



# US 29 Corridor Study

June 11, 2021

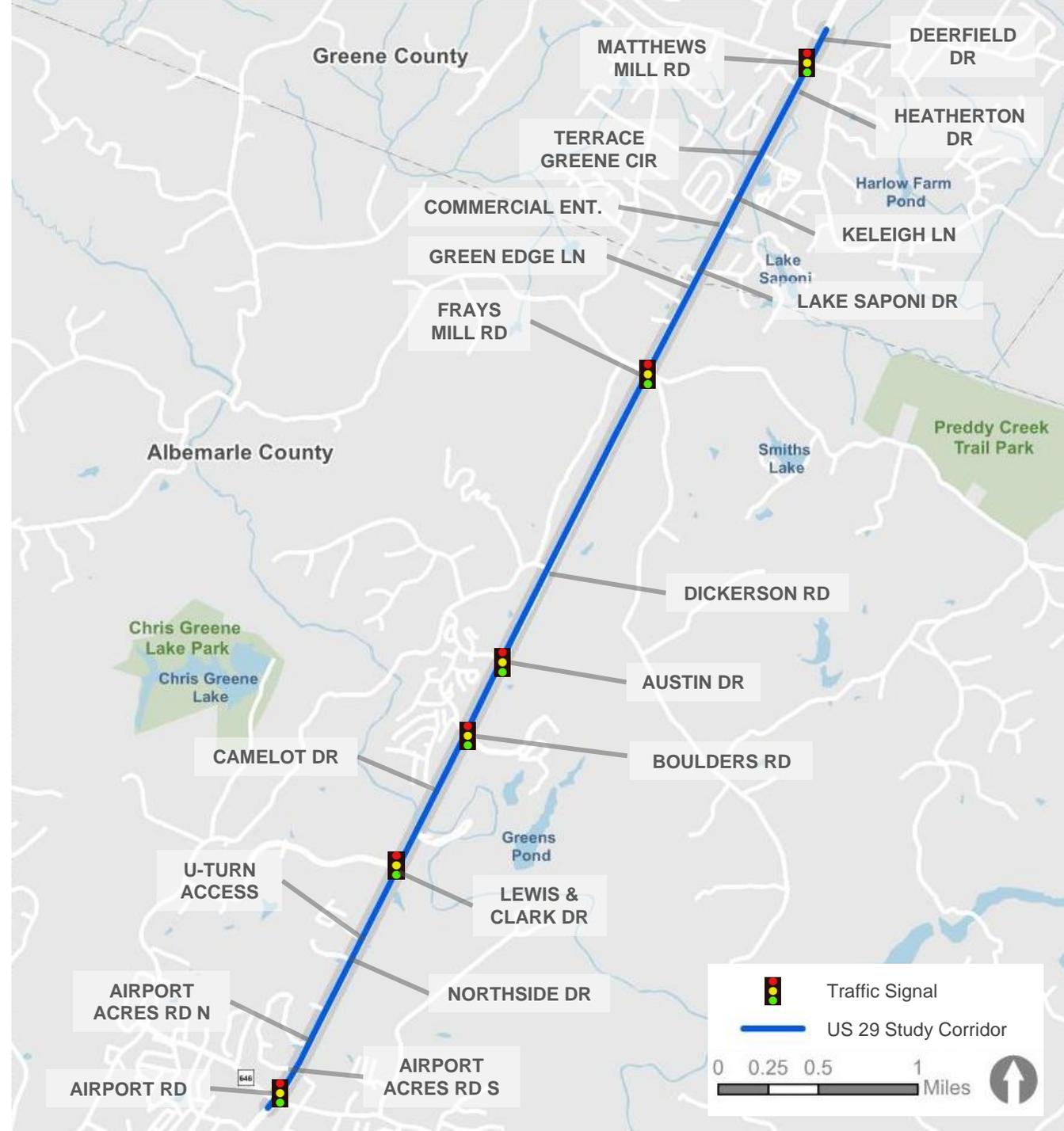


# Agenda

- Project Background and Scope
- Corridor Overview
  - Existing Characteristics
  - Planned Projects
- Crash Data
- Traffic Operations
- Goals and Objectives
- Next Steps



