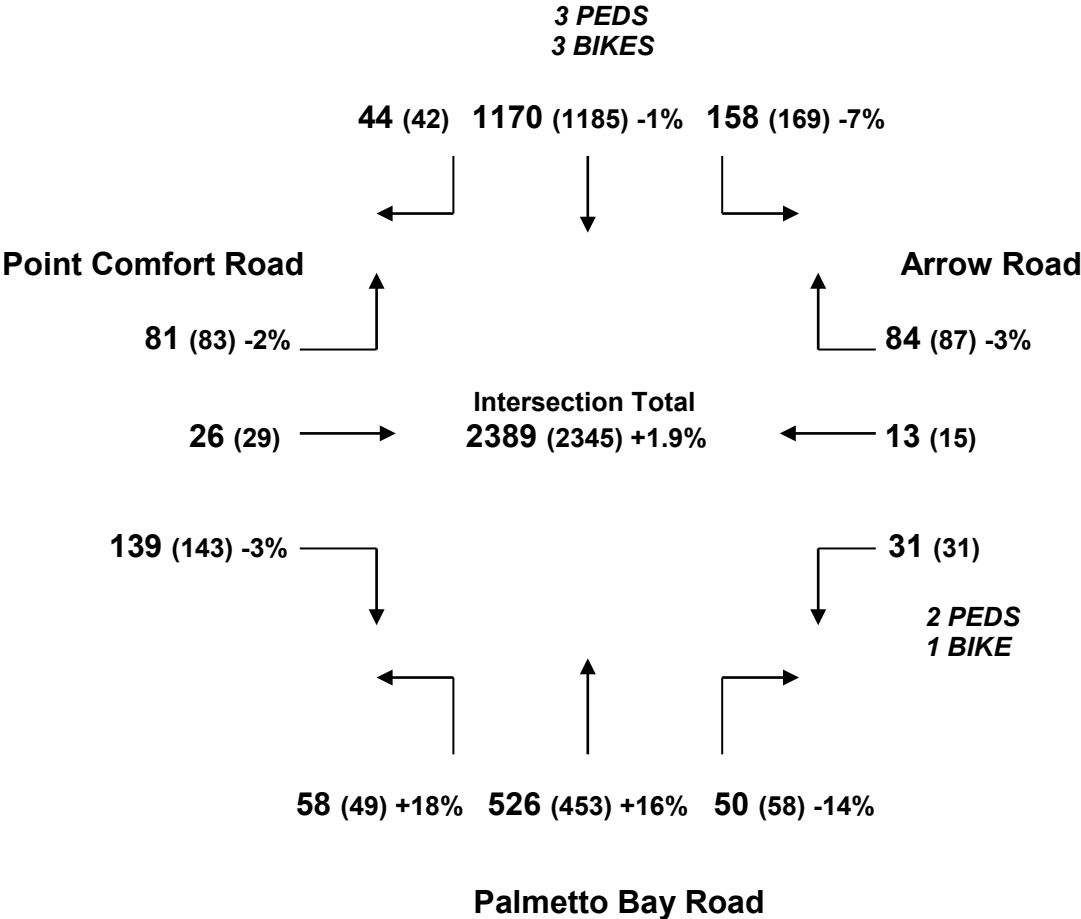


2019 (2018) %chg

# Palmetto Bay Road with Arrow Road and Point Comfort Road

A.M. PEAK HOUR - (8:00 to 9:00 a.m. – Tue. 6/4/19)

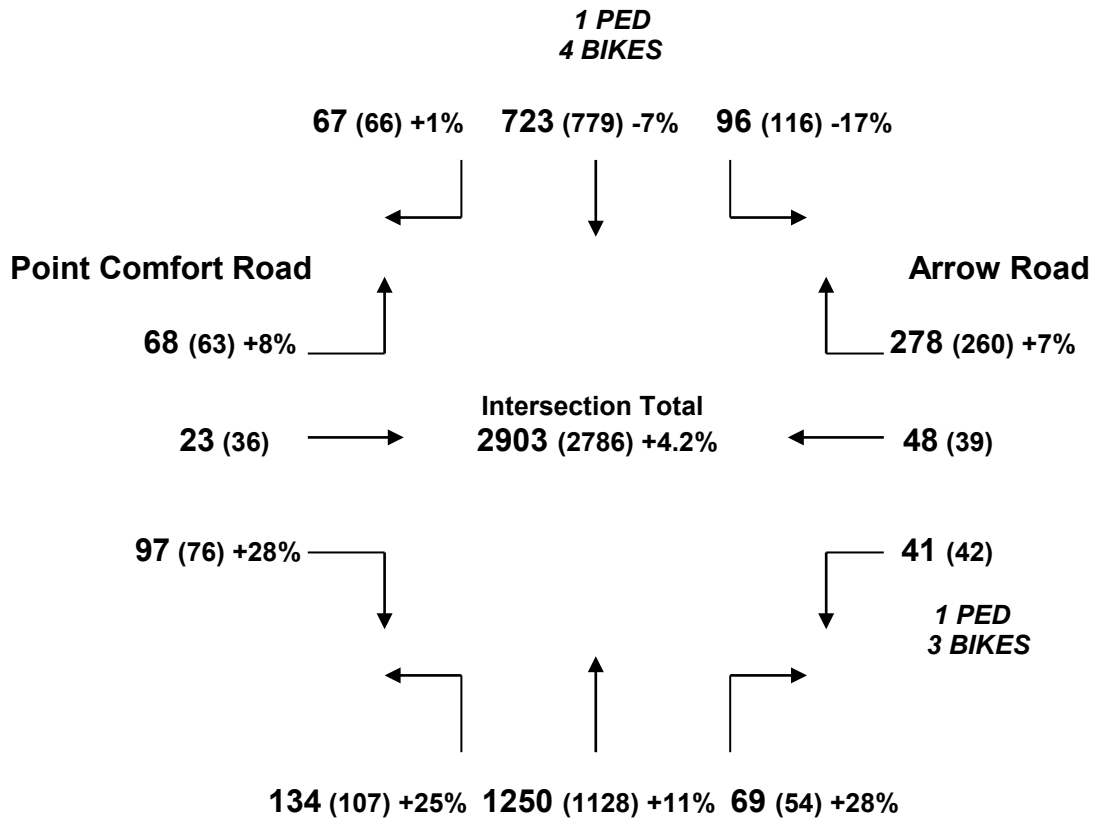
## Palmetto Bay Road



2019 (2018) %chg

**Palmetto Bay Road with Arrow Road  
and Point Comfort Road**  
P.M. PEAK HOUR - (4:15 to 5:15 p.m. – Tue. 6/4/19)

**Palmetto Bay Road**



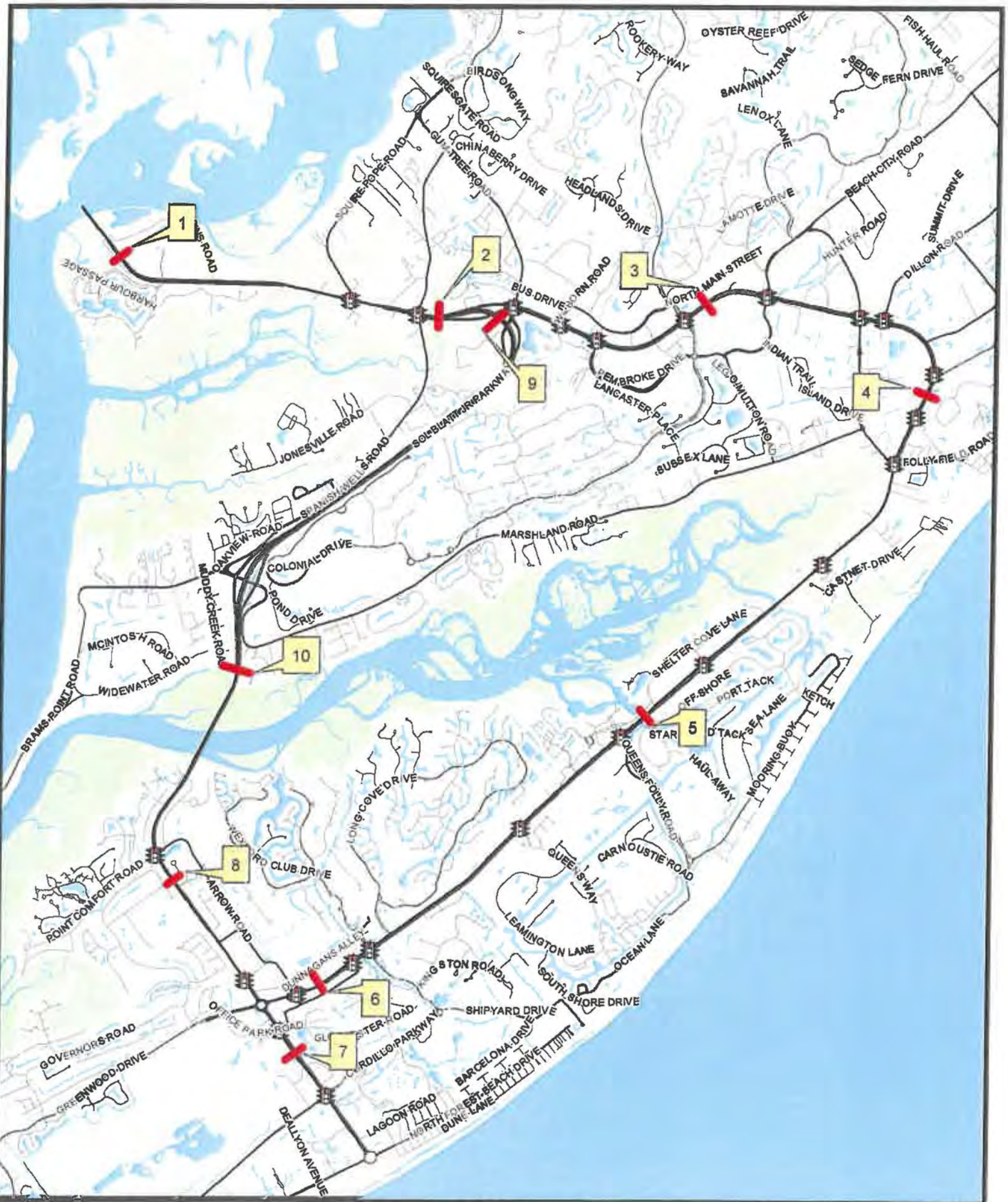
**Palmetto Bay Road**

**2019 (2018) %chg**

**APPENDIX B**

**MAP SHOWING  
LOCATIONS OF 24-HOUR BI-DIRECTIONAL COUNTS  
SUMMARIZED IN TABLE ONE**

**JUNE 2019**



**Town of Hilton Head Island**  
**24-Hour Traffic Count Locations**  
 June 2018



**B-2**

TOWN OF HILTON HEAD ISLAND  
 ONE TOWN CENTER COURT  
 HILTON HEAD ISLAND, S.C. 29928  
 PHONE (843) 361-1000  
 DATE: 06/2018  
 PUBLISHED: 06/2018



The information on this map has been compiled from a variety of sources and is intended to be used only as a guide. It is provided without any warranty or representation as to the accuracy or completeness of the information. The Town of Hilton Head Island assumes no liability for its accuracy or completeness or for any losses or damages resulting from the use of this map.

