

COUNTY COUNCIL OF BEAUFORT COUNTY

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CLERK TO COUNCIL

AGENDA PUBLIC FACILITIES COMMITTEE Monday, February 17, 2014 4:00 p.m. Conference Room, Building 2 Beaufort Industrial Village 102 Industrial Village Road, Beaufort

Committee Members:

Gerald Dawson, Chairman
Steve Fobes, Vice Chairman
Cynthia Bensch
Rick Caporale
Brian Flewelling
William McBride
Jerry Stewart

Staff Support:

Rob McFee, Division Director

1. CALL TO ORDER – 4:00 P.M.
2. REMOVAL OF BARREL LANDING ROAD FROM STATE HIGHWAY SYSTEM AND ACCEPTANCE AS COUNTY ROAD ([backup](#))
3. DISCUSSION / HARBOR RIVER BRIDGE REPLACEMENT RESOLUTION ([backup](#))
4. DISCUSSION / TRAFFIC ENGINEERING EMERGING SIGNAL COORDINATION NEEDS ([backup](#))
5. SOLID WASTE BUDGET UPDATE ([backup](#))
6. ADJOURNMENT





COUNTY COUNCIL OF BEAUFORT COUNTY
BEAUFORT COUNTY ENGINEERING DEPARTMENT
102 Industrial Village Road, Building #3, Beaufort, SC 29906
Post Office Drawer 1228, Beaufort, SC 29901-1228
Telephone: 843-255-2700 Facsimile: 843-255-9420

TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

VIA: Gary Kubic, County Administrator
Josh Gruber, County Attorney

FROM: Robert McFee, Director of Engineering and Infrastructure

SUBJ: **Removal of Barrel Landing Road from State Highway System and
Acceptance of Barrel Landing Road as a County Road**

DATE: February 3, 2014

BACKGROUND. Barrel Landing Road is a low volume, secondary highway in the State highway system. It is approximately 0.50 miles in length, and provides access from SC 170 (Okatie Highway) to the Beaufort County's Barrel Landing properties which were acquired through the Rural and Critical Lands program (See attached map).

The acquisition of Barrel Landing Road would permit the County to better control access to the above mentioned properties and allow for increased public safety.

FOR ACTION. Public Facilities Committee meeting occurring on February 17, 2014.

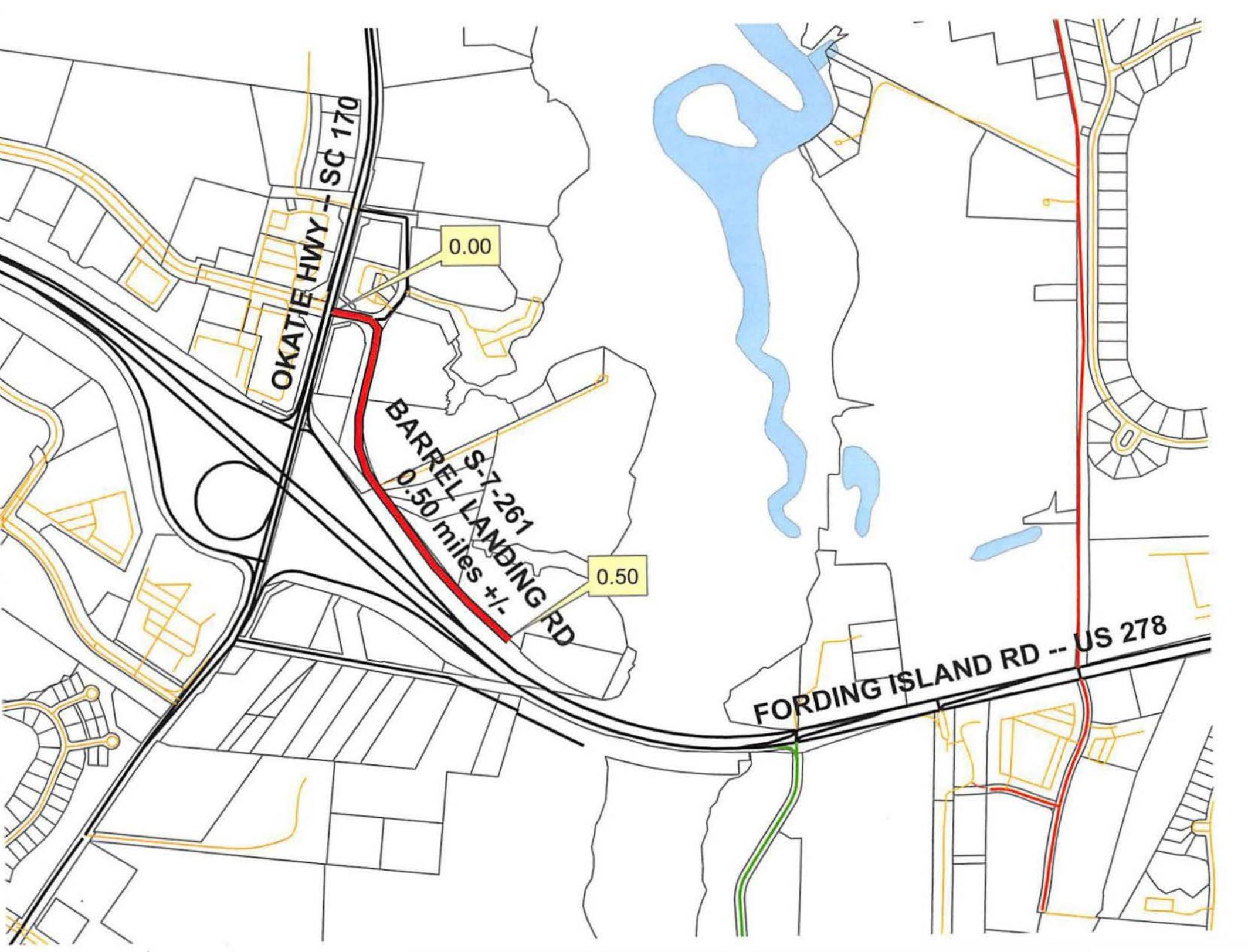
RECOMMENDATION. (1) The Public Facilities Committee approve petitioning SCDOT to remove Barrel Landing Road from the State Highway System. (2) The Committee approve the acceptance Barrel Landing Road as a County road and (3) The Committee recommend that County Council finalize the acceptance.

