

SCDOT District 6 Adaptive Signal System Installation

September 12, 2016



South Carolina Department of Transportation

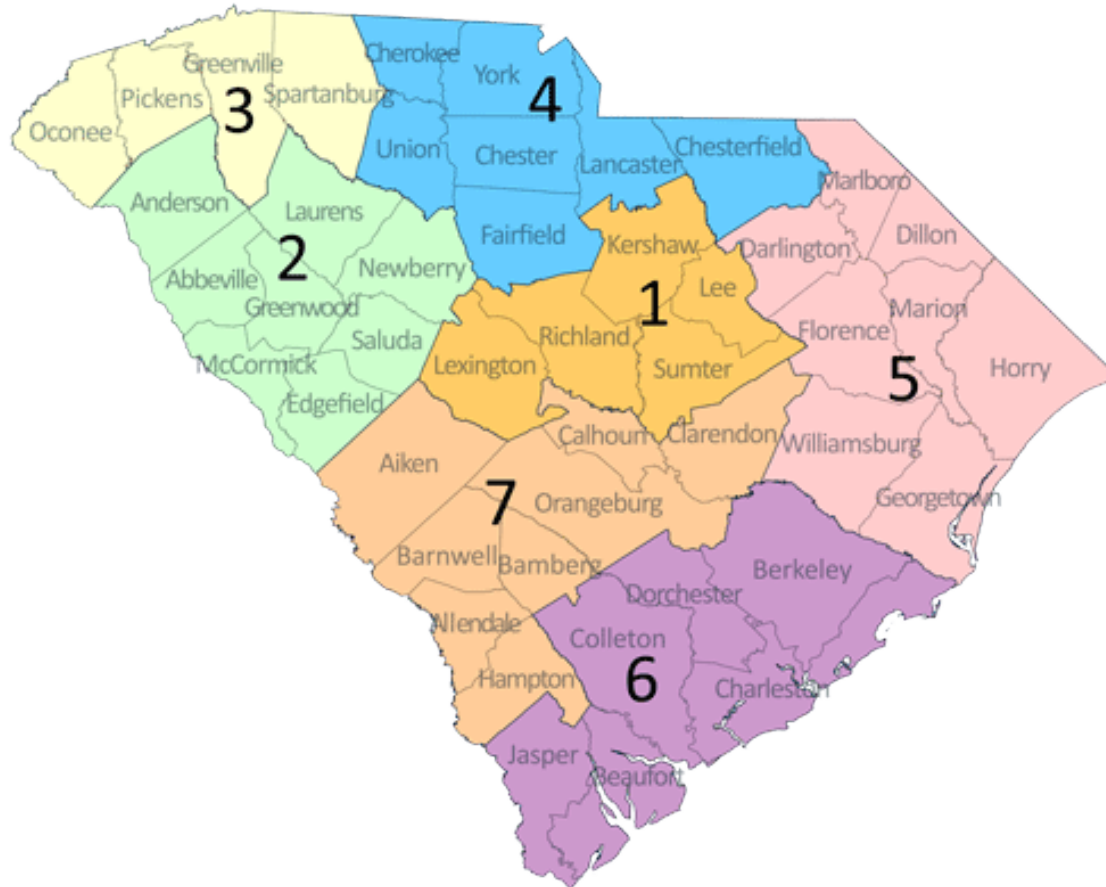
Objectives

- **Adaptive Signals Overview**
- **SCDOT District 6 Installations**
 - **Funding**
 - **Location characteristics**
 - **System details**
 - **Successes & challenges**