**APPENDIX C**

**FEDERAL HIGHWAY ADMINISTRATION REPORT**

**“TRAFFIC VOLUME TRENDS”**

**JUNE 2019**





U. S. Department of Transportation

Federal Highway Administration

Office of Highway Policy Information

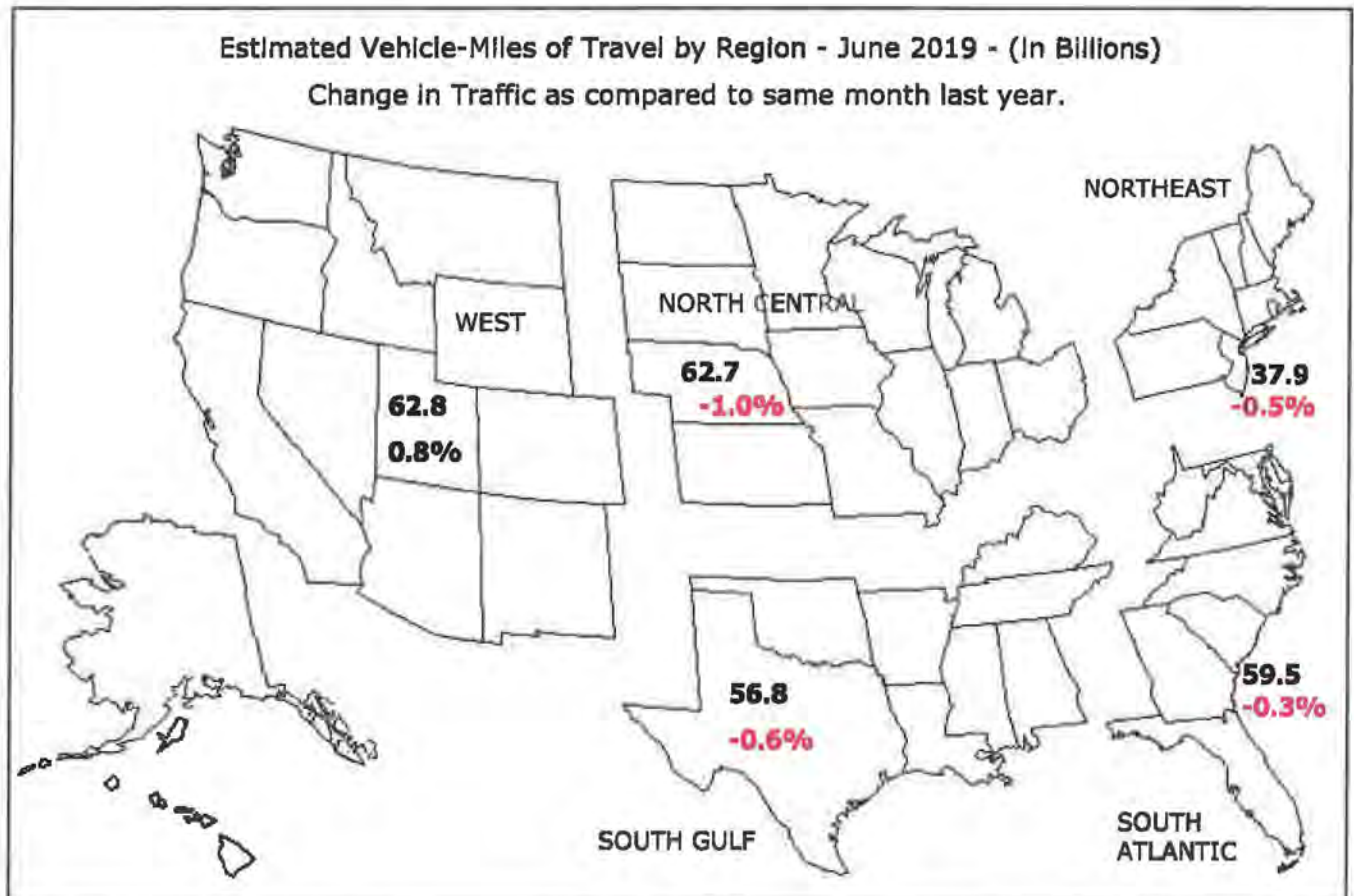
# TRAFFIC VOLUME TRENDS

## June 2019

Travel on all roads and streets changed by **-0.3%** (-0.9 billion vehicle miles) for June 2019 as compared with June 2018. Travel for the month is estimated to be 279.7 billion vehicle miles.

The seasonally adjusted vehicle miles traveled for June 2019 is 270.4 billion miles, a 0.6% (1.6 billion vehicle miles) increase over June 2018. It also represents 0.02% decline (0.05 billion vehicle miles) compared with May 2019.

Cumulative Travel for 2019 changed by **+0.8%** (+12.4 billion vehicle miles). The Cumulative estimate for the year is 1,586.7 billion vehicle miles of travel.



Note: All data for this month are preliminary. Revised values for the previous month are shown in Tables 1 and 2.

All vehicle-miles of travel computed with Highway Statistics 2017 Table VM-2 as a base.

Compiled with data on hand as of August 07, 2019.

Some historical data were revised based on HPMS and amended TVT data as of December 2016.

For information on total licensed drivers in the U.S., visit <http://www.fhwa.dot.gov/policy/ohpl/hss/hsspubs.htm>.

Select the year of interest then Section 6 (Driver Licensing).

For information on total registered motor vehicles in the U.S., visit <http://www.fhwa.dot.gov/policy/ohpl/hss/hsspubs.htm>

Select the year of interest and Section 7 (Motor Vehicles).

## Traffic Volume Trends - June 2019

Based on preliminary reports from the State Highway Agencies, travel during June 2019 on all roads and streets in the nation changed by **-0.3%** (-0.9 billion vehicle miles) resulting in estimated travel for the month at **279.7\*\*** billion vehicle-miles.

This total includes **86.6** billion vehicle-miles on rural roads and **193.1** billion vehicle-miles on urban roads and streets.

Cumulative Travel changed by **+0.8%** (+12.4 billion vehicle miles).

The larger changes to rural and urban travel are primarily because of the expansion in urban boundaries reflected in the 2010 census. Travel estimates for 2014 and beyond will also reflect this adjustment.

Travel for the current month, the cumulative yearly total, as well as the moving 12-month total on all roads and streets is shown below. Similar totals for each year since 1994 are also included.

### Travel in Millions of Vehicle Miles

#### All Roads and Streets

| Year | June    | Year to Date | Moving 12-Month |
|------|---------|--------------|-----------------|
| 1994 | 207,280 | 1,141,229    | 2,321,409       |
| 1995 | 211,370 | 1,188,287    | 2,404,645       |
| 1996 | 215,551 | 1,203,679    | 2,438,167       |
| 1997 | 222,254 | 1,245,655    | 2,524,178       |
| 1998 | 228,733 | 1,272,811    | 2,587,529       |
| 1999 | 235,970 | 1,293,581    | 2,646,133       |
| 2000 | 242,963 | 1,348,355    | 2,734,232       |
| 2001 | 243,498 | 1,364,517    | 2,763,088       |
| 2002 | 247,868 | 1,396,362    | 2,827,457       |
| 2003 | 252,145 | 1,403,694    | 2,862,841       |
| 2004 | 257,383 | 1,453,148    | 2,939,676       |
| 2005 | 263,816 | 1,474,580    | 2,986,220       |
| 2006 | 263,782 | 1,488,412    | 3,003,262       |
| 2007 | 265,374 | 1,498,035    | 3,023,739       |
| 2008 | 257,484 | 1,477,638    | 3,009,425       |
| 2009 | 258,395 | 1,460,959    | 2,956,830       |
| 2010 | 260,083 | 1,456,657    | 2,952,462       |
| 2011 | 258,350 | 1,452,389    | 2,962,998       |
| 2012 | 260,376 | 1,472,434    | 2,970,447       |
| 2013 | 259,980 | 1,473,698    | 2,969,833       |
| 2014 | 263,459 | 1,480,218    | 2,994,800       |
| 2015 | 270,574 | 1,512,965    | 3,058,404       |
| 2016 | 276,991 | 1,552,453    | 3,134,861       |
| 2017 | 280,290 | 1,571,005    | 3,192,960       |
| 2018 | 280,583 | 1,574,302    | 3,215,644       |
| 2019 | 279,707 | 1,586,693    | 3,235,748       |

Traffic Volume Trends is a monthly report based on hourly traffic count data. These data, collected at approximately 5,000 continuous traffic counting locations nationwide, are used to determine the percent change in traffic for the current month compared to the same month in the previous year. This percent change is applied to the travel for the same month of the previous year to obtain an estimate of travel for the current month. Because of the limited sample sizes, caution should be used with these estimates. The Highway Performance Monitoring System provides more accurate information on an annual basis.

\*\* System entries may not add to give "All Systems" total due to rounding for Page 2 to 8.