JRM/EWK/mjh
EWK

Attachments: 1) Map
2) Removal Request Form

cc: Eddie Bellamy

roads/ROWAccept/PFC-BarrelLanding



OKATIE HWY -- SC 170

0.00

S-7-261
0.50 miles +/-
BARREL LANDING RD

0.50

FORDING ISLAND RD -- US 278



SC 170 -- OKATIE HWY

RUNNING DEER RD

BARREL LANDING RD
S-7-261

FORDING ISLAND RD -- US 278

CECIL REYNOLDS DR

**REQUEST FOR REMOVAL OF ROAD
FROM STATE HIGHWAY SYSTEM
(REVISED 11-5-2007)**

DESCRIPTION OF SECTION OF ROAD TO BE REMOVED

COUNTY: Beaufort **ROAD NUMBER:** S-7-261
ROAD NAME: Barrel Landing Road

LENGTH TO BE REMOVED: 0.50 **MILES**

BEGINNING POINT: 0.00 SC 170 Intersection
ENDING POINT: 0.50 Terminus

DESCRIPTION: (PLEASE ATTACH LOCATION MAP)
This roadway is a paved 2-lane facility adjacent to
US 278/SC 170 interchange in Beaufort County.

ACCEPTANCE OF MAINTENANCE RESPONSIBILITY BY OTHER ENTITY

IT IS REQUESTED THAT THE ABOVE DESCRIBED ROAD BE REMOVED FROM THE STATE HIGHWAY SYSTEM. OWNERSHIP AND MAINTENANCE OF THIS ROAD WILL BECOME THE RESPONSIBILITY OF Beaufort County.

(INSERT COUNTY/CITY/SCHOOL DISTRICT NAME)

COUNTY/CITY/SCHOOL DISTRICT OR AGENCY OFFICIAL

NAME: Gary Kubic PLEASE TYPE OR PRINT

TITLE: County Administrator PLEASE TYPE OR PRINT

SIGNED _____ **DATE:** _____

NOTE TO DISTRICT ENGINEERING ADMINISTRATOR:
THIS COMPLETED FORM AND MAP SHOULD BE FORWARDED TO:

**DIRECTOR OF TRAFFIC ENGINEERING
SCDOT
955 PARK STREET, P.O. BOX 191
COLUMBIA, S. C. 29202**

**BASIS FOR REMOVAL
[TO BE COMPLETED BY SCDOT]**

CHECK ONE OF THE (3) THREE OPTIONS BELOW AND COMPLETE

1. **ABANDONMENT OF SECTION OF RELOCATED HIGHWAY**

2. **DELETION AND REMOVAL OF ROADS FROM THE SECONDARY SYSTEM (SWAP MILES ONLY)**

ROADS TO BE ADDED IN SWAP OF MILES:

<u>ROAD(S) NUMBER</u>	<u>ROAD MILEAGE</u>	<u>AVERAGE DAILY TRAFFIC (ADT)</u>	<u>NUMBER OF LANES</u>	<u>TRAFFIC IMPORTANCE</u>
_____	_____	x _____	/ _____	= _____
_____	_____	x _____	/ _____	= _____

ROADS TO BE DELETED IN SWAP OF MILES:

<u>ROAD(S) NUMBER</u>	<u>ROAD MILEAGE</u>	<u>AVERAGE DAILY TRAFFIC (ADT)</u>	<u>NUMBER OF LANES</u>	<u>TRAFFIC IMPORTANCE</u>
_____	_____	x _____	/ _____	= _____
_____	_____	x _____	/ _____	= _____

NOTE: ROADS TO BE ADDED MUST BE OF HIGHER TRAFFIC IMPORTANCE THAN ROADS TO BE DELETED AS DETERMINED BY THE CALCULATIONS ABOVE.

3. **ABANDONMENT OF RIGHT-OF-WAY (REMOVAL OF ROADS FROM STATE HWY. SYSTEM ONLY)**

DETERMINATION OF RIGHT-OF-WAY NEED (CHECK APPROPRIATE BOX(ES) BELOW)

YES NO

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | PROPERTY IS REQUIRED FOR SCDOT RIGHT-OF-WAY. |
| <input type="checkbox"/> | <input type="checkbox"/> | PROPERTY IS REQUIRED FOR DEPARTMENT PURPOSES. |
| <input type="checkbox"/> | <input type="checkbox"/> | ABANDONMENT IS IN THE INTEREST OF THE PUBLIC AND SCDOT. |
| <input type="checkbox"/> | <input type="checkbox"/> | ABANDONMENT ADVERSELY AFFECTS THE INDIVIDUAL RIGHTS OF OTHERS. |

(ACCEPTANCE OF MAINTENANCE RESPONSIBILITY (ON PAGE 1) MUST BE COMPLETED OR LETTER ATTACHED.)