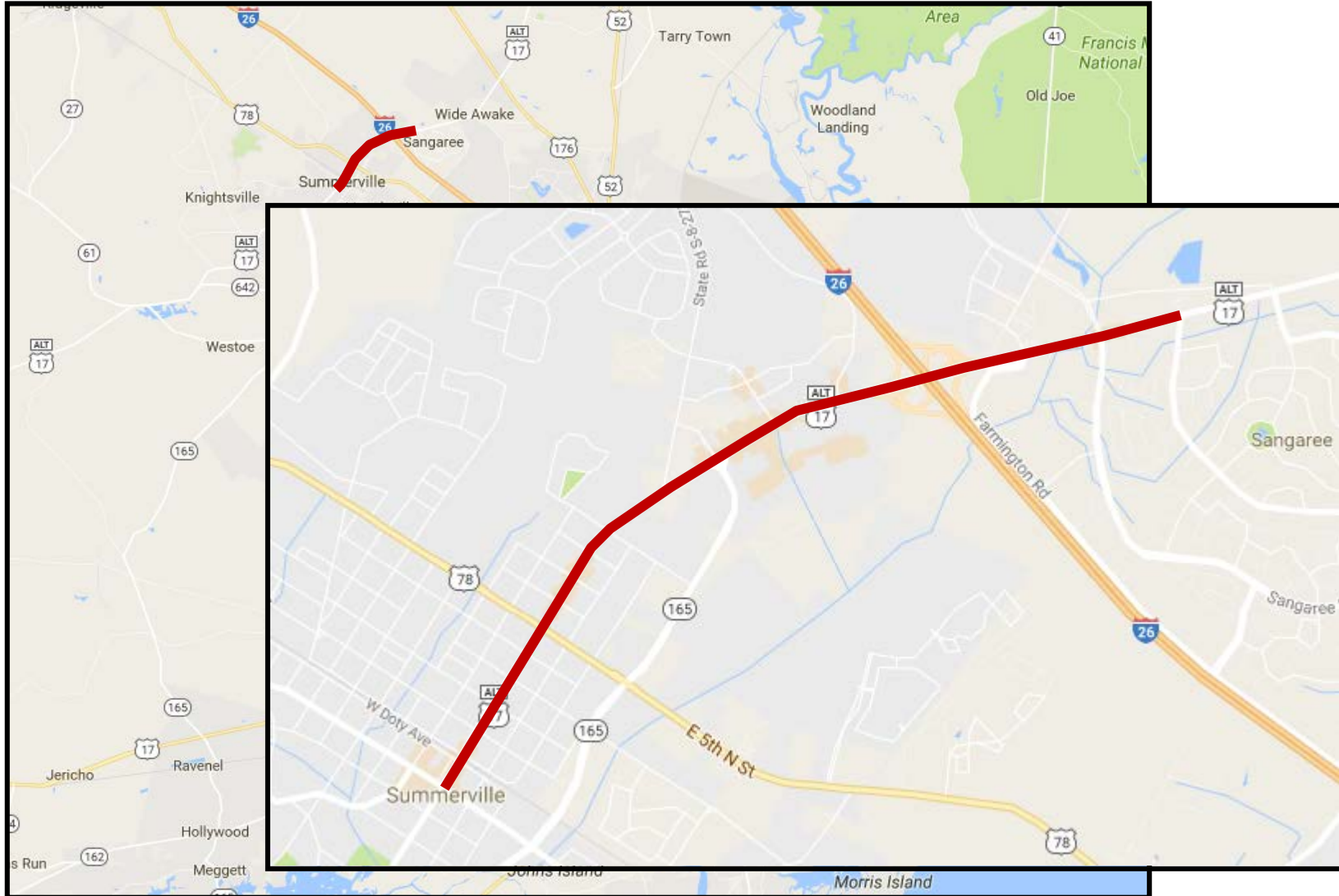
Adaptive Signal System Overview

- Signal timings change to meet vehicular demand
- Signals communicate, relaying traffic data
- Settings control level of variance
- Timings likely change every cycle
- Ideal for locations with varying demand
 - Alternative routes
 - Commercial areas
 - Beach/tourist areas (weather-dependent)