**Table - 1. Estimated Individual Monthly Motor Vehicle Travel in the United States\*\***

| System  | Month |       |       |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC   |
| 2018 Individual Monthly Vehicle-Miles of Travel in Billions |       |       |       |       |       |       |       |       |       |       |       |       |
| Rural Interstate  | 18.2  | 16.5  | 20.9  | 20.8  | 22.7  | 22.6  | 24.7  | 24.0  | 20.9  | 21.9  | 20.5  | 20.8  |
| Rural Other Arterial  | 26.9  | 25.0  | 30.5  | 30.6  | 33.4  | 33.6  | 35.8  | 34.7  | 31.5  | 33.3  | 29.8  | 30.2  |
| Other Rural   | 24.8  | 22.4  | 27.8  | 28.6  | 30.5  | 30.4  | 31.8  | 31.1  | 28.1  | 29.7  | 26.1  | 26.7  |
| Urban Interstate  | 43.6  | 39.7  | 47.6  | 47.9  | 50.0  | 50.5  | 49.3  | 49.7  | 46.4  | 49.2  | 46.7  | 49.0  |
| Urban Other Arterial  | 88.7  | 82.9  | 96.7  | 98.1  | 99.6  | 97.4  | 100.0 | 100.1 | 92.7  | 101.8 | 92.0  | 97.1  |
| Other Urban   | 41.3  | 38.5  | 45.7  | 46.4  | 47.1  | 46.0  | 47.8  | 46.3  | 43.5  | 46.3  | 43.6  | 45.9  |
| All Systems   | 243.5 | 225.1 | 269.2 | 272.4 | 283.4 | 280.6 | 289.4 | 286.0 | 263.2 | 282.2 | 258.6 | 269.7 |
| 2019 Individual Monthly Vehicle-Miles of Travel in Billions |       |       |       |       |       |       |       |       |       |       |       |       |
| Rural Interstate  | 18.5  | 16.5  | 21.1  | 21.4  | 23.1  | 22.8  |       |       |       |       |       |       |
| Rural Other Arterial  | 27.4  | 25.0  | 30.7  | 31.6  | 33.8  | 33.6  |       |       |       |       |       |       |
| Other Rural   | 24.9  | 22.2  | 27.8  | 29.4  | 30.7  | 30.2  |       |       |       |       |       |       |
| Urban Interstate  | 44.1  | 39.5  | 48.0  | 48.7  | 50.5  | 50.3  |       |       |       |       |       |       |
| Urban Other Arterial  | 89.9  | 82.3  | 96.7  | 100.1 | 100.4 | 96.7  |       |       |       |       |       |       |
| Other Urban   | 42.2  | 38.6  | 46.0  | 47.8  | 47.9  | 46.0  |       |       |       |       |       |       |
| All Systems   | 247.1 | 224.1 | 270.2 | 279.1 | 286.4 | 279.7 |       |       |       |       |       |       |
| * Percent Change In Individual Monthly Travel 2018 vs. 2019 |       |       |       |       |       |       |       |       |       |       |       |       |
| Rural Interstate  | 2.0   | 0.0   | 0.9   | 3.0   | 2.2   | 0.8   |       |       |       |       |       |       |
| Rural Other Arterial  | 1.9   | -0.1  | 0.5   | 3.3   | 1.1   | 0.2   |       |       |       |       |       |       |
| Other Rural   | 0.7   | -0.9  | -0.3  | 2.7   | 0.5   | -0.7  |       |       |       |       |       |       |
| Urban Interstate  | 1.1   | -0.7  | 0.7   | 1.8   | 1.0   | -0.4  |       |       |       |       |       |       |
| Urban Other Arterial  | 1.3   | -0.7  | 0.1   | 2.1   | 0.8   | -0.7  |       |       |       |       |       |       |
| Other Urban   | 2.3   | 0.2   | 0.6   | 3.0   | 1.6   | 0.0   |       |       |       |       |       |       |
| All Systems   | 1.5   | -0.4  | 0.3   | 2.5   | 1.0   | -0.3  |       |       |       |       |       |       |

**Table - 2. Estimated Cumulative Monthly Motor Vehicle Travel in the United States\*\***

| System  | Month |       |       |        |        |        |        |        |        |        |        |        |
|---|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | JAN   | FEB   | MAR   | APR    | MAY    | JUN    | JUL    | AUG    | SEP    | OCT    | NOV    | DEC    |
| 2018 Cumulative Monthly Vehicle-Miles of Travel in Billions |       |       |       |        |        |        |        |        |        |        |        |        |
| Rural Interstate  | 18.2  | 34.7  | 55.6  | 76.4   | 99.0   | 121.6  | 146.3  | 170.3  | 191.2  | 213.1  | 233.6  | 254.4  |
| Rural Other Arterial  | 26.9  | 51.9  | 82.4  | 113.1  | 146.5  | 180.0  | 215.9  | 250.6  | 282.1  | 315.4  | 345.3  | 375.5  |
| Other Rural   | 24.8  | 47.2  | 75.0  | 103.7  | 134.2  | 164.6  | 196.4  | 227.5  | 255.6  | 285.3  | 311.4  | 338.0  |
| Urban Interstate  | 43.6  | 83.4  | 131.0 | 178.9  | 228.9  | 279.5  | 328.7  | 378.5  | 424.9  | 474.1  | 520.8  | 569.8  |
| Urban Other Arterial  | 88.7  | 171.6 | 268.3 | 366.4  | 466.0  | 563.5  | 663.5  | 763.6  | 856.3  | 958.1  | 1050.0 | 1147.1 |
| Other Urban   | 41.3  | 79.8  | 125.5 | 171.9  | 219.0  | 265.0  | 312.9  | 359.2  | 402.7  | 449.0  | 492.6  | 538.4  |
| All Systems   | 243.5 | 468.6 | 737.9 | 1010.3 | 1293.7 | 1574.3 | 1863.7 | 2149.7 | 2412.8 | 2695.1 | 2953.7 | 3223.4 |
| 2019 Cumulative Monthly Vehicle-Miles of Travel in Billions |       |       |       |        |        |        |        |        |        |        |        |        |
| Rural Interstate  | 18.5  | 35.0  | 56.1  | 77.5   | 100.7  | 123.5  |        |        |        |        |        |        |
| Rural Other Arterial  | 27.4  | 52.4  | 83.1  | 114.7  | 148.5  | 182.1  |        |        |        |        |        |        |
| Other Rural   | 24.9  | 47.2  | 74.9  | 104.3  | 135.0  | 165.2  |        |        |        |        |        |        |
| Urban Interstate  | 44.1  | 83.6  | 131.6 | 180.3  | 230.9  | 281.2  |        |        |        |        |        |        |
| Urban Other Arterial  | 89.9  | 172.2 | 268.9 | 369.1  | 469.5  | 566.2  |        |        |        |        |        |        |
| Other Urban   | 42.2  | 80.8  | 126.8 | 174.6  | 222.5  | 268.5  |        |        |        |        |        |        |
| All Systems   | 247.1 | 471.3 | 741.5 | 1020.6 | 1307.0 | 1586.7 |        |        |        |        |        |        |
| * Percent Change In Cumulative Monthly Travel 2018 vs. 2019 |       |       |       |        |        |        |        |        |        |        |        |        |
| Rural Interstate  | 2.0   | 1.0   | 1.0   | 1.5    | 1.7    | 1.5    |        |        |        |        |        |        |
| Rural Other Arterial  | 1.9   | 1.0   | 0.8   | 1.5    | 1.4    | 1.1    |        |        |        |        |        |        |
| Other Rural   | 0.7   | 0.0   | -0.1  | 0.6    | 0.6    | 0.4    |        |        |        |        |        |        |
| Urban Interstate  | 1.1   | 0.3   | 0.4   | 0.8    | 0.8    | 0.6    |        |        |        |        |        |        |
| Urban Other Arterial  | 1.3   | 0.3   | 0.2   | 0.7    | 0.7    | 0.5    |        |        |        |        |        |        |
| Other Urban   | 2.3   | 1.3   | 1.1   | 1.6    | 1.6    | 1.3    |        |        |        |        |        |        |
| All Systems   | 1.5   | 0.6   | 0.5   | 1.0    | 1.0    | 0.8    |        |        |        |        |        |        |

\* Percent change is based on vehicle travel in millions of miles.