REQUEST SUBMITTED BY: _____
NAME SIGNATURE DATE

CONCURRENCE BY: _____
NAME SIGNATURE DATE

FOR PRIMARY ROUTES ONLY:

APPROVAL BY: _____
DIRECTOR OF TRAFFIC ENGINEERING DATE

BEAUFORT COUNTY RESOLUTION NO. _____

A RESOLUTION SUPPORTING THE REPLACEMENT OF THE HARBOR RIVER BRIDGE AS A FIXED SPAN FACILITY

WHEREAS, the South Carolina Department of Transportation has advertised for consulting services to perform preliminary engineering design services in preparation for the replacement of the existing Harbor River swing span bridge; and

WHEREAS, the existing manned swing span bridge has been operating continuously for more than 70 years and is functionally obsolete; and

WHEREAS, the Harbor River bridge represents the only connection between St Helena and the mainland for Harbor, Fripp and Hunting Islands; and

WHEREAS, the necessary openings of movable bridge spans subject to the priority of river traffic represent extraordinary challenges for emergency medical service, fire service and law enforcement to these island communities; and

WHEREAS, storm recovery to these barrier islands will likely be greatly complicated by the presence and possible failure of a movable bridge span.

NOW, THEREFORE, BE IT RESOLVED, that the Beaufort County Council does hereby express its desire to have the existing Harbor River swing span bridge replaced with a fixed span bridge.

APPROVED AND ADOPTED by the County Council of Beaufort County at a regular meeting held on the _____ day of _____, 2014.

COUNTY COUNCIL OF BEAUFORT COUNTY

By: _____
D. Paul Sommerville, Chairman

APPROVED AS TO FORM:

Joshua A. Gruber, Staff Attorney

ATTEST:

Suzanne M. Rainey, Clerk to Council

Traffic Engineering Emerging Needs

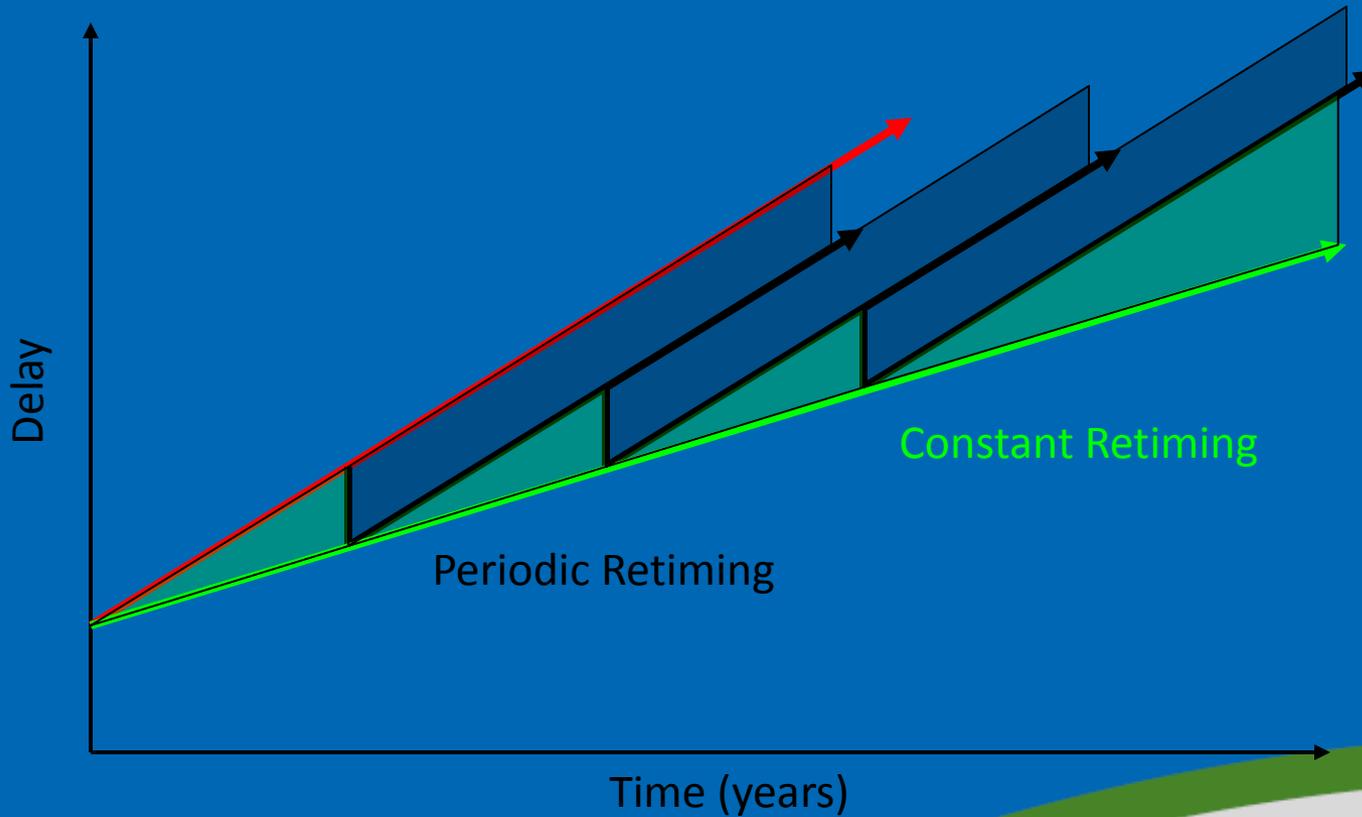
Presentation for the County's
Public Facilities Committee
February 17, 2014



- **US 278 Traffic Signal Coordination**
- **Woods Memorial Bridge Traveler Information System**