SCDOT District 6



US 17A - Location



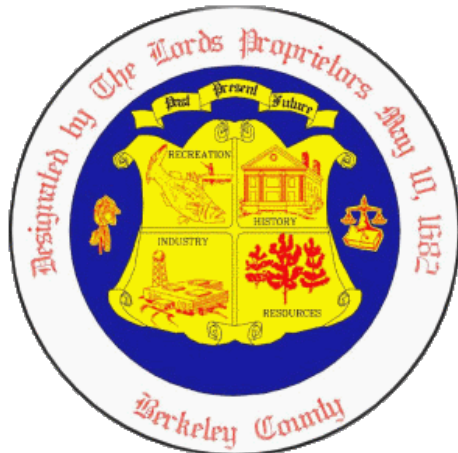
US 17A - Funding



16%



46%

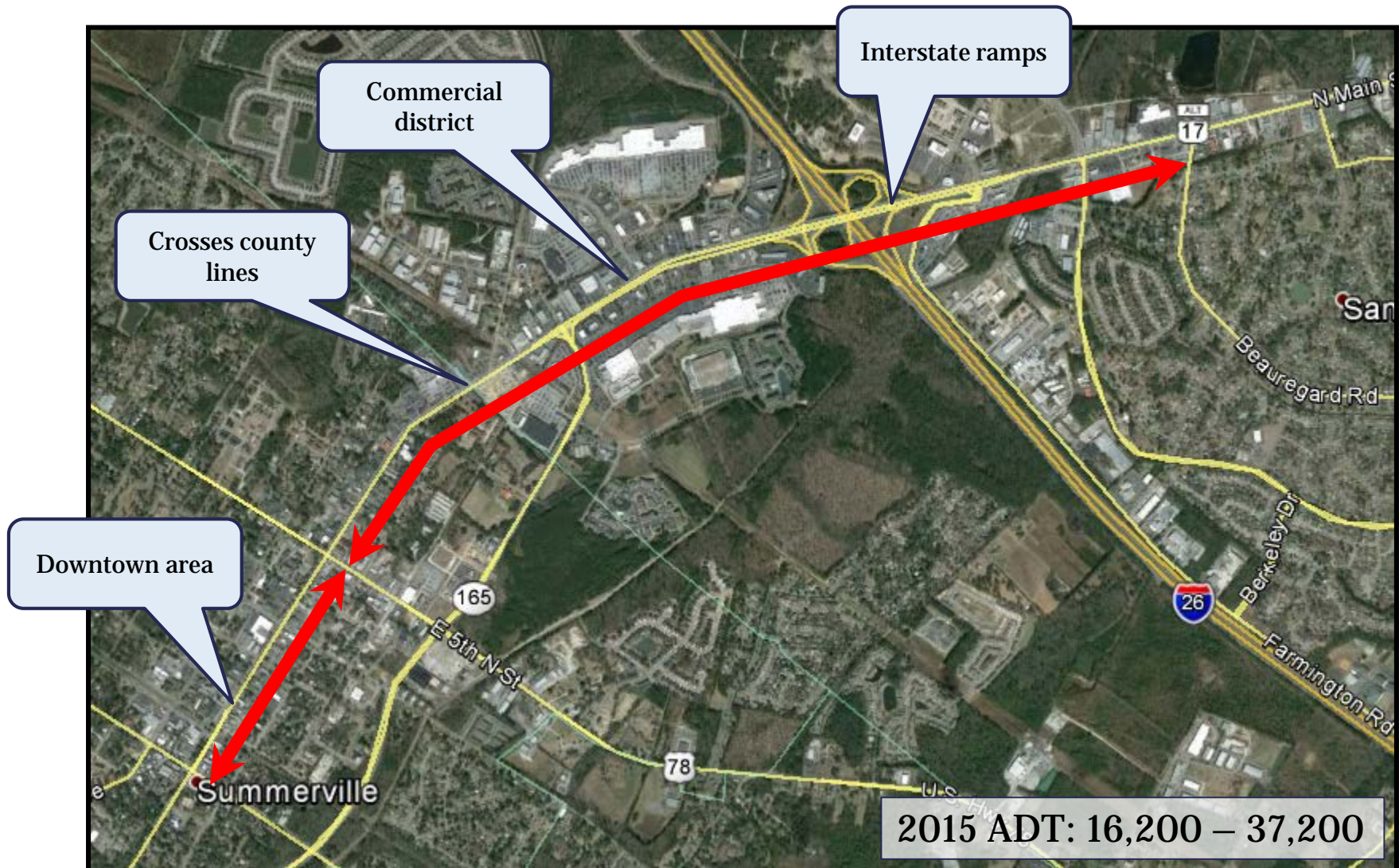


15%

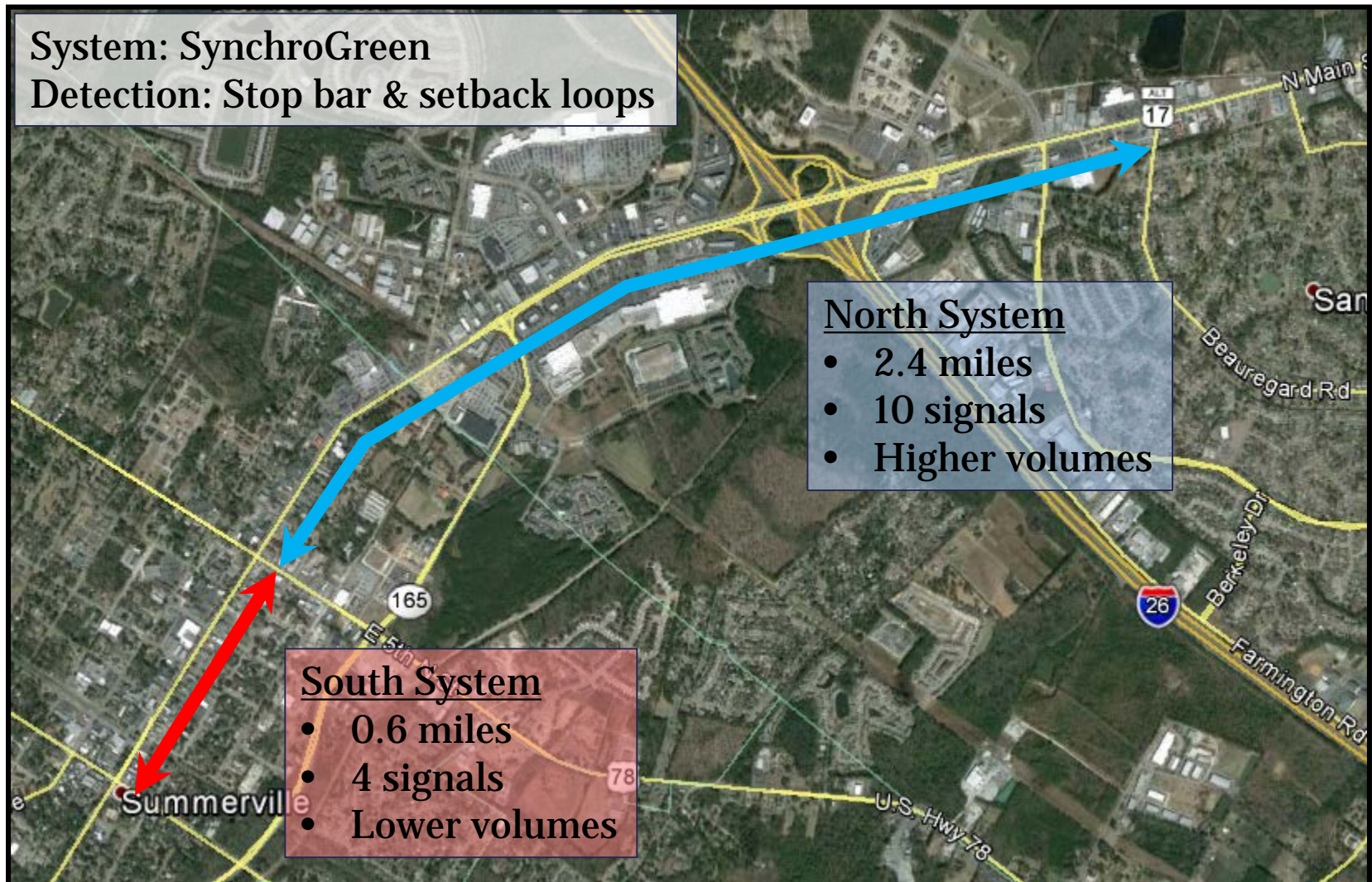


23%

US 17A - Characteristics