Table - 3. Changes on Rural Arterial Roads by Region and State\*\*

| Region and State      | June               |                          |               |                | May                |                          |               |                |
|-----------------------|--------------------|--------------------------|---------------|----------------|--------------------|--------------------------|---------------|----------------|
|                       | Number of Stations | Vehicle-Miles (Millions) |               | Percent Change | Number of Stations | Vehicle-Miles (Millions) |               | Percent Change |
|                       |                    | 2019 (Preliminary)       | 2018          |                |                    | 2019 (Revised)           | 2018          |                |
| <b>Northeast</b>      |                    |                          |               |                |                    |                          |               |                |
| Connecticut           | 1                  | 144                      | 148           | -2.3           | 1                  | 148                      | 149           | -0.6           |
| Maine                 | 54                 | 499                      | 505           | -1.1           | 51                 | 508                      | 509           | 0.0            |
| Massachusetts         | 4                  | 159                      | 156           | 1.8            | 4                  | 162                      | 160           | 1.3            |
| New Hampshire         | 80                 | 317                      | 321           | -1.3           | 81                 | 293                      | 293           | 0.1            |
| New Jersey            | 5                  | 238                      | 237           | 0.5            | 5                  | 275                      | 269           | 2.2            |
| New York              | 46                 | 1,308                    | 1,307         | 0.1            | 48                 | 1,290                    | 1,280         | 0.7            |
| Pennsylvania          | 32                 | 2,029                    | 2,045         | -0.8           | 36                 | 2,168                    | 2,155         | 0.6            |
| Rhode Island          | -                  | 53                       | 54            | -0.2           | 4                  | 60                       | 60            | 0.0            |
| Vermont               | 19                 | 266                      | 265           | 0.3            | 24                 | 254                      | 252           | 0.6            |
| Subtotal              |                    | <b>5,013</b>             | <b>5,038</b>  | <b>-0.5</b>    |                    | <b>5,158</b>             | <b>5,127</b>  | <b>0.6</b>     |
| <b>South Atlantic</b> |                    |                          |               |                |                    |                          |               |                |
| Delaware              | 9                  | 204                      | 204           | 0.2            | 11                 | 129                      | 125           | 2.8            |
| District of Columbia  | -                  | 0                        | 0             | 0.0            | -                  | 0                        | 0             | 0.0            |
| Florida               | 96                 | 2,150                    | 2,121         | 1.4            | 96                 | 2,223                    | 2,089         | 6.4            |
| Georgia               | 59                 | 1,537                    | 1,537         | 0.0            | 58                 | 1,767                    | 1,710         | 3.3            |
| Maryland              | 16                 | 587                      | 581           | 1.0            | 15                 | 621                      | 600           | 3.5            |
| North Carolina        | 26                 | 1,946                    | 1,934         | 0.6            | 25                 | 2,011                    | 1,932         | 4.1            |
| South Carolina        | 53                 | 1,556                    | 1,569         | -0.8           | 52                 | 1,640                    | 1,592         | 3.0            |
| Virginia              | 318                | 1,920                    | 1,937         | -0.9           | 324                | 2,060                    | 2,025         | 1.8            |
| West Virginia         | 22                 | 461                      | 470           | -1.7           | 24                 | 379                      | 378           | 0.2            |
| Subtotal              |                    | <b>10,361</b>            | <b>10,353</b> | <b>0.1</b>     |                    | <b>10,830</b>            | <b>10,451</b> | <b>3.6</b>     |
| <b>North Central</b>  |                    |                          |               |                |                    |                          |               |                |
| Illinois              | 22                 | 1,865                    | 1,867         | -0.1           | 23                 | 1,627                    | 1,618         | 0.5            |
| Indiana               | 20                 | 1,360                    | 1,374         | -1.1           | 16                 | 1,554                    | 1,530         | 1.6            |
| Iowa                  | 63                 | 1,306                    | 1,291         | 1.2            | 64                 | 1,308                    | 1,296         | 0.9            |
| Kansas                | 64                 | 951                      | 949           | 0.2            | 64                 | 941                      | 945           | -0.5           |
| Michigan              | 60                 | 1,727                    | 1,721         | 0.4            | 61                 | 1,791                    | 1,757         | 2.0            |
| Minnesota             | 20                 | 1,484                    | 1,510         | -1.7           | 21                 | 1,535                    | 1,552         | -1.1           |
| Missouri              | -                  | 1,701                    | 1,703         | -0.1           | 43                 | 1,806                    | 1,811         | -0.3           |
| Nebraska              | 30                 | 793                      | 780           | 1.8            | 30                 | 816                      | 820           | -0.4           |
| North Dakota          | 48                 | 436                      | 429           | 1.6            | 49                 | 394                      | 390           | 1.1            |
| Ohio                  | 46                 | 1,681                    | 1,709         | -1.6           | 46                 | 1,780                    | 1,779         | 0.1            |
| South Dakota          | 38                 | 513                      | 511           | 0.5            | 41                 | 431                      | 439           | -1.0           |
| Wisconsin             | 81                 | 1,739                    | 1,747         | -0.5           | 98                 | 1,875                    | 1,870         | 0.2            |
| Subtotal              |                    | <b>15,556</b>            | <b>15,591</b> | <b>-0.2</b>    |                    | <b>15,858</b>            | <b>15,807</b> | <b>0.3</b>     |
| <b>South Gulf</b>     |                    |                          |               |                |                    |                          |               |                |
| Alabama               | 59                 | 1,608                    | 1,583         | 1.6            | 59                 | 1,613                    | 1,533         | 5.2            |
| Arkansas              | 18                 | 1,033                    | 1,053         | -1.9           | 21                 | 983                      | 1,004         | -2.1           |
| Kentucky              | 19                 | 1,620                    | 1,626         | -0.4           | 24                 | 1,607                    | 1,608         | 0.0            |
| Louisiana             | -                  | 1,185                    | 1,167         | 1.6            | -                  | 1,220                    | 1,205         | 1.2            |
| Mississippi           | 42                 | 1,154                    | 1,163         | -0.7           | 44                 | 1,196                    | 1,186         | 0.9            |
| Oklahoma              | 37                 | 1,182                    | 1,188         | -0.5           | 46                 | 1,131                    | 1,157         | -2.2           |
| Tennessee             | 18                 | 1,568                    | 1,567         | 0.1            | 20                 | 1,546                    | 1,502         | 3.0            |
| Texas                 | 91                 | 4,900                    | 4,772         | 2.7            | 87                 | 4,767                    | 4,695         | 1.5            |
| Subtotal              |                    | <b>14,250</b>            | <b>14,119</b> | <b>0.9</b>     |                    | <b>14,063</b>            | <b>13,890</b> | <b>1.2</b>     |
| <b>West</b>           |                    |                          |               |                |                    |                          |               |                |
| Alaska                | 32                 | 141                      | 140           | 0.4            | 32                 | 136                      | 135           | 1.1            |
| Arizona               | 54                 | 1,118                    | 1,040         | 7.5            | 53                 | 1,112                    | 992           | 12.1           |
| California            | 82                 | 3,218                    | 3,204         | 0.5            | 86                 | 3,400                    | 3,392         | 0.2            |
| Colorado              | 62                 | 1,045                    | 1,050         | -0.5           | 60                 | 973                      | 968           | 0.5            |
| Hawaii                | 8                  | 86                       | 85            | 0.3            | 8                  | 71                       | 70            | 0.7            |
| Idaho                 | 117                | 609                      | 599           | 1.6            | 122                | 562                      | 548           | 2.5            |
| Montana               | 64                 | 667                      | 653           | 2.2            | 67                 | 537                      | 534           | 0.5            |
| Nevada                | 42                 | 423                      | 424           | -0.3           | 41                 | 408                      | 407           | 0.1            |
| New Mexico            | 24                 | 854                      | 832           | 2.6            | 29                 | 860                      | 855           | 0.6            |
| Oregon                | 99                 | 962                      | 954           | 0.9            | 96                 | 896                      | 886           | 1.1            |
| Utah                  | 31                 | 599                      | 585           | 2.4            | 31                 | 568                      | 555           | 2.3            |
| Washington            | 81                 | 1,087                    | 1,063         | 2.2            | 83                 | 1,069                    | 1,044         | 2.4            |
| Wyoming               | 21                 | 436                      | 448           | -2.7           | 82                 | 419                      | 416           | 0.5            |
| Subtotal              |                    | <b>11,245</b>            | <b>11,077</b> | <b>1.5</b>     |                    | <b>11,011</b>            | <b>10,802</b> | <b>1.9</b>     |
| <b>TOTALS</b>         | <b>2,333</b>       | <b>56,428</b>            | <b>56,177</b> | <b>0.4</b>     | <b>2,506</b>       | <b>56,922</b>            | <b>56,078</b> | <b>1.5</b>     |

Note: Where Number of Stations are shown as dashes, the values for the Vehicle-Miles and Percent Change are derived from the estimated VMT based on data from surrounding States or the nationwide average VMT.