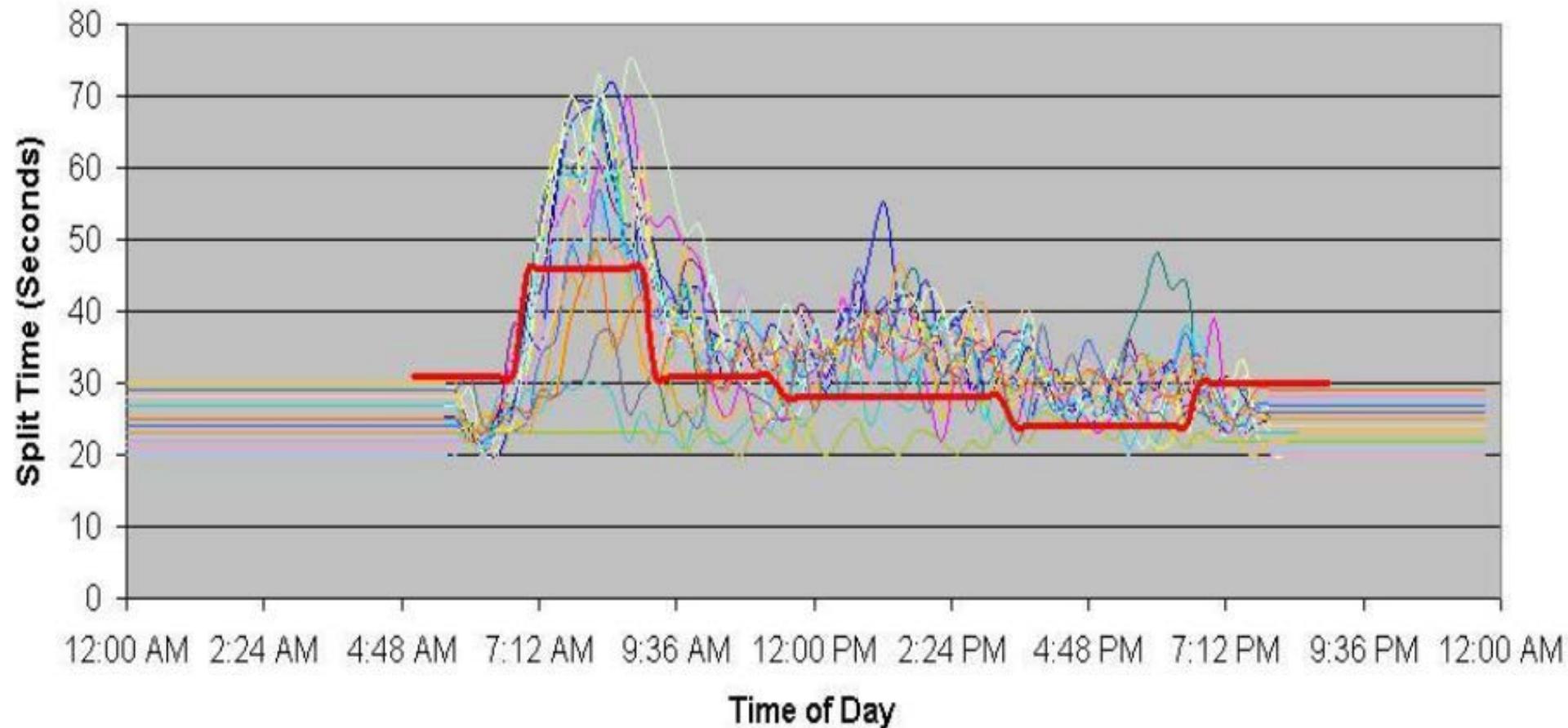
- **US 278 Signal System**
 - **Traffic Responsive Signal Coordination 2009**
 - **Timings Updated 2011**
 - **Phase 2 Widening Now Complete**
 - **Bluffton Parkway Flyover Fall 2015**
 - **Traffic Flow Variability Increasing**
 - **Data Collection and Re-timing
Time/Cost High**