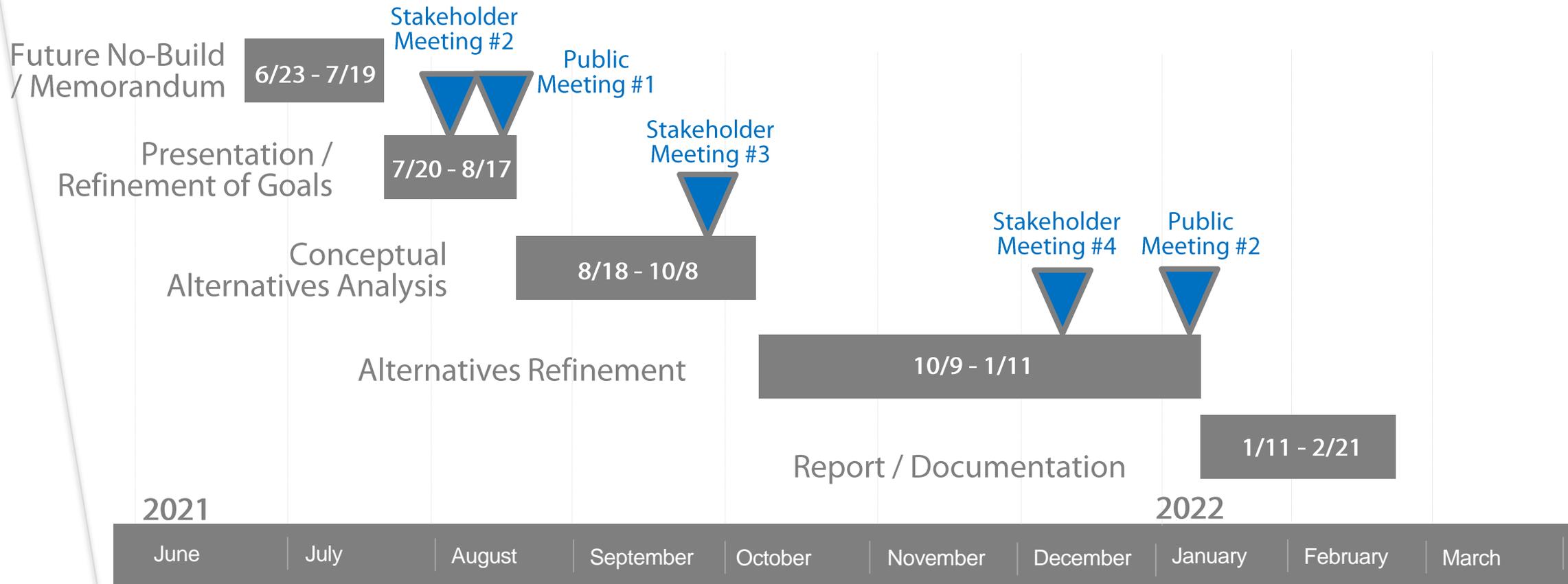
# Corridor Overview



# Phase 1 Study Schedule

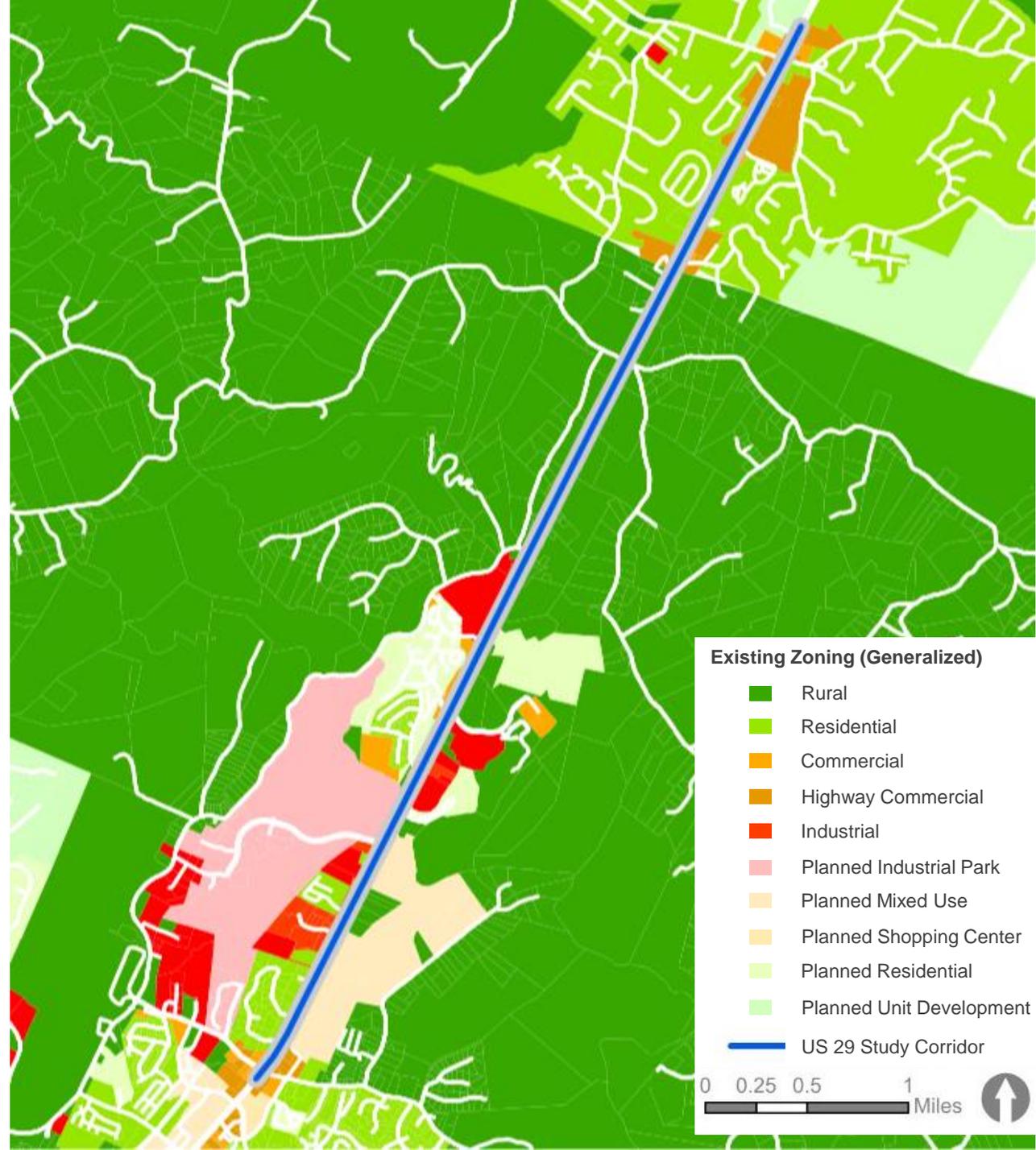


# Phase 2 Study Schedule

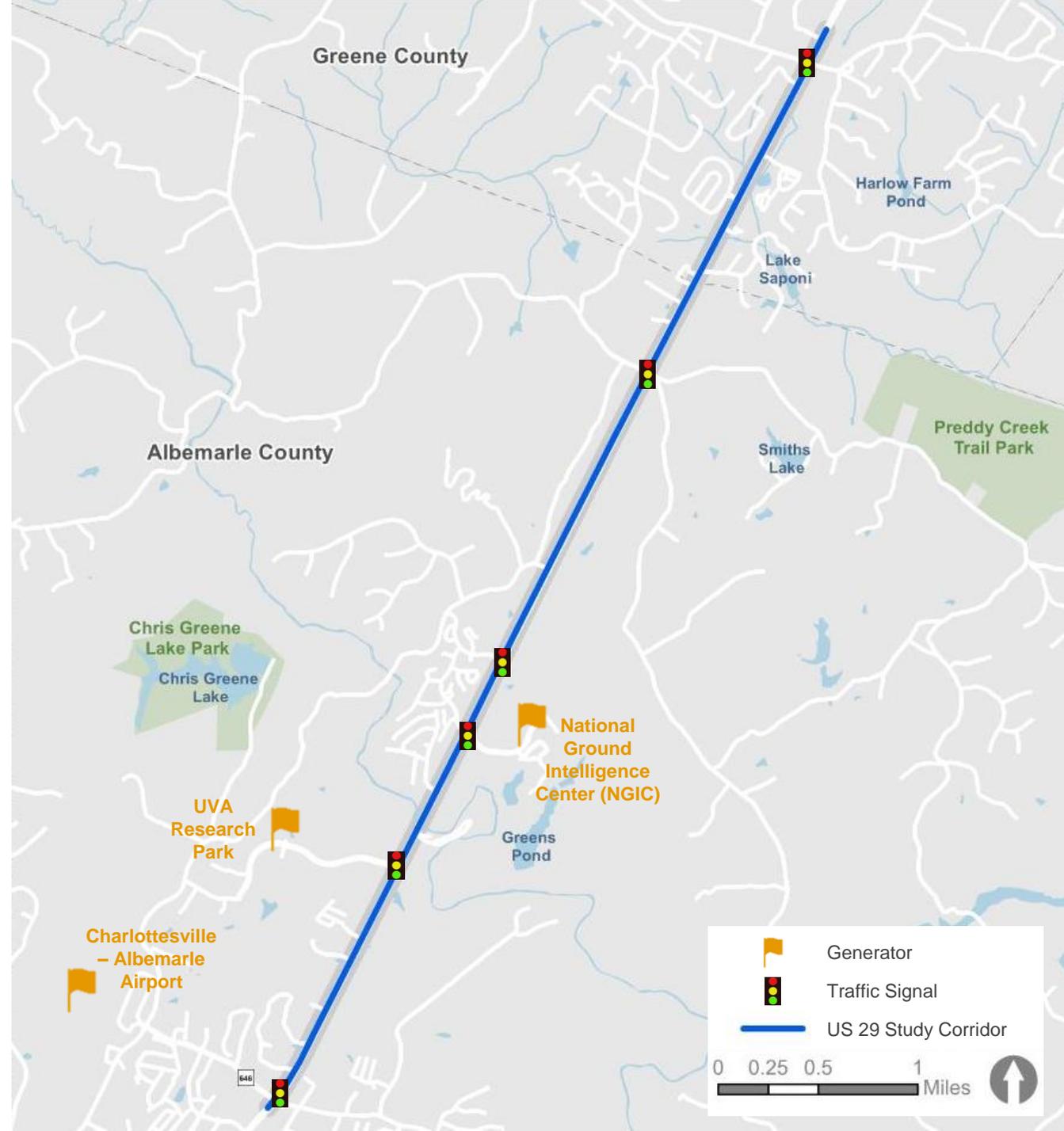


# Existing Characteristics

## Existing Zoning



# Existing Characteristics Generators



# Existing Characteristics

## Multimodal

- No pedestrian or bicycle facilities along the US 29 corridor with the exception of:
  - Airport Road (south and west approaches)
- No transit stops along the US 29 corridor