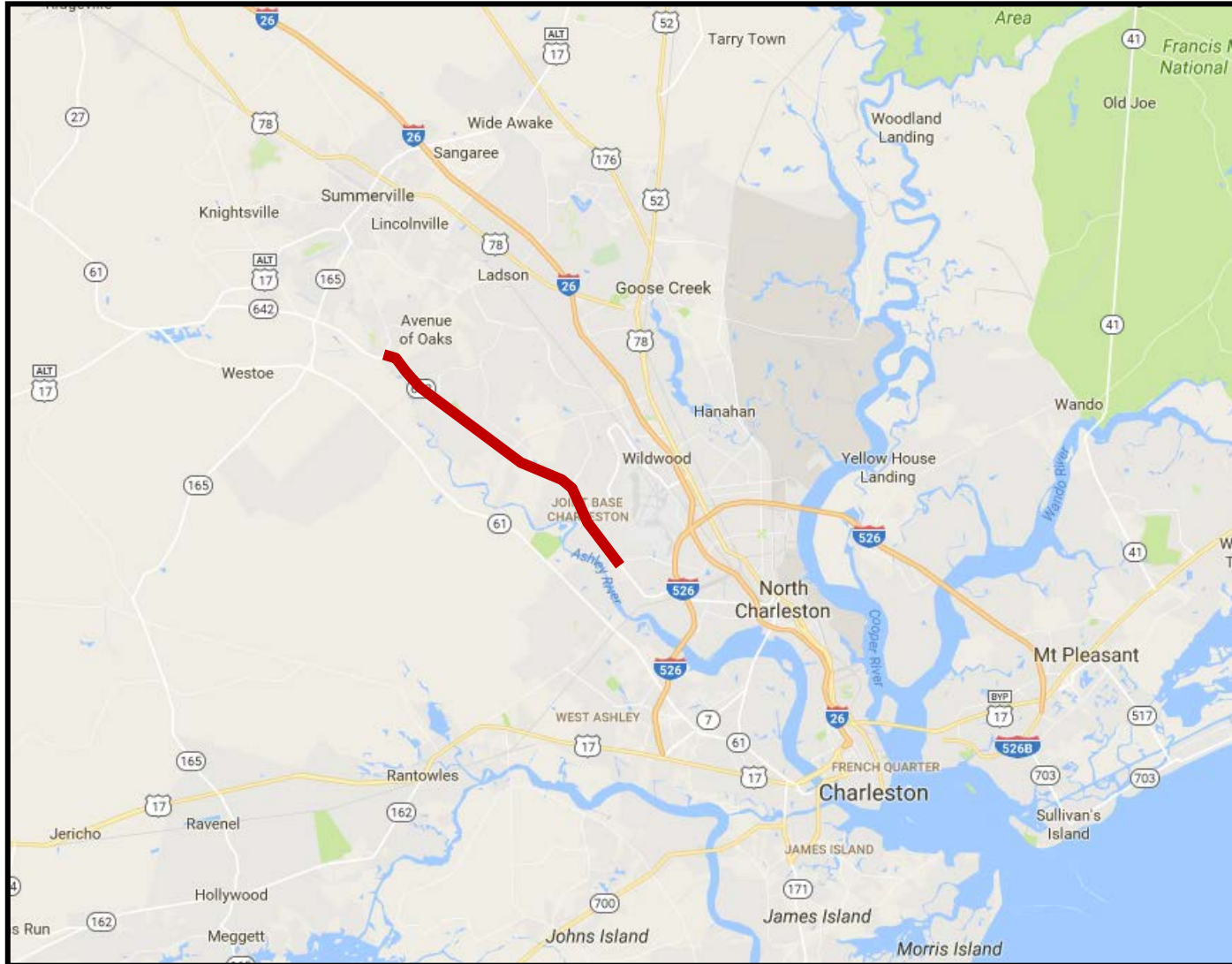
US 17A -System Details



US 17A - Successes & Challenges

- Noticeable reduction in citizen complaints
- Positive feedback from municipalities
- Certain time periods still need tweaking (Friday afternoons)