Savings from Retiming Signals



City of Alpharetta Pilot Study

GA400 SB Ramp SCOOT and TOD Split Time



US 278 Adaptive Signal Operation

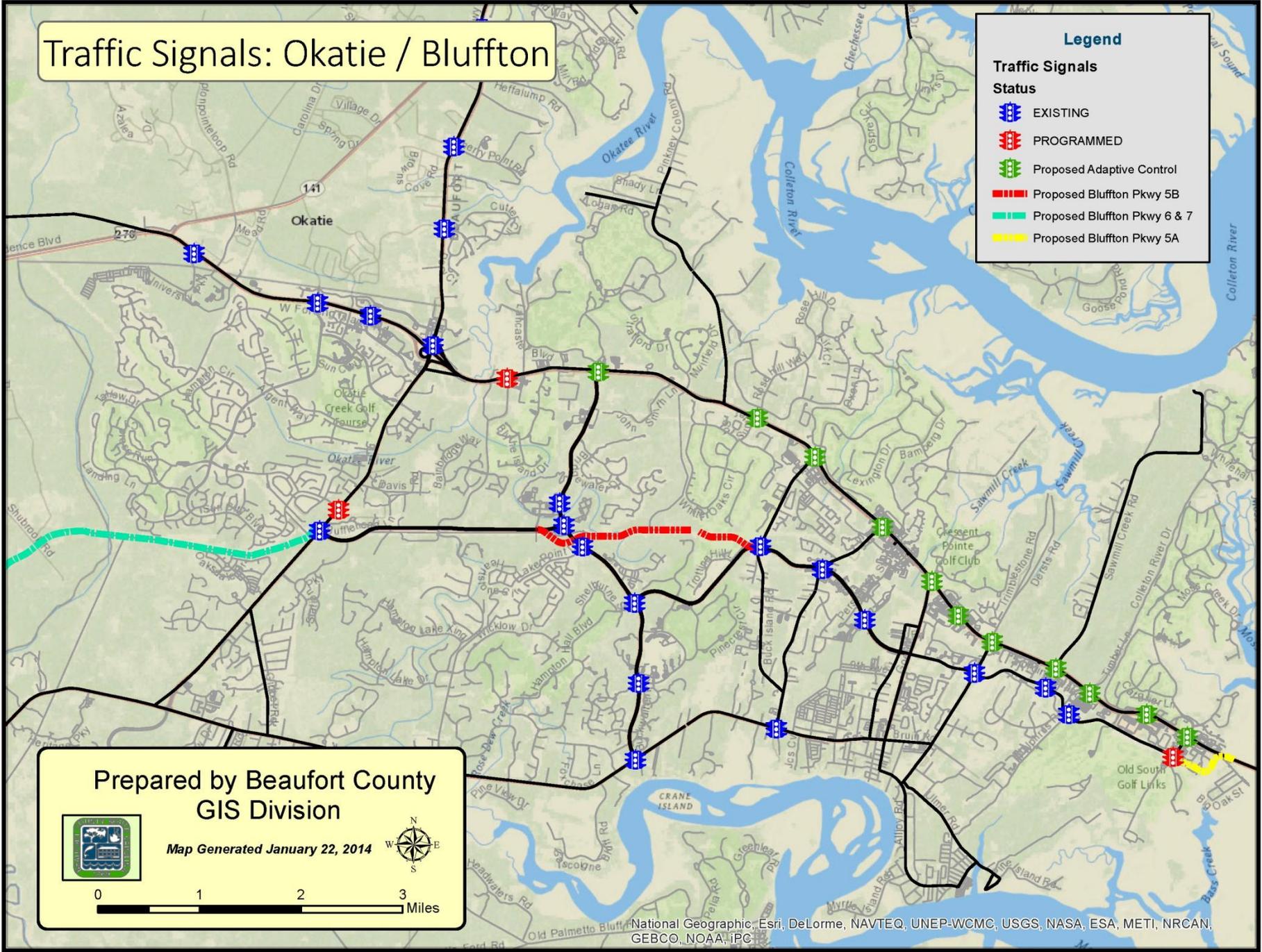
- 12 Intersections
- Real-time flexibility
- Expandable to Bluffton Pkwy
- Improved Efficiency = Improved Safety
- **B-C Ratio: 10 to 1**

Traffic Signals: Okatie / Bluffton

Legend

Traffic Signals Status

-  EXISTING
-  PROGRAMMED
-  Proposed Adaptive Control
-  Proposed Bluffton Pkwy 5B
-  Proposed Bluffton Pkwy 6 & 7
-  Proposed Bluffton Pkwy 5A



Prepared by Beaufort County
GIS Division



Map Generated January 22, 2014



US 278 Adaptive Signal Components

- Existing Traffic Signal Equipment
- Existing Communications Network
- Existing Signal System Platform
- Data Collection Sensors
- Software Module
- Implementation/Integration
- 4 Month Implementation Time
- \$275,000

Woods Memorial Bridge and Downtown Traffic Congestion

- 16,000 vehicles per day
- 1,710 Bridge Openings in 12 months
- Peak Periods: April-May, Oct-Nov.
- 9 AM to 4 PM
- Average Opening Time: 8 minutes
- Typical Opening: 2,000 Minutes Delay
- Open 39 min/day

Woods Memorial Bridge Alternatives

- Replace Bridge with High Span
- Replace Bridge with Fast Opening
- Tunnel
- New Bridge Location
- Northern Beaufort Bypass
- Traffic Management

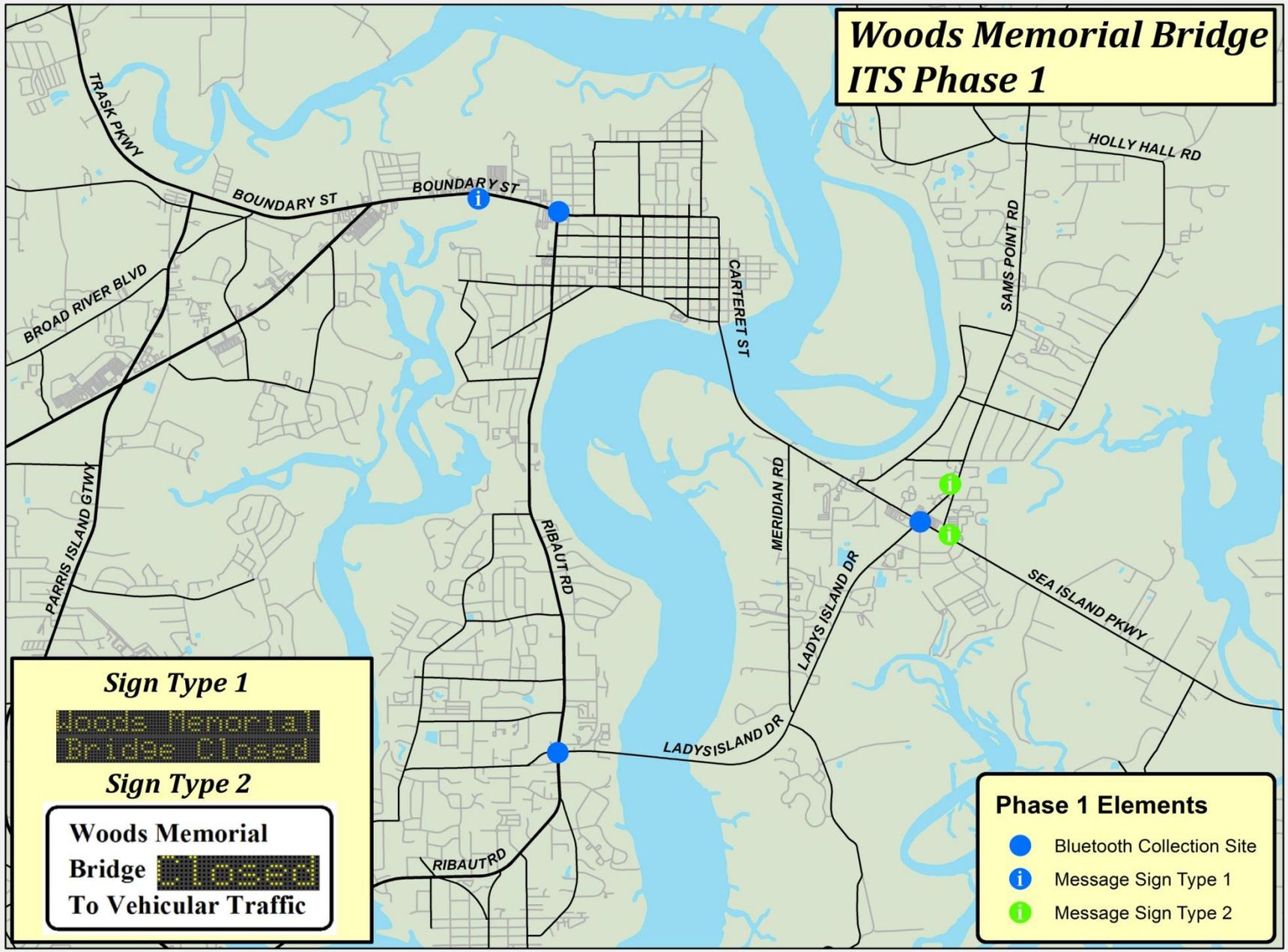
Woods Memorial Bridge Traffic Management

