

Intersection Traffic Safety Improvements **US 501 at Cannon Road, 3rd Avenue S.**

City of Myrtle Beach Council Presentation
May 24, 2022

Location



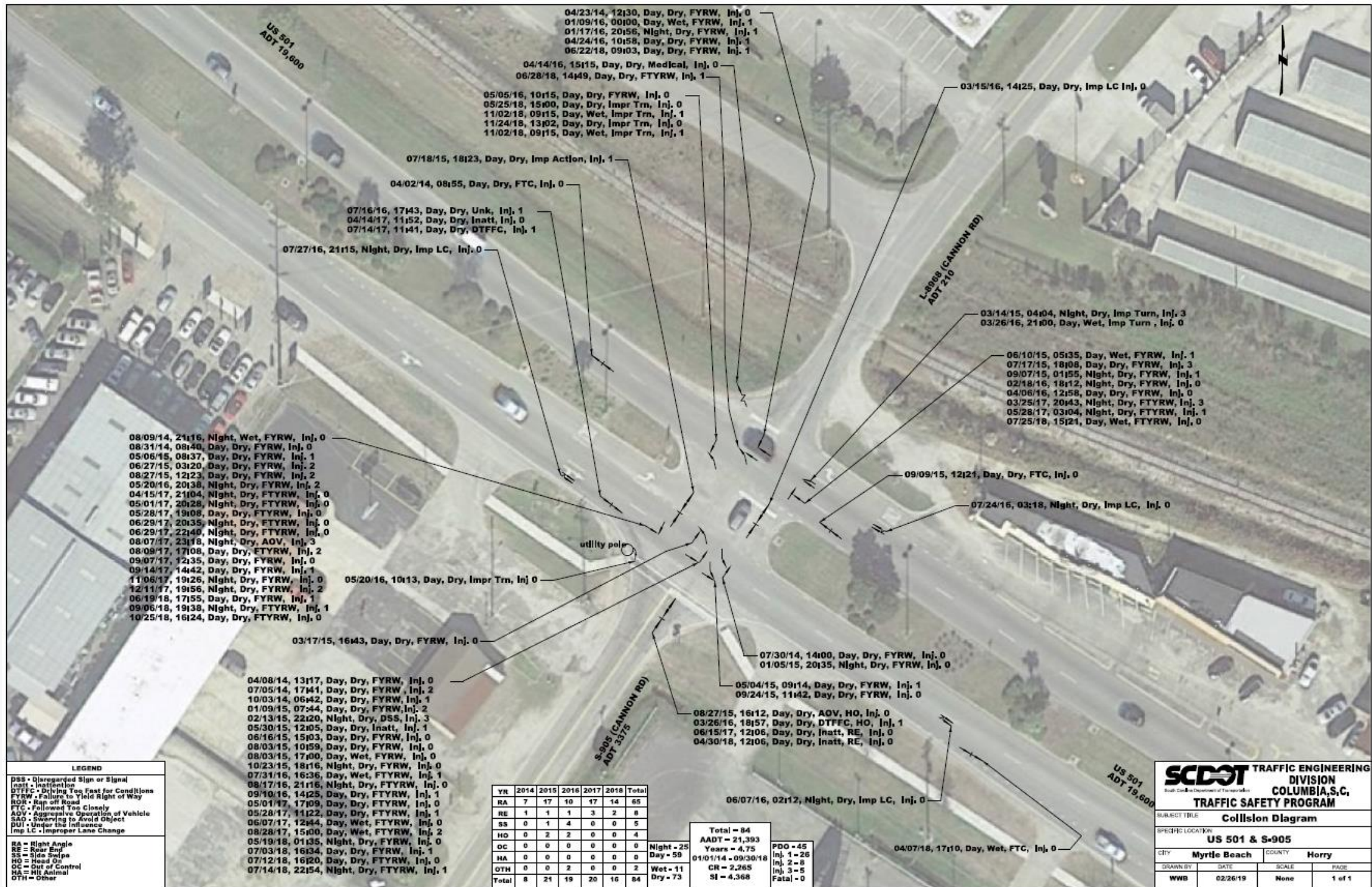
Crash Data

US 501 at Cannon Road

- **84** total crashes
 - 1/1/2014 to 9/20/2018
 - 67 right angle (80%), 8 rear end, 3 side swipe, and 4 head on
 - 39 injury, 5 serious injury, 0 fatal

US 501 at 3rd Avenue S.