Table - 4. Changes on Urban Arterial Roads by Region and State\*\*

| Region and State      | June               |                          |                |                | May                |                          |                |                |
|-----------------------|--------------------|--------------------------|----------------|----------------|--------------------|--------------------------|----------------|----------------|
|                       | Number of Stations | Vehicle-Miles (Millions) |                | Percent Change | Number of Stations | Vehicle-Miles (Millions) |                | Percent Change |
|                       |                    | 2019<br>(Preliminary)    | 2018           |                |                    | 2019<br>(Revised)        | 2018           |                |
| <b>Northeast</b>      |                    |                          |                |                |                    |                          |                |                |
| Connecticut           | 15                 | 1,945                    | 1,994          | -2.5           | 14                 | 2,115                    | 2,116          | -0.1           |
| Maine                 | 22                 | 274                      | 276            | -0.6           | 20                 | 272                      | 271            | 0.3            |
| Massachusetts         | 96                 | 4,101                    | 4,121          | -0.5           | 107                | 4,165                    | 4,149          | 0.4            |
| New Hampshire         | 71                 | 577                      | 583            | -1.0           | 71                 | 597                      | 594            | 0.5            |
| New Jersey            | 43                 | 4,664                    | 4,673          | -0.2           | 51                 | 4,921                    | 4,836          | 1.8            |
| New York              | 73                 | 6,624                    | 6,673          | -0.7           | 82                 | 7,283                    | 7,279          | 0.0            |
| Pennsylvania          | 29                 | 4,463                    | 4,496          | -0.7           | 31                 | 4,659                    | 4,565          | 2.1            |
| Rhode Island          | -                  | 558                      | 563            | -0.9           | 29                 | 557                      | 582            | -4.3           |
| Vermont               | 12                 | 126                      | 128            | -1.6           | 10                 | 131                      | 132            | -0.6           |
| <b>Subtotal</b>       |                    | <b>23,332</b>            | <b>23,507</b>  | <b>-0.7</b>    |                    | <b>24,700</b>            | <b>24,524</b>  | <b>0.7</b>     |
| <b>South Atlantic</b> |                    |                          |                |                |                    |                          |                |                |
| Delaware              | 10                 | 514                      | 516            | -0.4           | 9                  | 508                      | 505            | 0.8            |
| District of Columbia  | 3                  | 251                      | 248            | 1.2            | 3                  | 251                      | 242            | 3.5            |
| Florida               | 135                | 10,142                   | 10,201         | -0.6           | 128                | 10,484                   | 10,126         | 3.5            |
| Georgia               | 131                | 5,472                    | 5,508          | -0.7           | 118                | 5,883                    | 5,763          | 2.1            |
| Maryland              | 31                 | 3,578                    | 3,609          | -0.9           | 31                 | 3,775                    | 3,747          | 0.7            |
| North Carolina        | 31                 | 5,098                    | 5,091          | 0.1            | 29                 | 5,250                    | 5,039          | 4.2            |
| South Carolina        | 47                 | 2,116                    | 2,104          | 0.5            | 48                 | 2,119                    | 2,062          | 2.8            |
| Virginia              | 358                | 3,918                    | 3,957          | -1.0           | 367                | 4,200                    | 4,133          | 1.6            |
| West Virginia         | 14                 | 632                      | 636            | -0.6           | 13                 | 549                      | 546            | 0.5            |
| <b>Subtotal</b>       |                    | <b>31,721</b>            | <b>31,870</b>  | <b>-0.5</b>    |                    | <b>33,019</b>            | <b>32,163</b>  | <b>2.7</b>     |
| <b>North Central</b>  |                    |                          |                |                |                    |                          |                |                |
| Illinois              | 48                 | 5,729                    | 5,826          | -1.7           | 47                 | 5,498                    | 5,543          | -0.8           |
| Indiana               | 12                 | 2,662                    | 2,721          | -2.1           | 12                 | 2,728                    | 2,716          | 0.4            |
| Iowa                  | 31                 | 918                      | 918            | 0.0            | 28                 | 957                      | 953            | 0.5            |
| Kansas                | 17                 | 1,000                    | 995            | 0.5            | 17                 | 991                      | 1,011          | -1.9           |
| Michigan              | 43                 | 4,500                    | 4,584          | -1.8           | 43                 | 4,933                    | 4,931          | 0.0            |
| Minnesota             | 18                 | 2,374                    | 2,455          | -3.3           | 19                 | 2,375                    | 2,410          | -1.4           |
| Missouri              | -                  | 2,664                    | 2,695          | -1.1           | 10                 | 2,790                    | 2,893          | -3.5           |
| Nebraska              | 15                 | 618                      | 632            | -2.2           | 11                 | 639                      | 642            | -0.4           |
| North Dakota          | 9                  | 181                      | 181            | 0.5            | 9                  | 163                      | 160            | 1.7            |
| Ohio                  | 93                 | 4,953                    | 5,010          | -1.1           | 94                 | 5,361                    | 5,372          | -0.2           |
| South Dakota          | 3                  | 212                      | 207            | 2.0            | 3                  | 201                      | 208            | -3.7           |
| Wisconsin             | 97                 | 2,272                    | 2,345          | -3.1           | 115                | 2,300                    | 2,314          | -0.6           |
| <b>Subtotal</b>       |                    | <b>28,083</b>            | <b>28,569</b>  | <b>-1.7</b>    |                    | <b>28,936</b>            | <b>29,153</b>  | <b>-0.7</b>    |
| <b>South Gulf</b>     |                    |                          |                |                |                    |                          |                |                |
| Alabama               | 91                 | 2,339                    | 2,339          | 0.0            | 93                 | 2,316                    | 2,267          | 2.2            |
| Arkansas              | 11                 | 1,248                    | 1,237          | 0.9            | 11                 | 1,343                    | 1,360          | -1.3           |
| Kentucky              | 16                 | 1,521                    | 1,539          | -1.2           | 16                 | 1,458                    | 1,453          | 0.3            |
| Louisiana             | -                  | 2,245                    | 2,284          | -1.7           | -                  | 2,074                    | 2,106          | -1.5           |
| Mississippi           | 24                 | 1,087                    | 1,096          | -0.8           | 23                 | 1,078                    | 1,055          | 2.2            |
| Oklahoma              | 21                 | 1,599                    | 1,589          | 0.6            | 29                 | 1,601                    | 1,618          | -1.1           |
| Tennessee             | 12                 | 3,697                    | 3,723          | -0.7           | 12                 | 3,580                    | 3,498          | 2.3            |
| Texas                 | 61                 | 12,900                   | 13,132         | -1.8           | 62                 | 13,966                   | 14,178         | -1.5           |
| <b>Subtotal</b>       |                    | <b>26,636</b>            | <b>26,939</b>  | <b>-1.1</b>    |                    | <b>27,416</b>            | <b>27,535</b>  | <b>-0.4</b>    |
| <b>West</b>           |                    |                          |                |                |                    |                          |                |                |
| Alaska                | 43                 | 201                      | 198            | 1.4            | 47                 | 221                      | 219            | 0.6            |
| Arizona               | 65                 | 3,594                    | 3,512          | 2.3            | 71                 | 4,136                    | 3,817          | 8.4            |
| California            | 115                | 21,660                   | 21,562         | 0.5            | 105                | 19,935                   | 19,851         | 0.4            |
| Colorado              | 33                 | 2,374                    | 2,413          | -1.6           | 34                 | 2,600                    | 2,606          | -0.2           |
| Hawaii                | 48                 | 461                      | 459            | 0.4            | 45                 | 362                      | 355            | 2.0            |
| Idaho                 | 67                 | 510                      | 502            | 1.7            | 70                 | 499                      | 487            | 2.5            |
| Montana               | 11                 | 263                      | 263            | 0.1            | 11                 | 207                      | 210            | -1.4           |
| Nevada                | 36                 | 1,094                    | 1,114          | -1.8           | 38                 | 1,387                    | 1,388          | -0.1           |
| New Mexico            | 25                 | 689                      | 683            | 0.9            | 27                 | 785                      | 777            | 1.1            |
| Oregon                | 48                 | 1,463                    | 1,463          | 0.0            | 43                 | 1,504                    | 1,501          | 0.2            |
| Utah                  | 41                 | 1,374                    | 1,392          | -1.3           | 39                 | 1,421                    | 1,417          | 0.2            |
| Washington            | 78                 | 3,440                    | 3,384          | 1.7            | 82                 | 3,595                    | 3,494          | 2.9            |
| Wyoming               | 19                 | 153                      | 152            | 1.0            | 24                 | 174                      | 173            | 0.6            |
| <b>Subtotal</b>       |                    | <b>37,276</b>            | <b>37,097</b>  | <b>0.5</b>     |                    | <b>36,826</b>            | <b>36,295</b>  | <b>1.5</b>     |
| <b>TOTALS</b>         | <b>2,372</b>       | <b>147,051</b>           | <b>147,982</b> | <b>-0.6</b>    | <b>2,451</b>       | <b>150,896</b>           | <b>149,671</b> | <b>0.8</b>     |

Notes: Where Number of Stations are shown as dashes, the values for the Vehicle-Miles and Percent Change are derived from the estimated VMT based on data from surrounding States or the nationwide average VMT.