- Intelligent Transportation System (ITS)
- Optimize Utilization of Existing Infrastructure
- Existing Available Technology
- Reduce Delays
- Reliability

Woods Memorial Bridge ITS Components

- Vehicle Detection, Travel Time and Delay
- Traveler Information
 - Dynamic Message Signs
 - Social Media/Web
 - Radio and Cameras
- Adaptive Signal Coordination
- Variable Lane Assignment

Woods Memorial Bridge ITS Phase 1



Sign Type 1

Woods Memorial
Bridge Closed

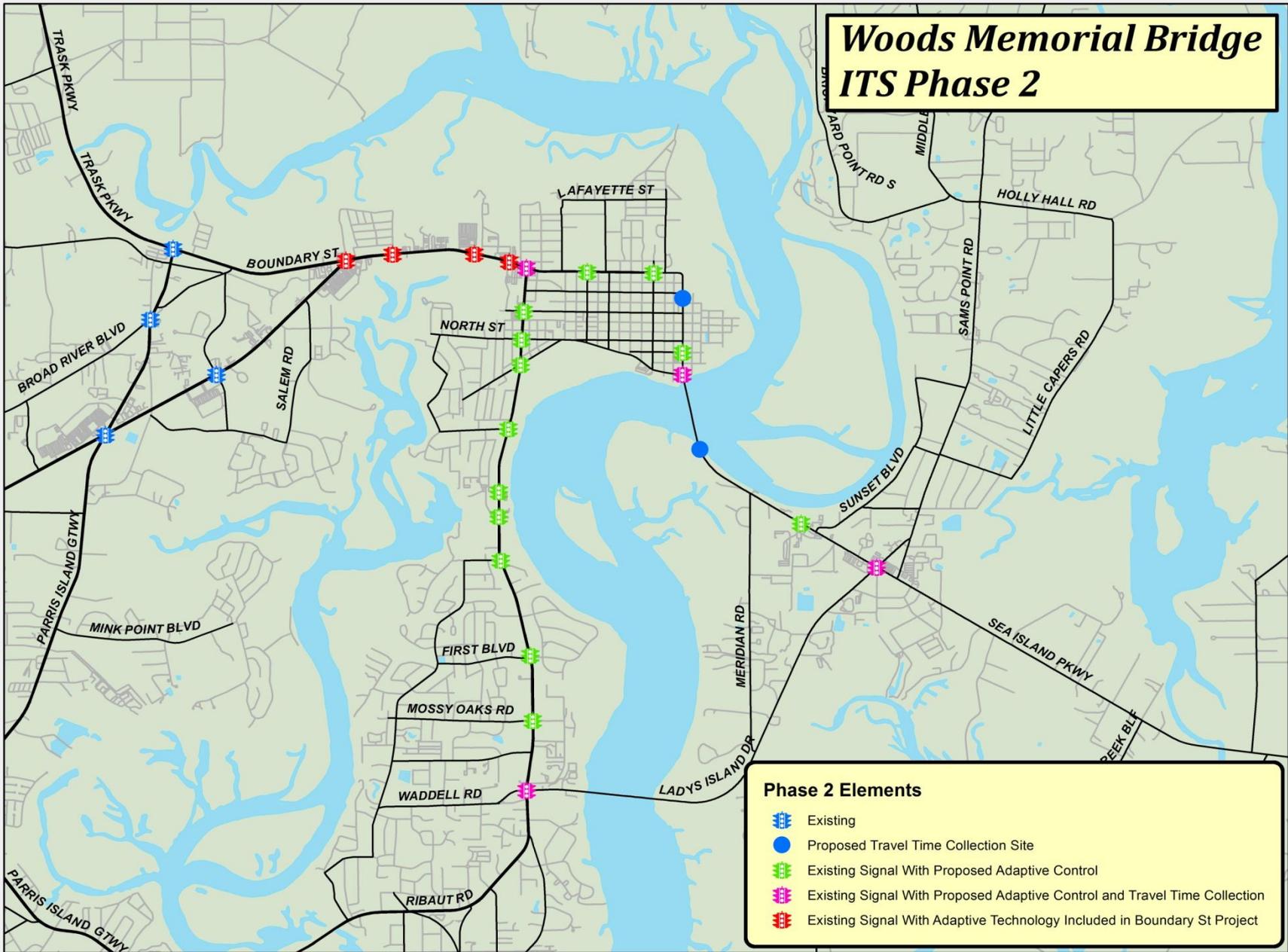
Sign Type 2

Woods Memorial
Bridge **Closed**
To Vehicular Traffic

Phase 1 Elements

- Bluetooth Collection Site
- Message Sign Type 1
- Message Sign Type 2

Woods Memorial Bridge ITS Phase 2



Phase 2 Elements

-  Existing
-  Proposed Travel Time Collection Site
-  Existing Signal With Proposed Adaptive Control
-  Existing Signal With Proposed Adaptive Control and Travel Time Collection
-  Existing Signal With Adaptive Technology Included in Boundary St Project