SC 642 - Location

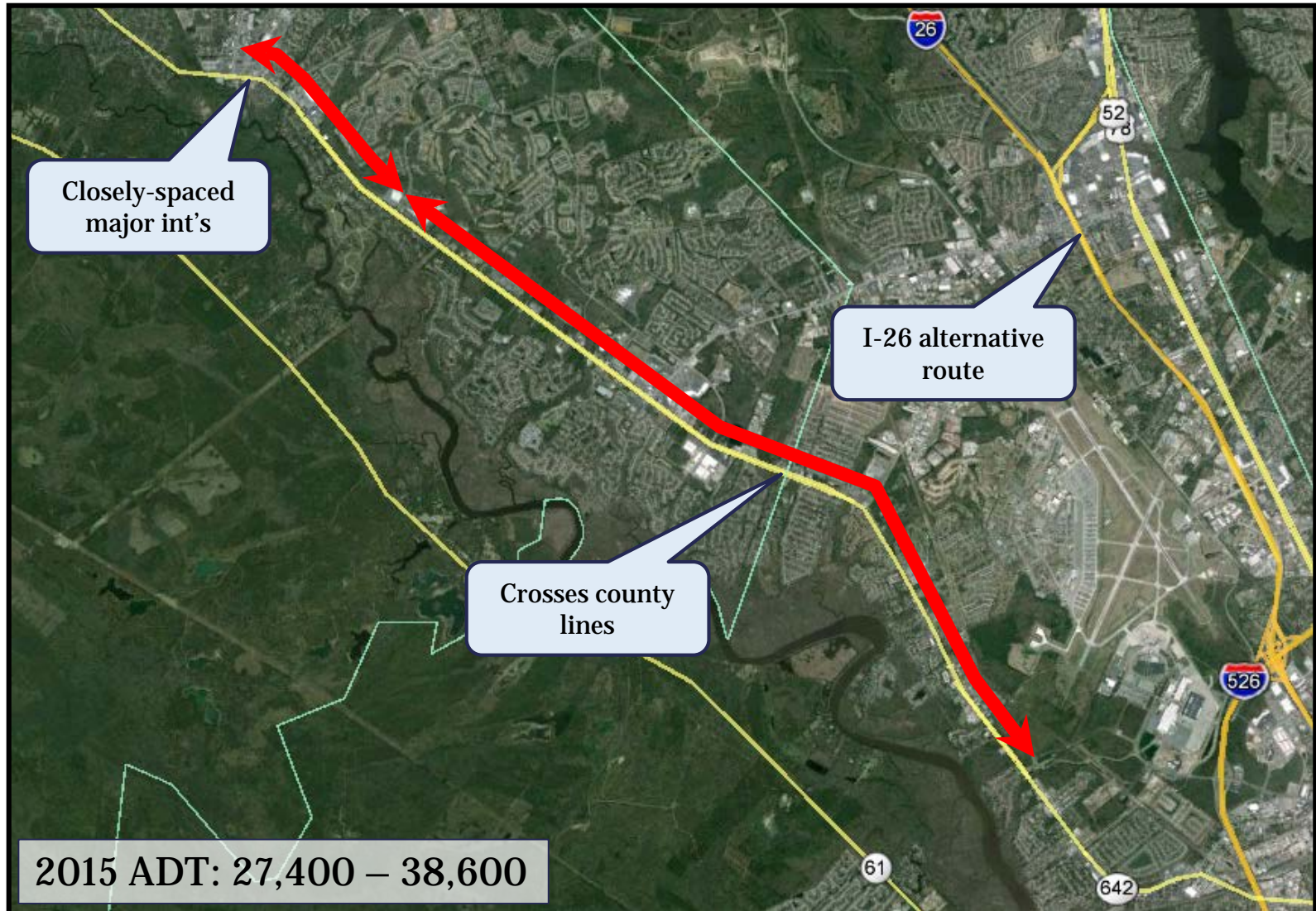


SC 642 - Funding



100%