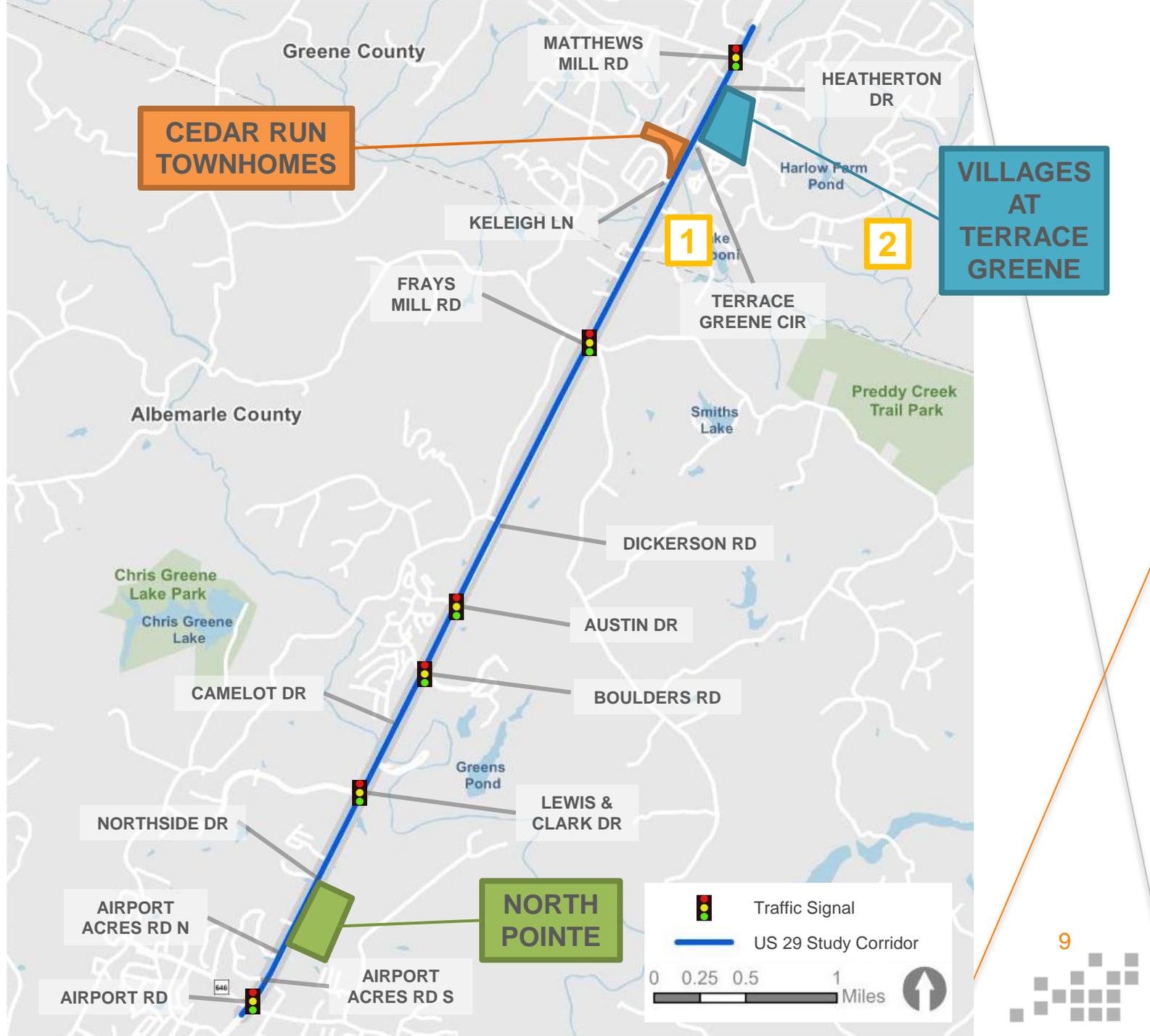


# Planned Development

-  Villages at Terrace Greene (Greene)