Traveler Information and Adaptive System

- Phase 1
 - Vehicle Detection and Travel Time
 - Dynamic Message Signs
 - Implementation: 6 Months to 1 Year
- Phase 2
 - Adaptive Signals and Variable Lanes
 - Implementation: 1 Year to 2 Years

Woods Memorial Bridge Information and Adaptive System

- Phase 1: Traveler Information & Travel Time System
- \$200,000
- Phase 2: Full Adaptive with Variable Lanes
- \$700,000
- **B-C Ratio: 3 to 1**

Traffic Engineering Emerging Needs

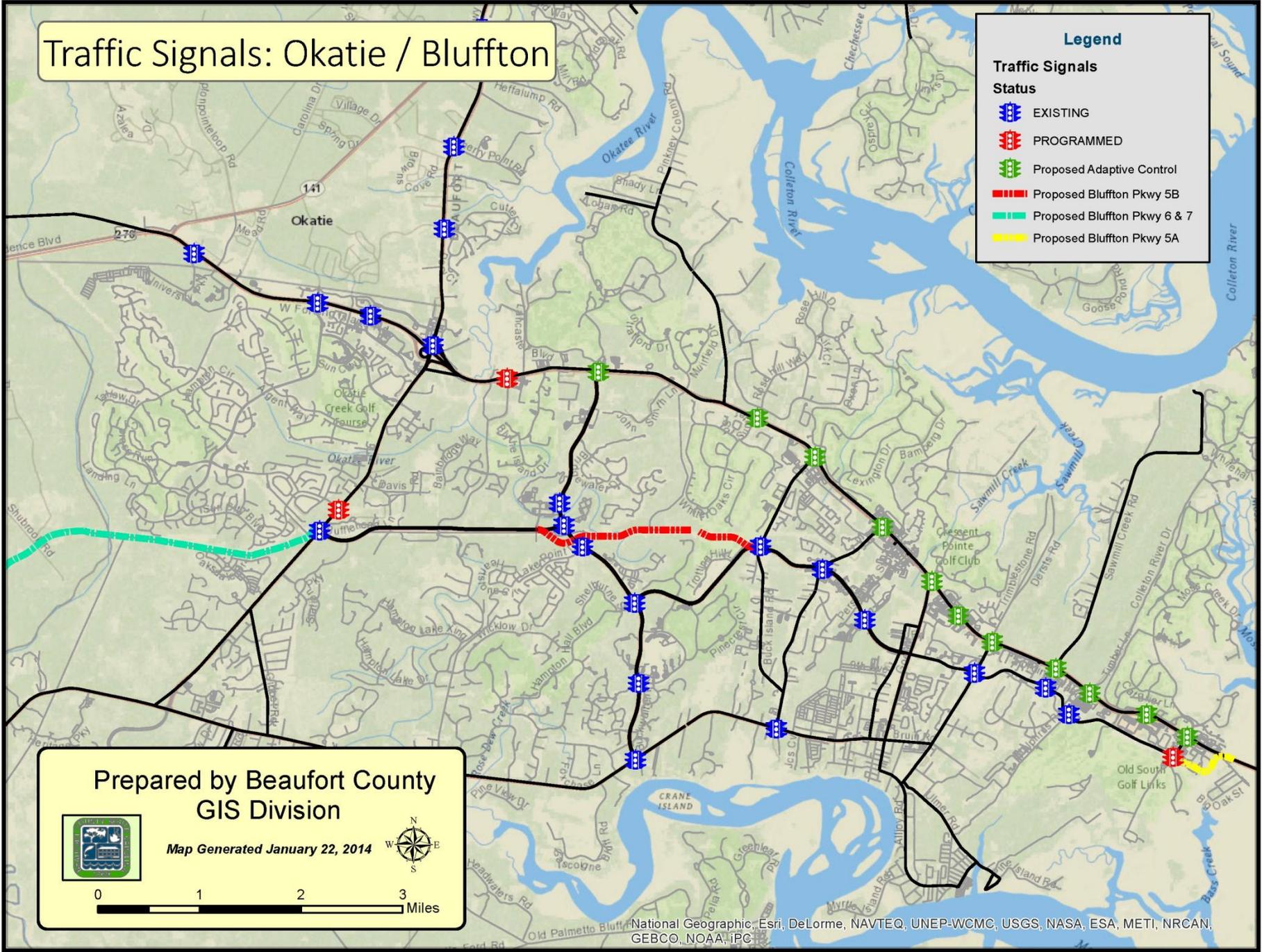
- Low Cost
- Utilize Existing Infrastructure
- High Benefit-Cost Ratio
- Quickly Deployed
- Expandable
- Improves Safety, Efficiency
- Reduce Delays and Stops
- Reliable

Traffic Signals: Okatie / Bluffton

Legend

Traffic Signals Status

-  EXISTING
-  PROGRAMMED
-  Proposed Adaptive Control
-  Proposed Bluffton Pkwy 5B
-  Proposed Bluffton Pkwy 6 & 7
-  Proposed Bluffton Pkwy 5A