Table - 5. Changes on ALL\* Estimated Roads by Region and State\*\*

| Region and State      | June               |                          |                |                | May                |                          |                |                |
|-----------------------|--------------------|--------------------------|----------------|----------------|--------------------|--------------------------|----------------|----------------|
|                       | Number of Stations | Vehicle-Miles (Millions) |                | Percent Change | Number of Stations | Vehicle-Miles (Millions) |                | Percent Change |
|                       |                    | 2019 (Preliminary)       | 2018           |                |                    | 2019 (Revised)           | 2018           |                |
| <b>Northeast</b>      |                    |                          |                |                |                    |                          |                |                |
| Connecticut           | 16                 | 2,681                    | 2,749          | -2.5           | 15                 | 2,899                    | 2,902          | -0.1           |
| Maine                 | 103                | 1,284                    | 1,309          | -1.9           | 97                 | 1,316                    | 1,327          | -0.8           |
| Massachusetts         | 103                | 5,461                    | 5,481          | -0.4           | 114                | 5,553                    | 5,523          | 0.5            |
| New Hampshire         | 163                | 1,219                    | 1,237          | -1.5           | 164                | 1,201                    | 1,200          | 0.1            |
| New Jersey            | 50                 | 6,502                    | 6,476          | 0.4            | 60                 | 7,019                    | 6,857          | 2.4            |
| New York              | 132                | 10,587                   | 10,601         | -0.1           | 146                | 11,652                   | 11,616         | 0.3            |
| Pennsylvania          | 74                 | 8,812                    | 8,882          | -0.8           | 81                 | 9,118                    | 8,988          | 1.4            |
| Rhode Island          | -                  | 717                      | 723            | -0.8           | 33                 | 721                      | 751            | -3.9           |
| Vermont               | 44                 | 635                      | 641            | -0.9           | 44                 | 627                      | 628            | -0.1           |
| Subtotal              |                    | <b>37,898</b>            | <b>38,099</b>  | <b>-0.5</b>    |                    | <b>40,108</b>            | <b>39,792</b>  | <b>0.8</b>     |
| <b>South Atlantic</b> |                    |                          |                |                |                    |                          |                |                |
| Delaware              | 28                 | 1,014                    | 1,017          | -0.3           | 33                 | 904                      | 891            | 1.4            |
| District of Columbia  | 3                  | 349                      | 345            | 1.2            | 3                  | 351                      | 339            | 3.5            |
| Florida               | 238                | 18,617                   | 18,551         | 0.4            | 231                | 19,701                   | 18,754         | 5.1            |
| Georgia               | 218                | 10,240                   | 10,295         | -0.5           | 204                | 11,442                   | 11,159         | 2.5            |
| Maryland              | 53                 | 5,244                    | 5,260          | -0.3           | 53                 | 5,538                    | 5,461          | 1.4            |
| North Carolina        | 72                 | 10,429                   | 10,487         | -0.6           | 68                 | 11,056                   | 10,652         | 3.8            |
| South Carolina        | 121                | 4,869                    | 4,889          | -0.4           | 121                | 5,095                    | 4,953          | 2.9            |
| Virginia              | 691                | 7,264                    | 7,357          | -1.3           | 706                | 7,870                    | 7,763          | 1.4            |
| West Virginia         | 45                 | 1,514                    | 1,534          | -1.3           | 49                 | 1,320                    | 1,320          | 0.0            |
| Subtotal              |                    | <b>59,540</b>            | <b>59,735</b>  | <b>-0.3</b>    |                    | <b>63,277</b>            | <b>61,292</b>  | <b>3.2</b>     |
| <b>North Central</b>  |                    |                          |                |                |                    |                          |                |                |
| Illinois              | 76                 | 10,221                   | 10,302         | -0.8           | 76                 | 9,538                    | 9,611          | -0.8           |
| Indiana               | 41                 | 6,630                    | 6,761          | -1.9           | 39                 | 7,046                    | 7,000          | 0.7            |
| Iowa                  | 121                | 3,037                    | 3,033          | 0.1            | 112                | 3,073                    | 3,063          | 0.3            |
| Kansas                | 91                 | 2,820                    | 2,836          | -0.6           | 92                 | 2,793                    | 2,846          | -1.9           |
| Michigan              | 103                | 8,313                    | 8,415          | -1.2           | 104                | 8,863                    | 8,815          | 0.5            |
| Minnesota             | 44                 | 5,353                    | 5,424          | -1.3           | 47                 | 5,390                    | 5,399          | -0.2           |
| Missouri              | -                  | 6,425                    | 6,493          | -1.1           | 55                 | 6,593                    | 6,749          | -2.3           |
| Nebraska              | 53                 | 1,881                    | 1,878          | 0.2            | 50                 | 1,899                    | 1,911          | -0.6           |
| North Dakota          | 63                 | 899                      | 897            | 0.2            | 65                 | 816                      | 816            | 0.1            |
| Ohio                  | 154                | 10,250                   | 10,364         | -1.1           | 154                | 10,646                   | 10,660         | -0.1           |
| South Dakota          | 45                 | 945                      | 934            | 1.2            | 47                 | 841                      | 867            | -3.1           |
| Wisconsin             | 185                | 5,932                    | 6,009          | -1.3           | 222                | 5,998                    | 5,978          | 0.3            |
| Subtotal              |                    | <b>62,706</b>            | <b>63,346</b>  | <b>-1.0</b>    |                    | <b>63,496</b>            | <b>63,715</b>  | <b>-0.3</b>    |
| <b>South Gulf</b>     |                    |                          |                |                |                    |                          |                |                |
| Alabama               | 155                | 6,391                    | 6,376          | 0.2            | 158                | 6,463                    | 6,288          | 2.8            |
| Arkansas              | 35                 | 3,216                    | 3,263          | -1.4           | 38                 | 3,172                    | 3,259          | -2.7           |
| Kentucky              | 50                 | 4,366                    | 4,404          | -0.9           | 54                 | 4,455                    | 4,461          | -0.1           |
| Louisiana             | -                  | 4,449                    | 4,480          | -0.7           | -                  | 4,262                    | 4,287          | -0.6           |
| Mississippi           | 78                 | 3,670                    | 3,734          | -1.7           | 80                 | 3,682                    | 3,662          | 0.5            |
| Oklahoma              | 66                 | 4,140                    | 4,145          | -0.1           | 85                 | 4,146                    | 4,236          | -2.1           |
| Tennessee             | 41                 | 7,395                    | 7,447          | -0.7           | 41                 | 7,245                    | 7,075          | 2.4            |
| Texas                 | 176                | 23,137                   | 23,236         | -0.4           | 174                | 24,210                   | 24,370         | -0.7           |
| Subtotal              |                    | <b>56,764</b>            | <b>57,085</b>  | <b>-0.6</b>    |                    | <b>57,635</b>            | <b>57,638</b>  | <b>0.0</b>     |
| <b>West</b>           |                    |                          |                |                |                    |                          |                |                |
| Alaska                | 83                 | 520                      | 516            | 0.7            | 89                 | 553                      | 547            | 1.1            |
| Arizona               | 139                | 6,111                    | 5,921          | 3.2            | 145                | 6,673                    | 6,169          | 8.2            |
| California            | 198                | 30,500                   | 30,345         | 0.5            | 192                | 28,595                   | 28,491         | 0.4            |
| Colorado              | 97                 | 4,346                    | 4,384          | -0.9           | 96                 | 4,528                    | 4,518          | 0.2            |
| Hawaii                | 62                 | 896                      | 890            | 0.7            | 59                 | 724                      | 708            | 2.2            |
| Idaho                 | 192                | 1,630                    | 1,605          | 1.5            | 201                | 1,554                    | 1,524          | 1.9            |
| Montana               | 86                 | 1,315                    | 1,300          | 1.1            | 89                 | 1,067                    | 1,069          | -0.2           |
| Nevada                | 87                 | 2,224                    | 2,251          | -1.2           | 89                 | 2,596                    | 2,604          | -0.3           |
| New Mexico            | 55                 | 2,456                    | 2,427          | 1.2            | 63                 | 2,683                    | 2,672          | 0.4            |
| Oregon                | 154                | 3,334                    | 3,318          | 0.5            | 147                | 3,303                    | 3,295          | 0.2            |
| Utah                  | 75                 | 2,706                    | 2,712          | -0.2           | 73                 | 2,705                    | 2,680          | 1.0            |
| Washington            | 163                | 5,881                    | 5,758          | 2.1            | 169                | 6,041                    | 5,844          | 3.4            |
| Wyoming               | 49                 | 879                      | 890            | -1.2           | 125                | 855                      | 860            | -0.5           |
| Subtotal              |                    | <b>62,798</b>            | <b>62,317</b>  | <b>0.8</b>     |                    | <b>61,877</b>            | <b>60,981</b>  | <b>1.5</b>     |
| <b>TOTALS</b>         | <b>5,171</b>       | <b>279,707</b>           | <b>280,583</b> | <b>-0.3</b>    | <b>5,452</b>       | <b>286,391</b>           | <b>283,417</b> | <b>1.0</b>     |

Note: Where Number of Stations are shown as dashes, the values for the Vehicle-Miles and Percent Change are derived from the estimated VMT based on data from surrounding States or the nationwide average VMT.  
\* All Estimated roads include travel from Table 3 and 4 plus remaining roads.



Table - 6. Estimated Rural Vehicle Miles (Millions) and Percent Change from Same Period Previous Year\*\*

| Year - 2018 |                    |            |                     |                |               |             |                |             |               |                |            |             |                  |            |
|-------------|--------------------|------------|---------------------|----------------|---------------|-------------|----------------|-------------|---------------|----------------|------------|-------------|------------------|------------|
|             | Rural Interstate % |            | Rural Other Arter % |                | Other Rural % |             | Total Rural %  |             | All Systems % |                |            |             |                  |            |
| Jan         | 18,160             | 0.7        | Jan                 | 26,908         | 1.5           | Jan         | 24,782         | 0.6         | Jan           | 69,850         | 1.0        | Jan         | 243,483          | 0.4        |
| Feb         | 16,527             | -0.2       | Feb                 | 24,995         | -0.7          | Feb         | 22,420         | -1.1        | Feb           | 63,942         | -0.7       | Feb         | 225,146          | -0.2       |
| Mar         | 20,876             | 2.4        | Mar                 | 30,511         | 0.9           | Mar         | 27,834         | 0.3         | Mar           | 79,221         | 1.1        | Mar         | 269,229          | 0.3        |
| Q1          | 55,563             | 1.1        | Q1                  | 82,414         | 0.6           | Q1          | 75,036         | 0.0         | Q1            | 213,013        | 0.5        | Q1          | 737,858          | 0.2        |
| Apr         | 20,813             | -1.2       | Apr                 | 30,643         | -0.1          | Apr         | 28,622         | -1.1        | Apr           | 80,078         | -0.7       | Apr         | 272,444          | -0.2       |
| May         | 22,653             | 1.4        | May                 | 33,424         | 2.3           | May         | 30,542         | 1.1         | May           | 86,619         | 1.6        | May         | 283,417          | 0.8        |
| Jun         | 22,615             | 0.7        | Jun                 | 33,562         | 1.0           | Jun         | 30,415         | -0.1        | Jun           | 86,592         | 0.6        | Jun         | 280,583          | 0.1        |
| Q2          | 66,081             | 0.3        | Q2                  | 97,629         | 1.1           | Q2          | 89,579         | 0.0         | Q2            | 253,289        | 0.5        | Q2          | 836,445          | 0.2        |
| 1st Half    | 121,644            | 0.7        | 1st Half            | 180,043        | 0.9           | 1st Half    | 164,615        | 0.0         | 1st Half      | 466,302        | 0.5        | 1st Half    | 1,574,302        | 0.2        |
| Jul         | 24,687             | 0.0        | Jul                 | 35,809         | 0.9           | Jul         | 31,779         | -0.1        | Jul           | 92,275         | 0.3        | Jul         | 289,390          | 0.3        |
| Aug         | 23,986             | 2.5        | Aug                 | 34,747         | 1.7           | Aug         | 31,108         | 1.2         | Aug           | 89,842         | 1.7        | Aug         | 285,979          | 1.2        |
| Sep         | 20,902             | -0.1       | Sep                 | 31,516         | -0.6          | Sep         | 28,073         | -1.1        | Sep           | 80,490         | -0.7       | Sep         | 263,175          | -0.8       |
| Q3          | 69,575             | 0.8        | Q3                  | 102,072        | 0.7           | Q3          | 90,960         | 0.0         | Q3            | 262,607        | 0.5        | Q3          | 838,545          | 0.3        |
| Oct         | 21,906             | 0.9        | Oct                 | 33,334         | 1.5           | Oct         | 29,737         | 0.4         | Oct           | 84,977         | 0.9        | Oct         | 282,230          | 1.2        |
| Nov         | 20,475             | 0.5        | Nov                 | 29,803         | 0.4           | Nov         | 26,058         | -1.1        | Nov           | 76,336         | -0.1       | Nov         | 258,574          | 0.2        |
| Dec         | 20,844             | 1.1        | Dec                 | 30,231         | 0.8           | Dec         | 26,670         | -0.3        | Dec           | 77,745         | 0.5        | Dec         | 269,706          | 0.7        |
| Q4          | 63,225             | 0.8        | Q4                  | 93,368         | 0.9           | Q4          | 82,466         | -0.3        | Q4            | 239,058        | 0.5        | Q4          | 810,510          | 0.7        |
| 2nd Half    | 132,800            | 0.8        | 2nd Half            | 195,440        | 0.8           | 2nd Half    | 173,425        | -0.1        | 2nd Half      | 501,665        | 0.5        | 2nd Half    | 1,649,055        | 0.5        |
| <b>Year</b> | <b>254,445</b>     | <b>0.8</b> | <b>Year</b>         | <b>375,483</b> | <b>0.8</b>    | <b>Year</b> | <b>338,040</b> | <b>-0.1</b> | <b>Year</b>   | <b>967,968</b> | <b>0.5</b> | <b>Year</b> | <b>3,223,357</b> | <b>0.3</b> |