-  Cedar Run Townhomes (Greene)
-  North Pointe (Albemarle)

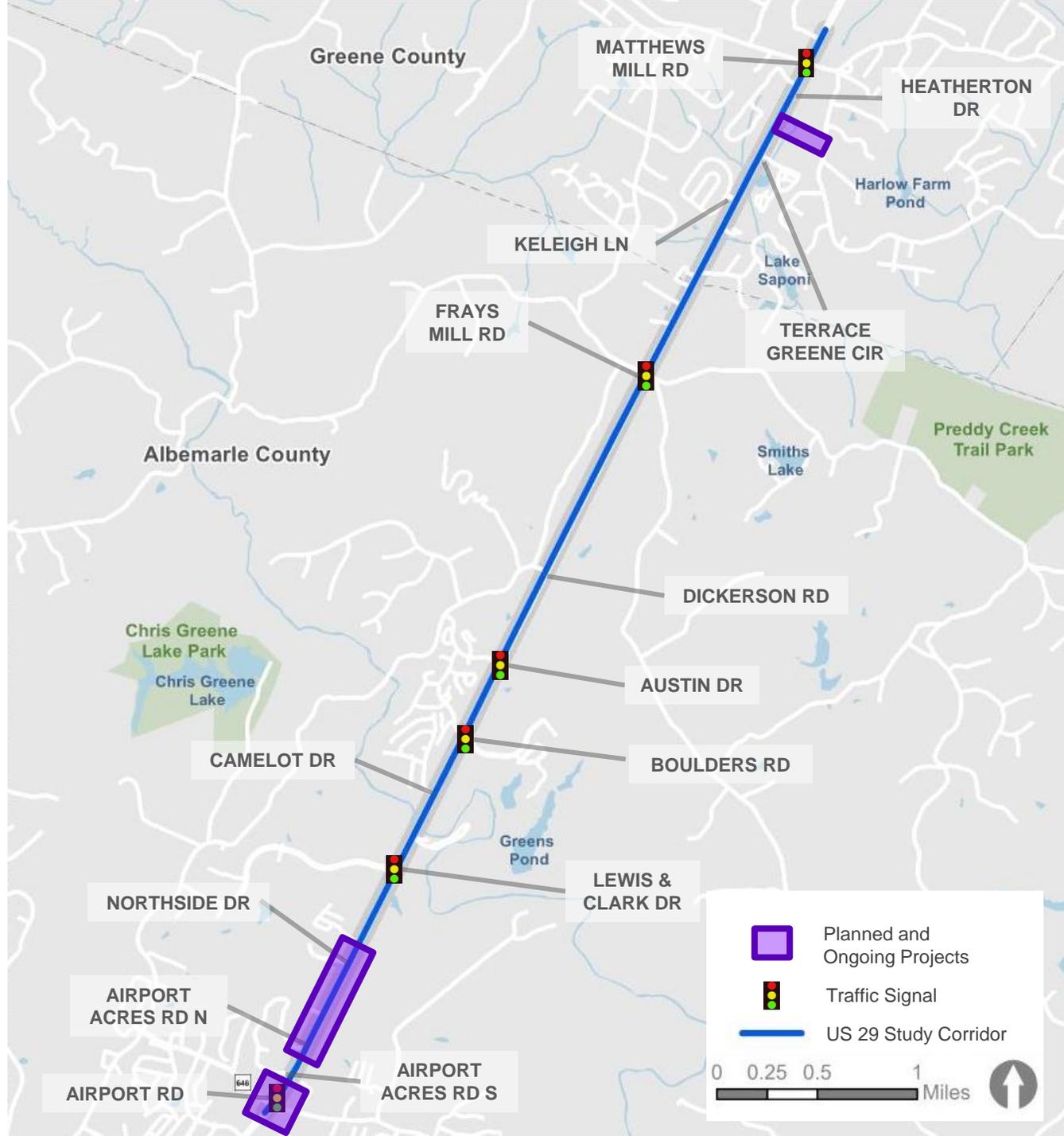
Information still needed for:

1. Creekside Development (Greene)
2. Judo Drive Development (Greene)



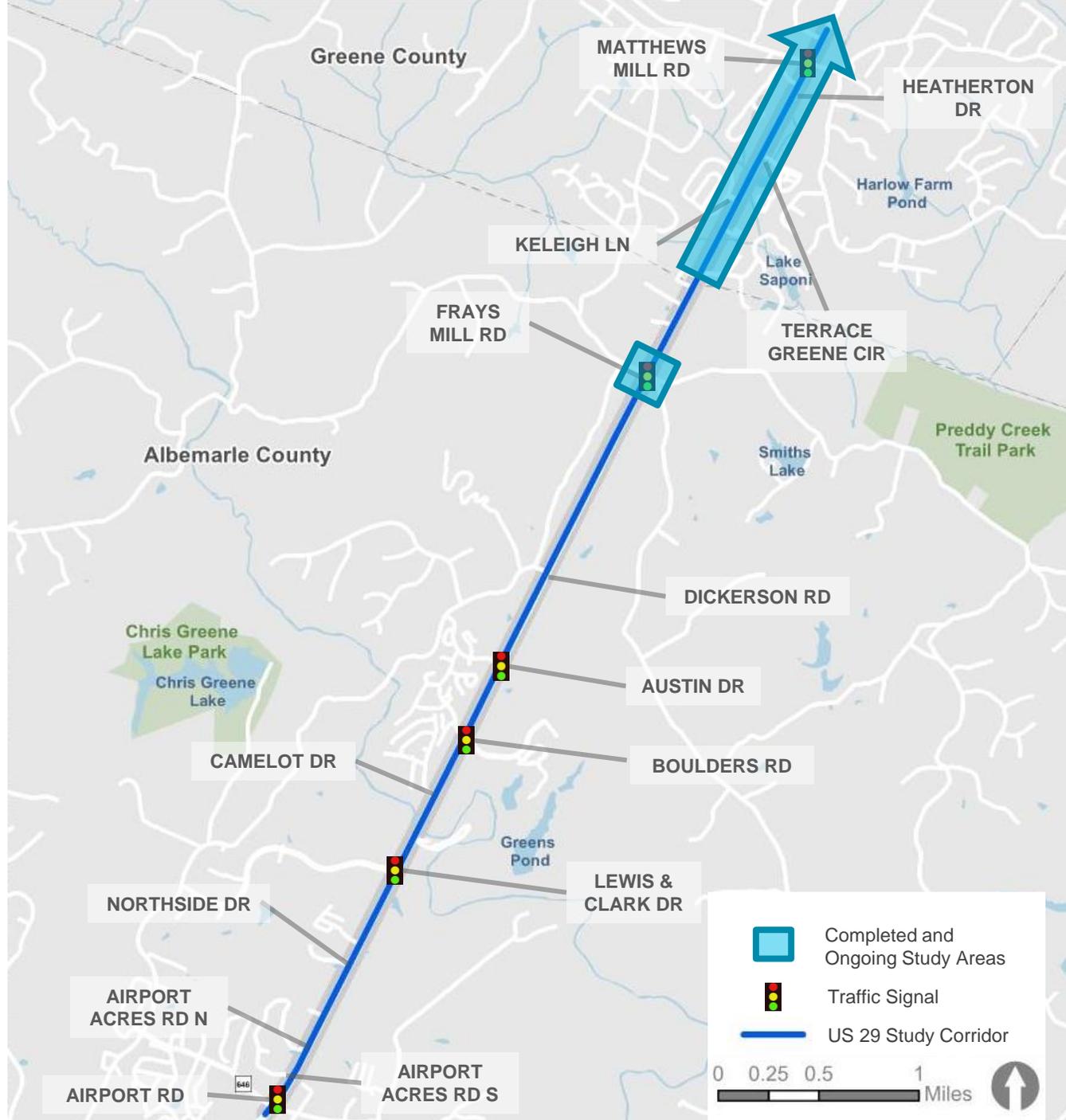
# Planned and Ongoing Projects

1. Constructed RCUTs
  - Northside Drive
  - Airport Acres Road N
  - U-Turn access north of Cypress Drive
2. Route 670 Connector (in design)
3. Striping improvements on Route 29 at Airport Road