- **30** total crashes
 - 1/1/2016 to 3/31/2021
 - 14 right angle (47%), 15 rear end, and 1 side swipe
 - 11 injury, 0 serious injury, 0 fatal



LEGEND

DSS = Disregarded Sign or Signal
Inatt = Inattention
DTFFC = Driving Too Fast for Conditions
FTC = Failure to Yield Right of Way
ROV = Run off Road
FTC = Followed Too Closely
AOV = Aggressive Operation of Vehicle
SAO = Swerving to Avoid Object
DUI = Under the Influence
Imp LC = Improper Lane Change

RA = Right Angle
RE = Rear End
SS = Side Swipe
HO = Head On
OC = Out of Control
HA = Hit Animal
OTH = Other

YR	2014	2015	2016	2017	2018	Total
RA	7	17	10	17	14	65
RE	1	1	1	3	2	8
SS	0	1	4	0	0	5
HO	0	2	2	0	0	4
OC	0	0	0	0	0	0
HA	0	0	0	0	0	0
OTH	0	0	2	0	0	2
Total	8	21	19	20	16	84

Night - 25
Day - 59
Wet - 11
Dry - 73

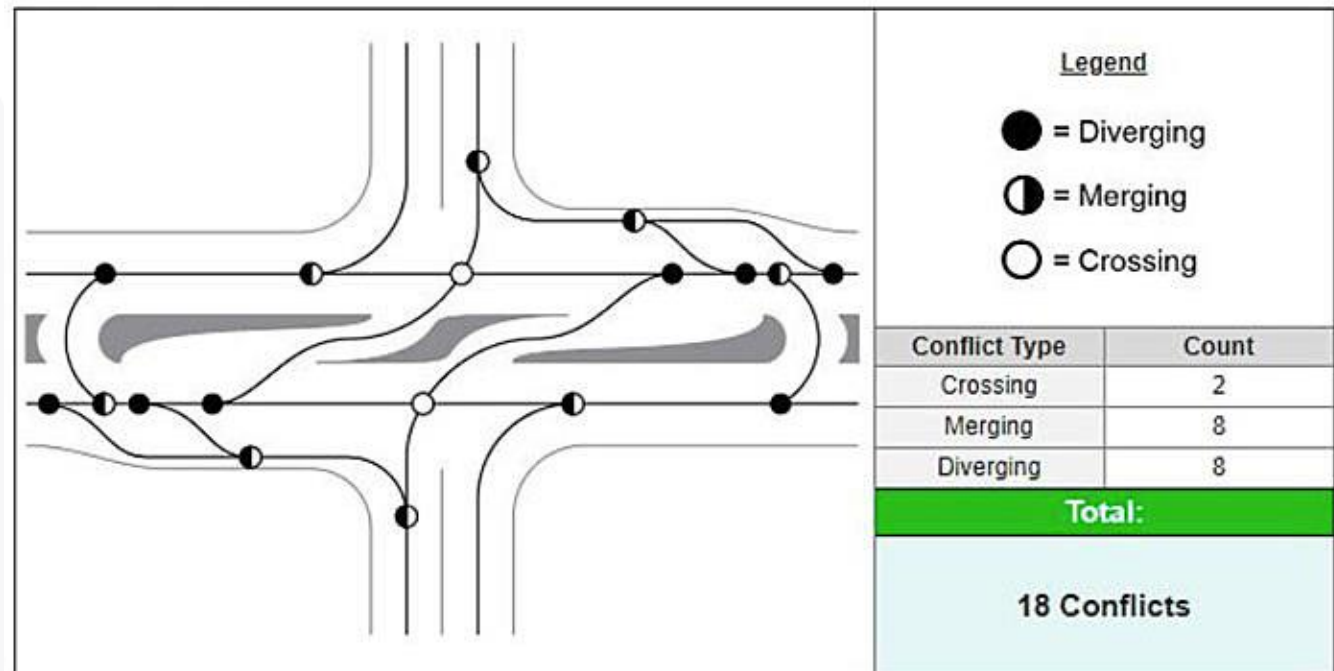
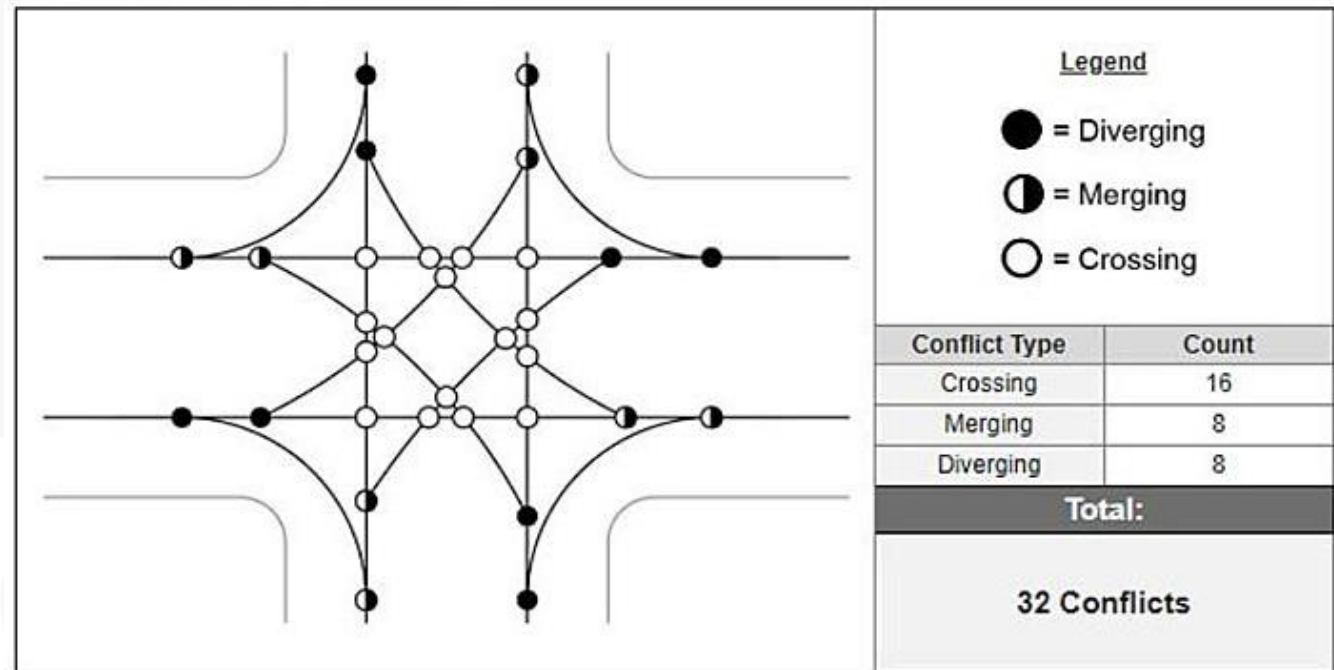
Total = 84
AADT = 21,393
Years = 4.75
01/01/14 - 09/30/18
CR = 2.265
SI = 4.368