| Year - 2019 |                    |            |                     |                |               |             |                |            |               |                |            |             |                  |            |
|-------------|--------------------|------------|---------------------|----------------|---------------|-------------|----------------|------------|---------------|----------------|------------|-------------|------------------|------------|
|             | Rural Interstate % |            | Rural Other Arter % |                | Other Rural % |             | Total Rural %  |            | All Systems % |                |            |             |                  |            |
| Jan         | 18,518             | 2.0        | Jan                 | 27,430         | 1.9           | Jan         | 24,949         | 0.7        | Jan           | 70,897         | 1.5        | Jan         | 247,145          | 1.5        |
| Feb         | 16,520             | 0.0        | Feb                 | 24,971         | -0.1          | Feb         | 22,230         | -0.8       | Feb           | 63,722         | -0.3       | Feb         | 224,137          | -0.4       |
| Mar         | 21,066             | 0.9        | Mar                 | 30,655         | 0.5           | Mar         | 27,751         | -0.3       | Mar           | 79,472         | 0.3        | Mar         | 270,171          | 0.3        |
| Q1          | 56,104             | 1.0        | Q1                  | 83,057         | 0.8           | Q1          | 74,930         | -0.1       | Q1            | 214,090        | 0.5        | Q1          | 741,453          | 0.5        |
| Apr         | 21,431             | 3.0        | Apr                 | 31,643         | 3.3           | Apr         | 29,396         | 2.7        | Apr           | 82,471         | 3.0        | Apr         | 279,142          | 2.5        |
| May         | 23,143             | 2.2        | May                 | 33,779         | 1.1           | May         | 30,694         | 0.5        | May           | 87,615         | 1.1        | May         | 286,391          | 1.0        |
| Jun         | 22,796             | 0.8        | Jun                 | 33,632         | 0.2           | Jun         | 30,216         | -0.7       | Jun           | 86,644         | 0.1        | Jun         | 279,707          | -0.3       |
| Q2          | 67,370             | 2.0        | Q2                  | 99,054         | 1.5           | Q2          | 90,306         | 0.8        | Q2            | 256,730        | 1.4        | Q2          | 845,240          | 1.1        |
| 1st Half    | 123,474            | 1.5        | 1st Half            | 182,111        | 1.1           | 1st Half    | 165,236        | 0.4        | 1st Half      | 470,821        | 1.0        | 1st Half    | 1,586,693        | 0.8        |
| Jul         |                    |            | Jul                 |                |               | Jul         |                |            | Jul           |                |            | Jul         |                  |            |
| Aug         |                    |            | Aug                 |                |               | Aug         |                |            | Aug           |                |            | Aug         |                  |            |
| Sep         |                    |            | Sep                 |                |               | Sep         |                |            | Sep           |                |            | Sep         |                  |            |
| Q3          |                    | 0.0        | Q3                  |                | 0.0           | Q3          |                | 0.0        | Q3            |                | 0.0        | Q3          |                  | 0.0        |
| Oct         |                    |            | Oct                 |                |               | Oct         |                |            | Oct           |                |            | Oct         |                  |            |
| Nov         |                    |            | Nov                 |                |               | Nov         |                |            | Nov           |                |            | Nov         |                  |            |
| Dec         |                    |            | Dec                 |                |               | Dec         |                |            | Dec           |                |            | Dec         |                  |            |
| Q4          |                    | 0.0        | Q4                  |                | 0.0           | Q4          |                | 0.0        | Q4            |                | 0.0        | Q4          |                  | 0.0        |
| 2nd Half    |                    | 0.0        | 2nd Half            |                | 0.0           | 2nd Half    |                | 0.0        | 2nd Half      |                | 0.0        | 2nd Half    |                  | 0.0        |
| <b>Year</b> | <b>123,474</b>     | <b>1.5</b> | <b>Year</b>         | <b>182,111</b> | <b>1.1</b>    | <b>Year</b> | <b>165,236</b> | <b>0.4</b> | <b>Year</b>   | <b>470,821</b> | <b>1.0</b> | <b>Year</b> | <b>1,586,693</b> | <b>0.8</b> |

Table - 7. Estimated Urban Vehicle Miles (Millions) and Percent Change from Same Period Previous Year\*\*

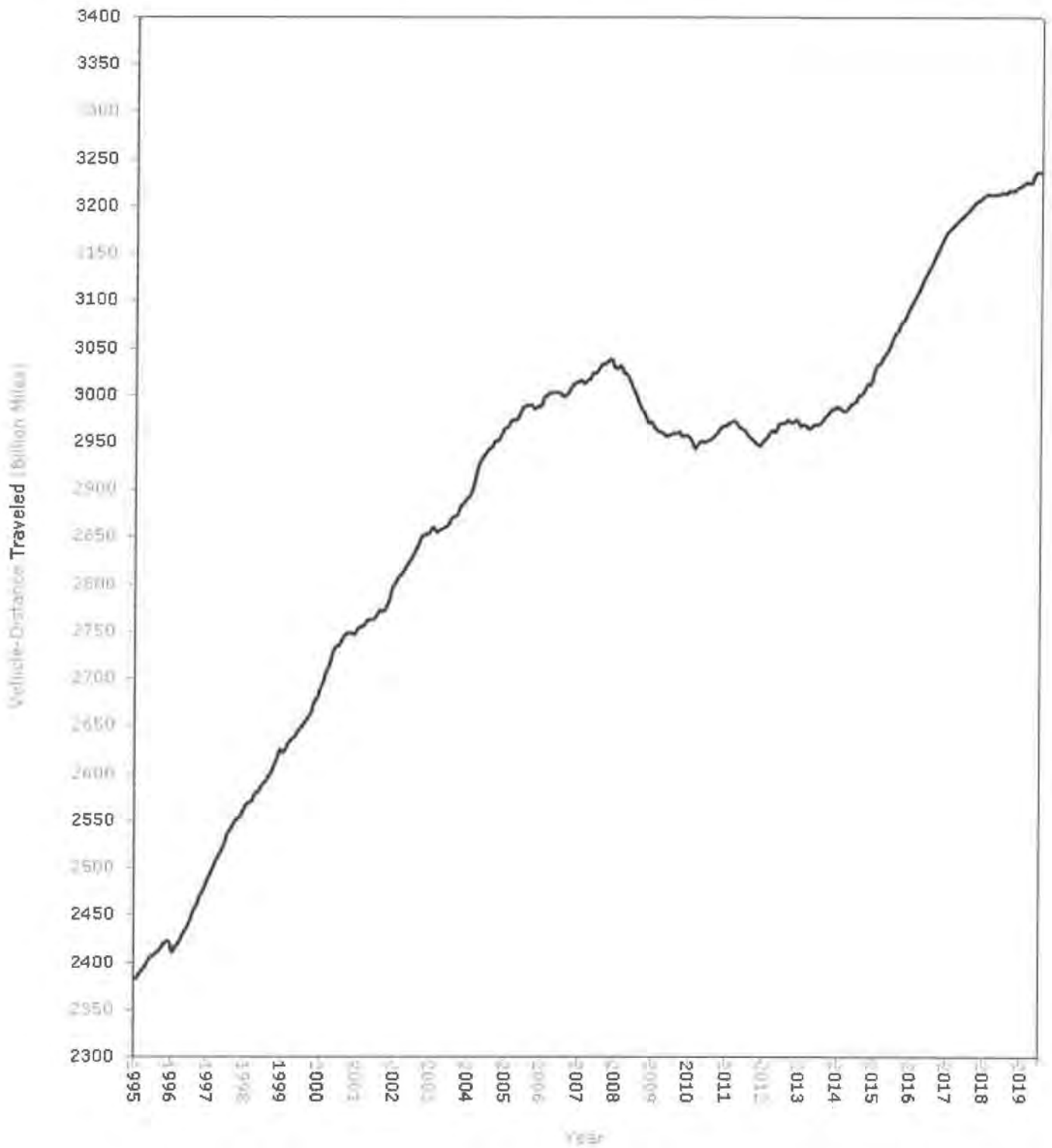
| Year - 2018 |                  |      |                      |      |             |      |             |      |             |      |
|-------------|------------------|------|----------------------|------|-------------|------|-------------|------|-------------|------|
|             | Urban Interstate | %    | Urban Other Arterial | %    | Other Urban | %    | Total Urban | %    | All Systems | %    |
| Jan         | 43,646           | 1.0  | 88,722               | 0.3  | 41,264      | -1.1 | 173,633     | 0.1  | 243,483     | 0.4  |
| Feb         | 39,747           | -0.2 | 82,917               | 0.2  | 38,541      | -0.2 | 161,204     | 0.0  | 225,146     | -0.2 |
| Mar         | 47,647           | 0.4  | 96,653               | -0.3 | 45,707      | 0.3  | 190,007     | 0.0  | 269,229     | 0.3  |
| Q1          | 131,041          | 0.4  | 268,292              | 0.0  | 125,512     | -0.3 | 524,845     | 0.0  | 737,858     | 0.2  |
| Apr         | 47,872           | 0.3  | 98,112               | 0.2  | 46,382      | -0.2 | 192,366     | 0.1  | 272,444     | -0.2 |
| May         | 50,031           | 0.9  | 99,640               | 0.5  | 47,127      | -0.3 | 196,798     | 0.4  | 283,417     | 0.8  |
| Jun         | 50,539           | 0.0  | 97,443               | -0.1 | 46,009      | -0.3 | 193,991     | -0.1 | 280,583     | 0.1  |
| Q2          | 148,442          | 0.4  | 295,194              | 0.2  | 139,519     | -0.3 | 583,155     | 0.1  | 836,445     | 0.2  |
| 1st Half    | 279,483          | 0.4  | 563,486              | 0.1  | 265,031     | -0.3 | 1,108,000   | 0.1  | 1,574,302   | 0.2  |
| Jul         | 49,250           | 0.6  | 100,023              | 0.2  | 47,842      | 0.1  | 197,115     | 0.3  | 289,390     | 0.3  |
| Aug         | 49,739           | 1.0  | 100,057              | 1.1  | 46,342      | 0.7  | 196,138     | 1.0  | 285,979     | 1.2  |
| Sep         | 46,441           | -0.8 | 92,734               | -0.9 | 43,511      | -0.8 | 182,685     | -0.8 | 263,175     | -0.8 |
| Q3          | 145,430          | 0.3  | 292,813              | 0.2  | 137,695     | 0.0  | 575,938     | 0.2  | 838,545     | 0.3  |
| Oct         | 49,220           | 1.3  | 101,758              | 1.3  | 46,275      | 1.2  | 197,253     | 1.3  | 282,230     | 1.2  |
| Nov         | 46,676           | 0.1  | 91,979               | 0.3  | 43,583      | 0.5  | 182,237     | 0.3  | 258,574     | 0.2  |
| Dec         | 48,994           | 0.8  | 97,112               | 0.4  | 45,855      | 1.3  | 191,961     | 0.7  | 269,706     | 0.7  |
| Q4          | 144,890          | 0.7  | 290,849              | 0.7  | 135,713     | 1.0  | 571,452     | 0.8  | 810,510     | 0.7  |
| 2nd Half    | 290,320          | 0.5  | 583,662              | 0.4  | 273,408     | 0.5  | 1,147,390   | 0.5  | 1,649,055   | 0.5  |
| Year        | 569,803          | 0.5  | 1,147,148            | 0.3  | 538,439     | 0.1  | 2,255,389   | 0.3  | 3,223,357   | 0.3  |