Prepared by Beaufort County
GIS Division



Map Generated January 22, 2014



Solid Waste Budget Update

February 17, 2014

Budget Line Items

- 10001340-51165 Solid Waste Hauling Services
 - FY 14 Budget \$850,000
- 10001340-51166 Solid Waste Disposal Services
 - FY 14 Budget \$2,500,000
- 10001340-51167 Recycling Services
 - FY 14 Budget \$350,000
- 10001340-5116A Daufuskie Hauling Services
 - FY 14 Budget \$50,000
- 10001340-5116B Daufuskie Disposal Services
 - FY 14 Budget \$8,000

10001340-51165 Solid Waste Hauling Services
FY 14 Budget \$850,000

- Contractor Republic Waste
 - \$111 per haul from our Convenience Centers
- PO 20140393 - \$808,000
 - Current PO balance \$398,103
 - 6 months remain- Avg. monthly cost \$60,000
- No adjustment necessary at this time

10001340-51166 Solid Waste Disposal Services
FY 14 Budget \$2,500,000

- Class 3 waste to Hickory Hill Landfill
 - PO 20140391 - \$2,100,000
- Class 2 waste to:
 - Oakwood Landfill – PO 20140357 - \$120,000
 - Barnwell Resources – PO 20140356 - \$60,000
- Class 1 waste to:
 - Oakwood Landfill - PO 20140357 - \$120,000
 - Barnwell Resources - PO 20140356 - \$60,000
 - Evergreen – PO 20140361 - \$120,000

10001340-51166 Solid Waste Disposal Services FY 14 Budget \$2,500,000

- Class 3 : Hickory Hill; Waste Management \$42.42 /ton
 - Annual CPI Adjustment
- PO 20140391 - \$2,100,000
 - Current PO balance \$876,137 – Average invoice \$ 177,000 per month – 5 months remaining = \$885,000
 - Unencumbered budget balance \$92,000
 - Corrective action increase PO by \$30,000

10001340-51166 Solid Waste Disposal Services FY 14 Budget \$2,500,000

- Class 2 & Class 1:
 - Oakwood C &D \$24/ton ; 5 years fixed then CPI adjust
 - PO 20140357 - \$120,000 – Current PO balance \$59,000
 - Average monthly invoice \$8,600 – 5 months remaining = \$ 43,000
 - No adjustment necessary at this time
 - Barnwell Resources located on Lady's Island ; C&D \$35/ton
 - PO 20140356 - \$60,000 – Current PO balance -\$996.83 when we pay the December bill – Average monthly invoice \$8,700 – 6 months remaining = \$52,200
 - Unencumbered budget balance \$62,000
 - Corrective action increase PO by \$60,000

Causes of Barnwell PO Error

- Underestimated amount/volume when dividing funds between accounts at beginning of fiscal year ; spent \$90,000 last year
- 3-2-1 Initiative is directing more C& D to Barnwell than anticipated but diverting it from Hickory Hill creates \$7.42 per ton cost avoidance

3-2-1 Initiative

CLASS 3

- A. HOUSEHOLD GARBAGE**
- B. ALL BAGGED TRASH**

CLASS 2

- A. FURNITURE (ALL TYPES)**
- B. MATTRESSES**
- C. PLASTICS**
- D. STYROFOAM**
- E. VINYL**
- F. FIBERGLASS**
- G. BRICKS/MASONRY**

CLASS 1

- A. YARD WASTE**
- B. LEAVES**
- C. LIMBS/BRANCHES (Up to 6 inches diameter/4 feet long or less)**
- D. LUMBER**
- E. PALLETS**

3-2-1 Initiative

Hickory Hill Disposal

Month	FY 2014	FY 2013
July	5466.37	4829.35
August	4743.30	4630.40
September	3366.60	3696.15
October	3900.74	4027.28
November	3295.15	3844.26
December	4051.53	3893.76
January	3636.33	4278.86

10001340-51166 Solid Waste Disposal Services FY 14 Budget \$2,500,000

- Class 1 :
 - Oakwood yard waste \$18.25/ton
 - Covered under previous PO
 - Barnwell Resources yard waste \$30/ton
 - Covered under previous PO
 - Evergreen yard waste \$90 per container
 - PO 20140361 - \$120,000 - Current PO balance \$71,865
 - Average monthly invoice \$6,000 – 5 months remaining = \$30,000
 - No adjustment necessary at this time

10001340-51167 Recycling Services
FY 14 Budget \$350,000

- PO 20140476 - \$350,000
 - Current PO balance \$172,997 – Average monthly invoice \$25,000 – 5 months remaining = \$ 125,000
 - No adjustment necessary at this time

- 10001340-5116A Daufuskie Hauling Services
 - FY 14 Budget \$50,000 – PO 20140394 -\$50,000
 - Current PO balance \$29,000 – Average monthly invoice \$4,200 – 6 months remaining = \$25,200
 - No adjustment necessary at this time
- 10001340-5116B Daufuskie Disposal Services
 - FY 14 Budget \$8,000 – PO 20140371 - \$8,000
 - Current PO balance \$1,932 – Average monthly invoice \$900 – 5 months remaining = \$4,500
 - Corrective action reduce Evergreen PO 20140361 \$6,000 and add the increase to PO 20140371

Summary

- PO 20140391 - \$2,100,000 Hickory Hill
 - Increase by \$30,000
- PO 20140356 - \$60,000 Barnwell Resources
 - Increase by \$60,000
- PO 20140371 - \$8,000 Daufuskie Disposal Services
 - Corrective action reduce Evergreen PO 20140361 \$6,000 and add the increase to PO 20140371