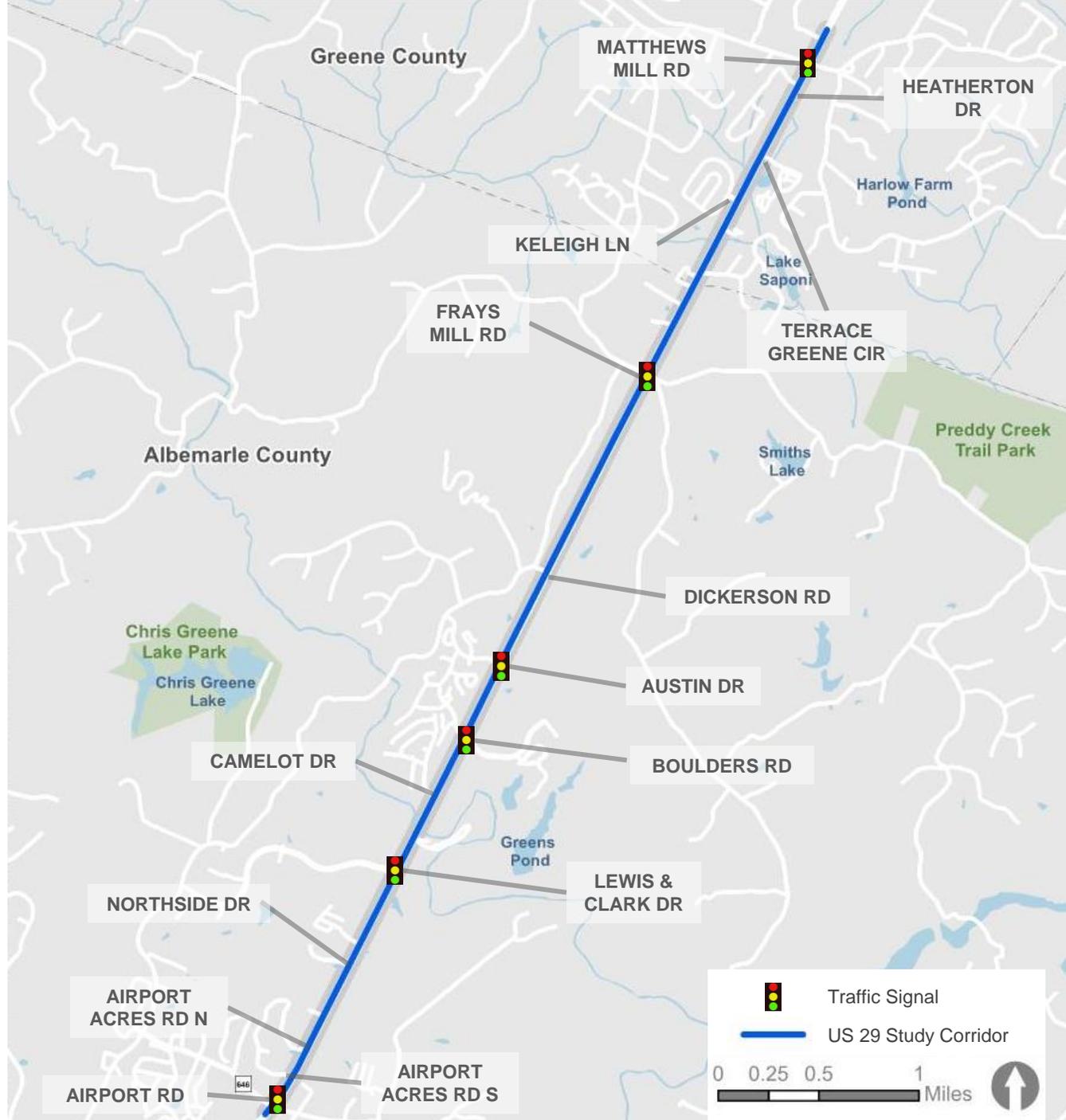
# Completed and Ongoing Studies

1. Signal Coordination Study (ongoing)
2. Frays Mill Study (2018)
3. Ruckersville Small Area Plan (2018)
4. Greene County Corridor Study (2018)
5. Greene County Comprehensive Plan Update (ongoing)
6. Local Climate Action Initiatives in Charlottesville and Albemarle County