SC 642 - Characteristics

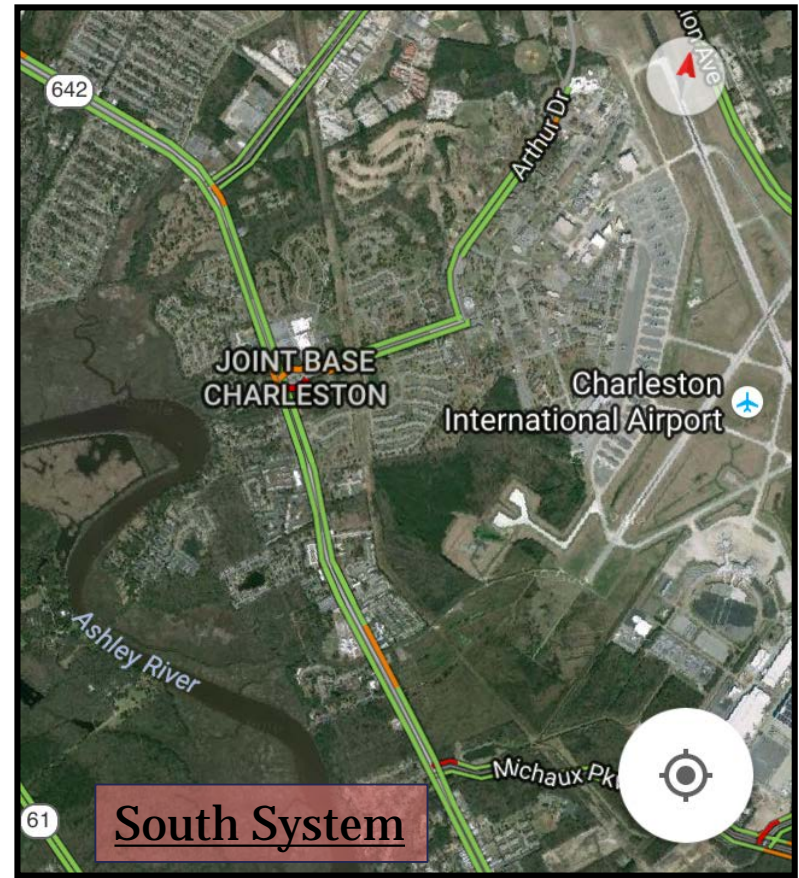
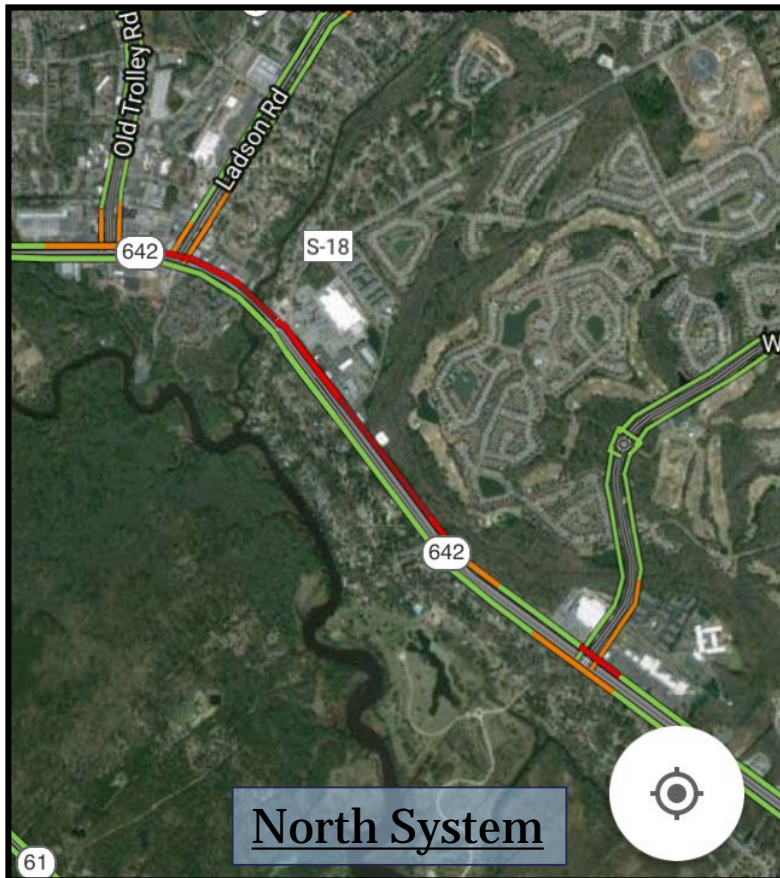