FOO - 45
Inj. 1 - 26
Inj. 2 - 8
Inj. 3 - 5
Fatal - 0

SCDOT TRAFFIC ENGINEERING <small>South Carolina Department of Transportation</small> DIVISION COLUMBIA, S.C. TRAFFIC SAFETY PROGRAM			
SUBJECT TITLE Collision Diagram			
SPECIFIC LOCATION US 501 & S-905			
CITY Myrtle Beach	COUNTY Horry		
DRAWN BY WWB	DATE 02/26/19	SCALE None	PAGE 1 of 1

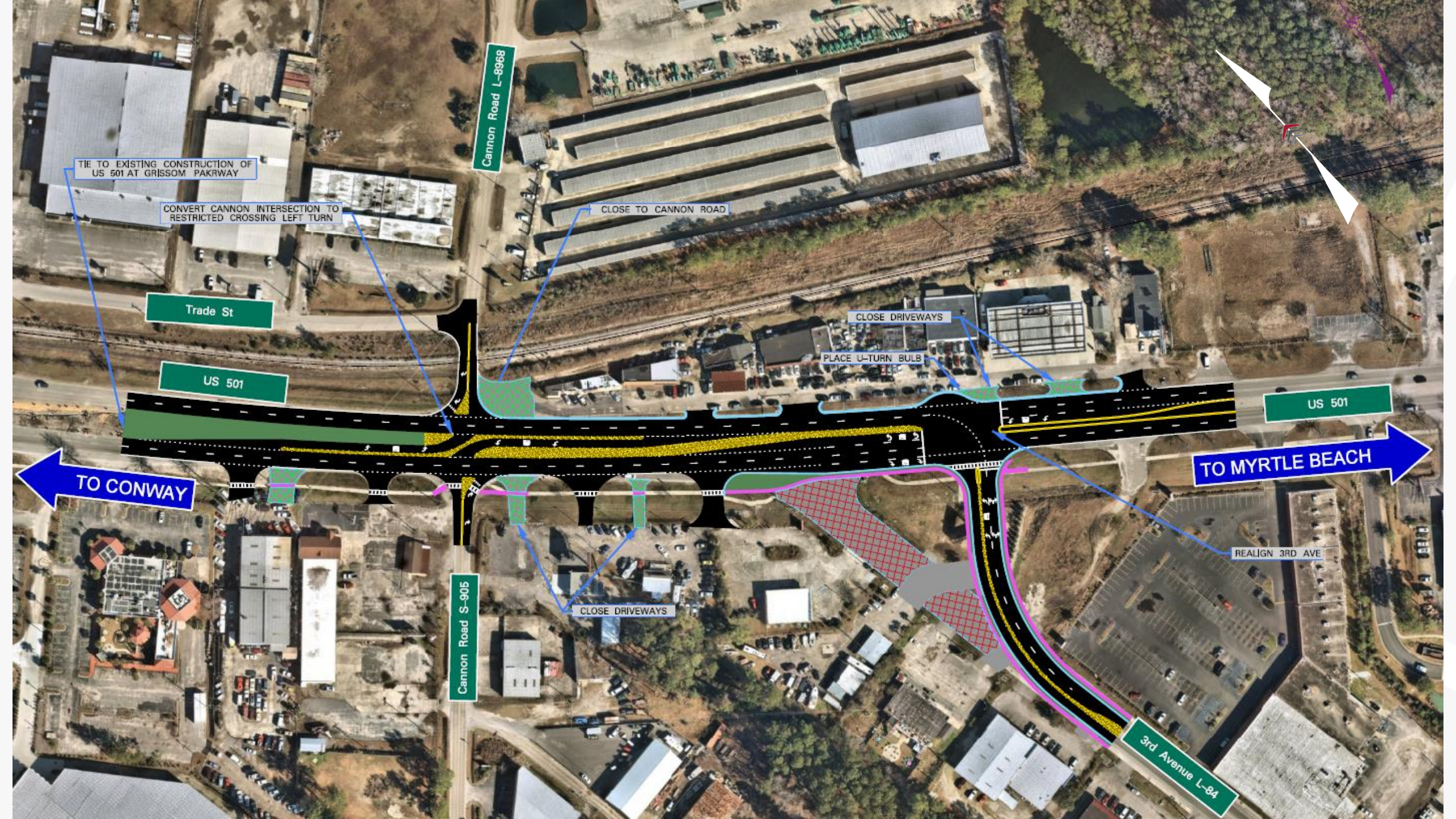
RCIs

- Reduced Conflict Intersection (RCI)
- Innovative intersection design that improves traffic safety and operations by changing how minor road traffic crosses or turns left at a major road.
- RCIs reduces the total number and overall severity of vehicle-to-vehicle conflict points.
- At a typical four-leg intersection, an RCI design **reduces** the total number of conflict points from 32 to 18.



Improvement Alternative

Cannon Road Implement a Reduced Conflict Intersection
3rd Avenue S. Install SB U-Turn Lane + Realign 3rd Avenue S. approach



TIE TO EXISTING CONSTRUCTION OF
US 501 AT GRISSOM PARKWAY

CONVERT CANNON INTERSECTION TO
RESTRICTED CROSSING LEFT TURN

Cannon Road L-9968

CLOSE TO CANNON ROAD

Trade St

US 501

CLOSE DRIVEWAYS

PLACE U-TURN BULB

US 501

TO MYRTLE BEACH

REALIGN 3RD AVE

TO CONWAY

Cannon Road S-905

CLOSE DRIVEWAYS

3rd Avenue L-84

Improvement Alternative Analysis Results

Cannon Road Implement a Reduced Conflict Intersection
3rd Avenue S. Install SB U-Turn Lane + Realign 3rd Avenue S. approach

➤ ***Capacity Analysis***

Alternative will improve level of service from **F** to **C** for the Cannon Road approaches (no change for the 3rd Avenue S. intersection)

➤ ***Crash Modification Analysis***

Alternative will reduce future crash potential by **75%** at Cannon Road and **17%** at 3rd Avenue S.

➤ ***Benefit-Cost Analysis***

Alternative has a benefit-to-cost ratio of **13.11**

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Thank You!

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