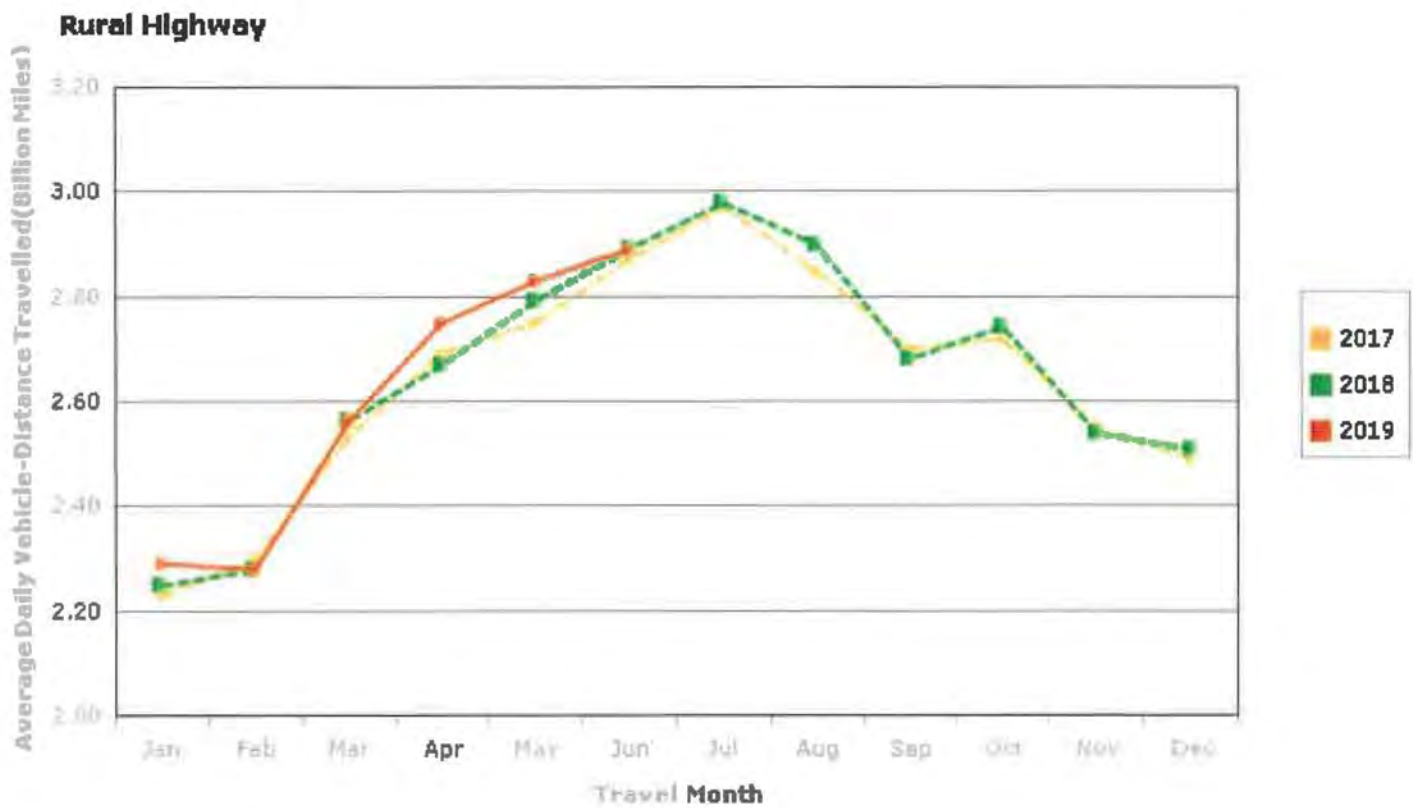
| Year - 2019 |                  |      |                      |      |             |     |             |      |             |      |
|-------------|------------------|------|----------------------|------|-------------|-----|-------------|------|-------------|------|
|             | Urban Interstate | %    | Urban Other Arterial | %    | Other Urban | %   | Total Urban | %    | All Systems | %    |
| Jan         | 44,139           | 1.1  | 89,898               | 1.3  | 42,211      | 2.3 | 176,248     | 1.5  | 247,145     | 1.5  |
| Feb         | 39,472           | -0.7 | 82,311               | -0.7 | 38,633      | 0.2 | 160,416     | -0.5 | 224,137     | -0.4 |
| Mar         | 47,992           | 0.7  | 96,714               | 0.1  | 45,993      | 0.6 | 190,699     | 0.4  | 270,171     | 0.3  |
| Q1          | 131,604          | 0.4  | 268,923              | 0.2  | 126,836     | 1.1 | 527,363     | 0.5  | 741,453     | 0.5  |
| Apr         | 48,743           | 1.8  | 100,141              | 2.1  | 47,787      | 3.0 | 196,671     | 2.2  | 279,142     | 2.5  |
| May         | 50,506           | 1.0  | 100,390              | 0.8  | 47,880      | 1.6 | 198,776     | 1.0  | 286,391     | 1.0  |
| Jun         | 50,314           | -0.4 | 96,737               | -0.7 | 46,012      | 0.0 | 193,063     | -0.5 | 279,707     | -0.3 |
| Q2          | 149,564          | 0.8  | 297,269              | 0.7  | 141,678     | 1.5 | 588,510     | 0.9  | 845,240     | 1.1  |
| 1st Half    | 281,167          | 0.6  | 566,191              | 0.5  | 268,514     | 1.3 | 1,115,873   | 0.7  | 1,586,693   | 0.8  |
| Jul         |                  |      |                      |      |             |     |             |      |             |      |
| Aug         |                  |      |                      |      |             |     |             |      |             |      |
| Sep         |                  |      |                      |      |             |     |             |      |             |      |
| Q3          |                  | 0.0  |                      | 0.0  |             | 0.0 |             | 0.0  |             | 0.0  |
| Oct         |                  |      |                      |      |             |     |             |      |             |      |
| Nov         |                  |      |                      |      |             |     |             |      |             |      |
| Dec         |                  |      |                      |      |             |     |             |      |             |      |
| Q4          |                  | 0.0  |                      | 0.0  |             | 0.0 |             | 0.0  |             | 0.0  |
| 2nd Half    |                  | 0.0  |                      | 0.0  |             | 0.0 |             | 0.0  |             | 0.0  |
| Year        | 281,167          | 0.6  | 566,191              | 0.5  | 268,514     | 1.3 | 1,115,873   | 0.7  | 1,586,693   | 0.8  |



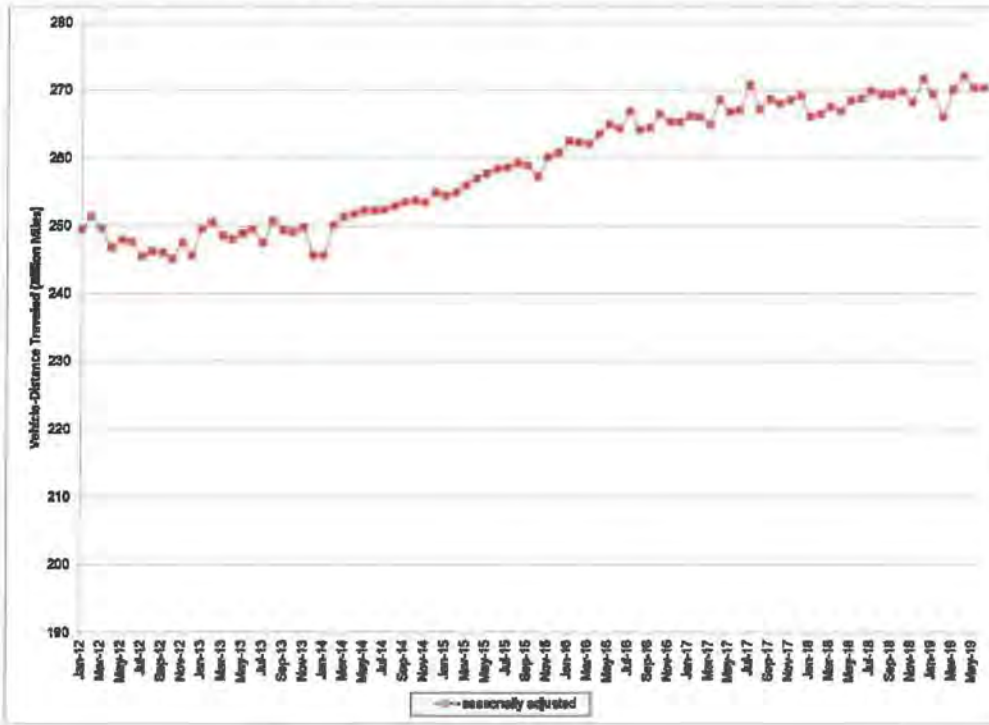
**Figure - 1. Moving 12-Month Total on ALL Roads**



**Figure - 2. Travel on U.S. Highways by Month**



**Figure 3: Seasonally Adjusted Vehicle Miles Traveled by Month**



Seasonally adjusted data are modeled by the Bureau of Transportation Statistics, Office of the Assistant Secretary for Research and Technology, U.S. Department of Transportation. See <http://www.transtats.bts.gov/OSEA/SeasonalAdjustment/> for additional seasonally adjusted travel data and information.