SC 642 - System Details



SC 642 - Successes & Challenges

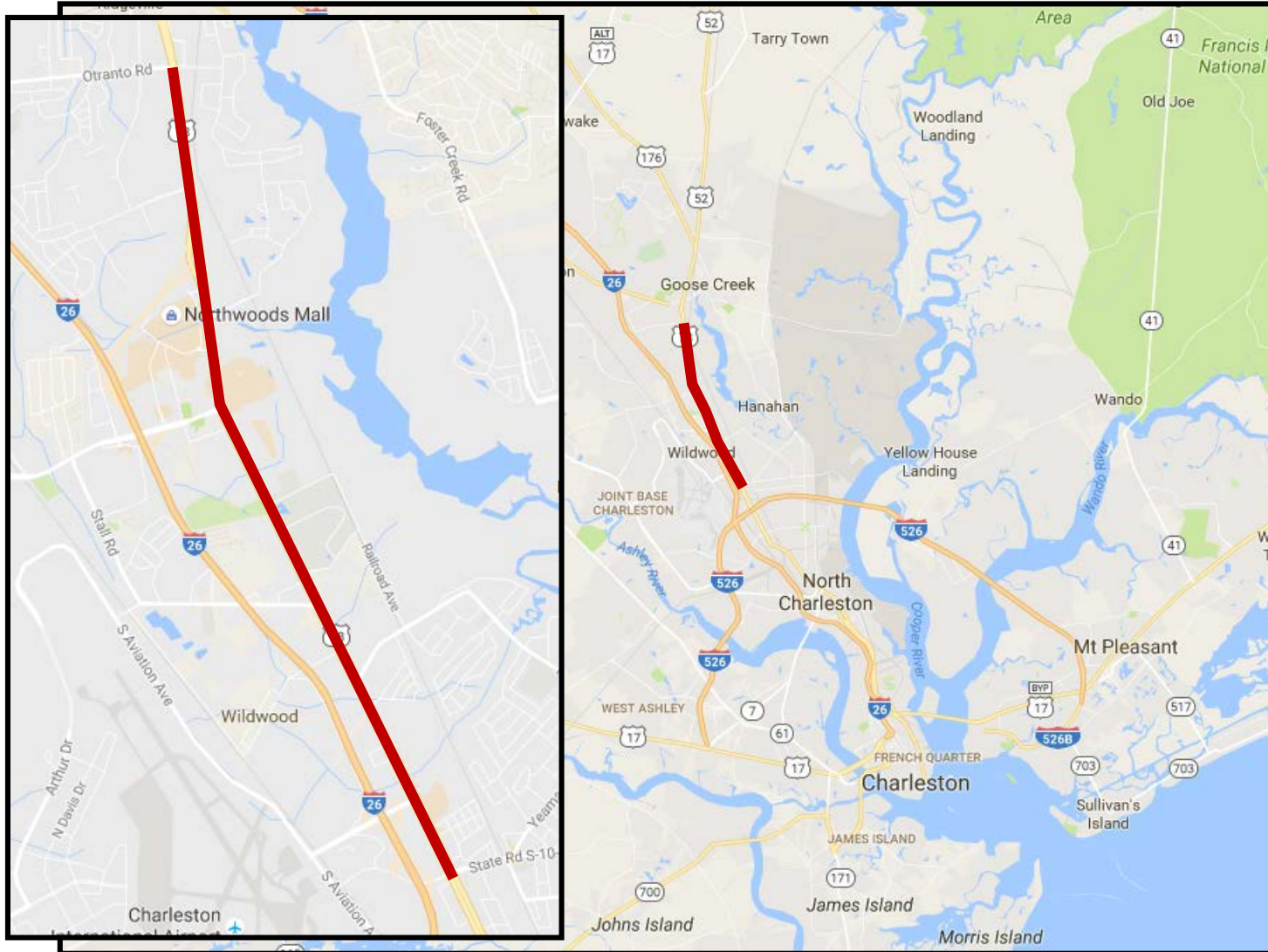
- A tale of two systems



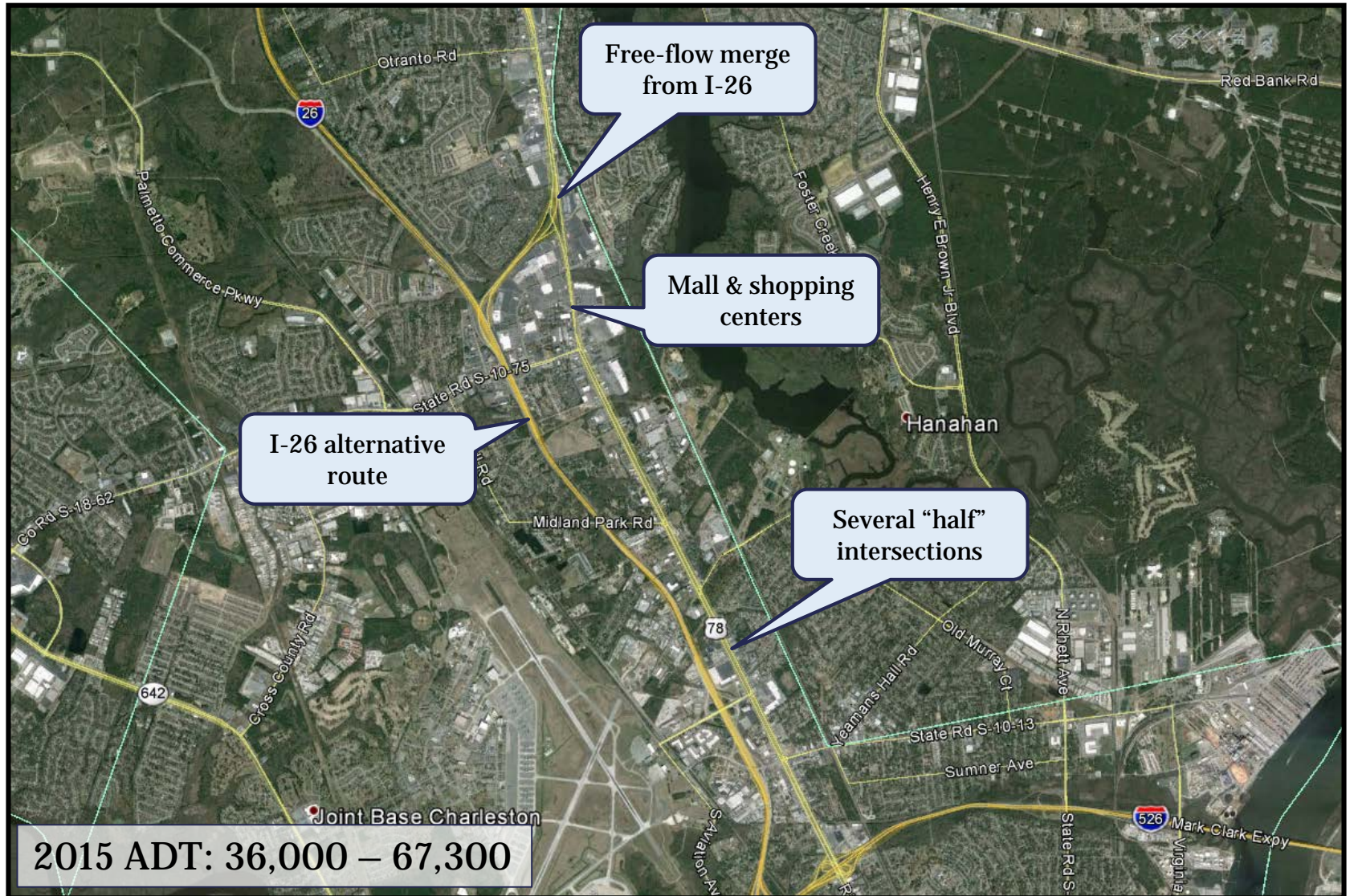
SC 642 - Successes & Challenges

- **Detection inconsistency**
- **AM school intake with manual traffic control**

US 52 - Location



US 52 - Characteristics



US 52 - Funding



14%



86%

US 52 - Status & Next Steps

- **Funding secured from CHATS Committee**
- **SCDOT setting up project**
- **Software installation**
- **System activation & fine tuning**

Upcoming SCDOT Research

- **“Adaptive Signal System Safety Impacts”**
- **Expected kick-off Spring 2017**
- **Review impacts to crash patterns with installation of adaptive signal control**

System Interface Demo

Day of Week	Month	Day of Month	Day Plan
mon-fri	1-12	1-31	1
sat	1-12	1-31	2
sun	1-12	1-31	3

DayPlan.1	
Time	Action
0:00	3
6:00	1
15:15	2
19:00	1
22:00	3

Thank You!

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