# Transit Studies

1. Charlottesville Area Transit Feasibility Study
  - Transit Hub and Park 'n Ride
2. Regional Transit Vision Study
3. Transit Feasibility Study with Albemarle County



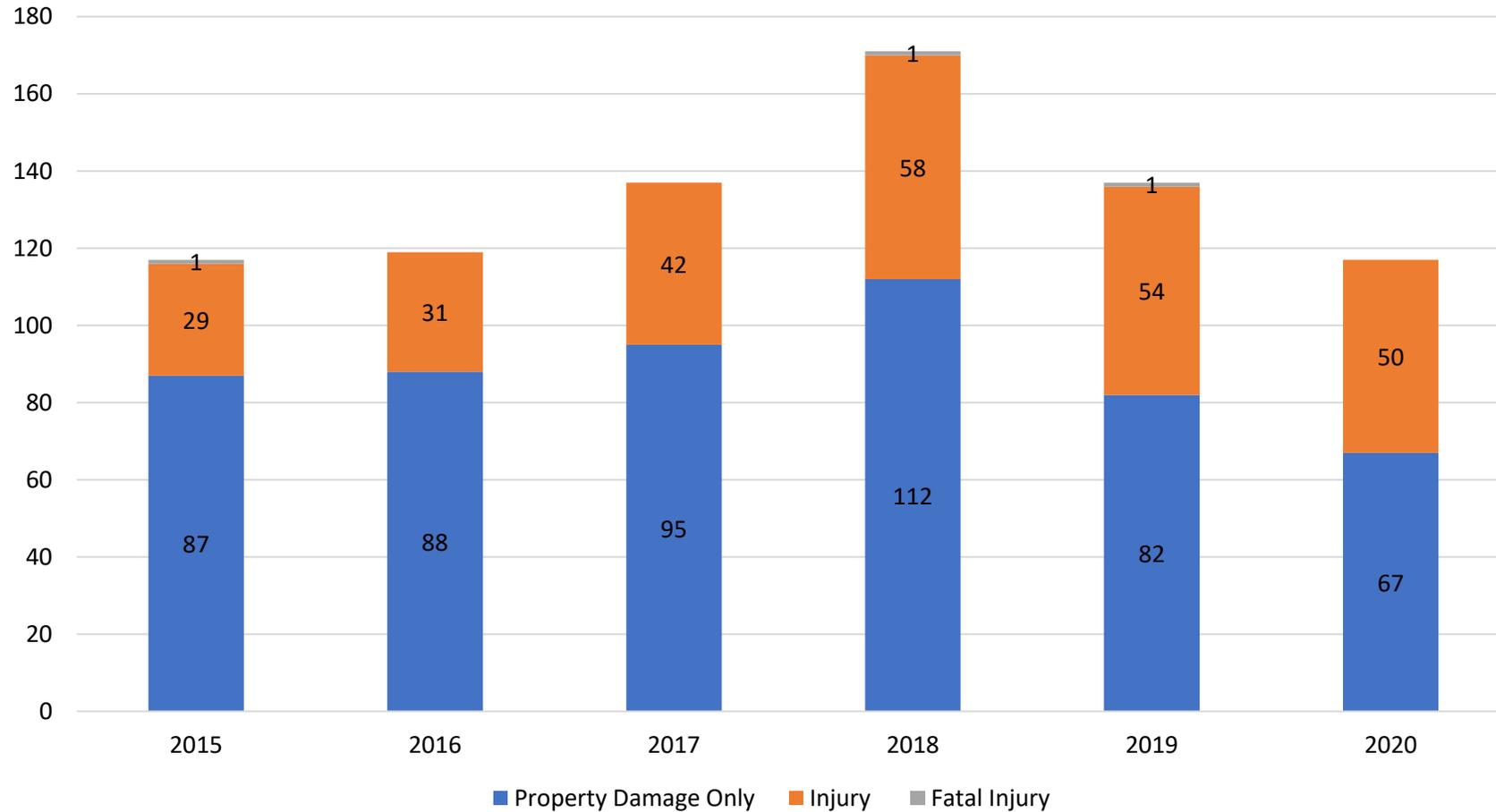
# Safety

- Crash data pulled from years 2015 to 2020
  - 798 crashes along corridor
- Top three crash types: rear end (61%), angle (11%), fixed object – off road (9%)
- Intersection crashes (485 total - 61%) outnumber segment crashes (313 total - 39%)



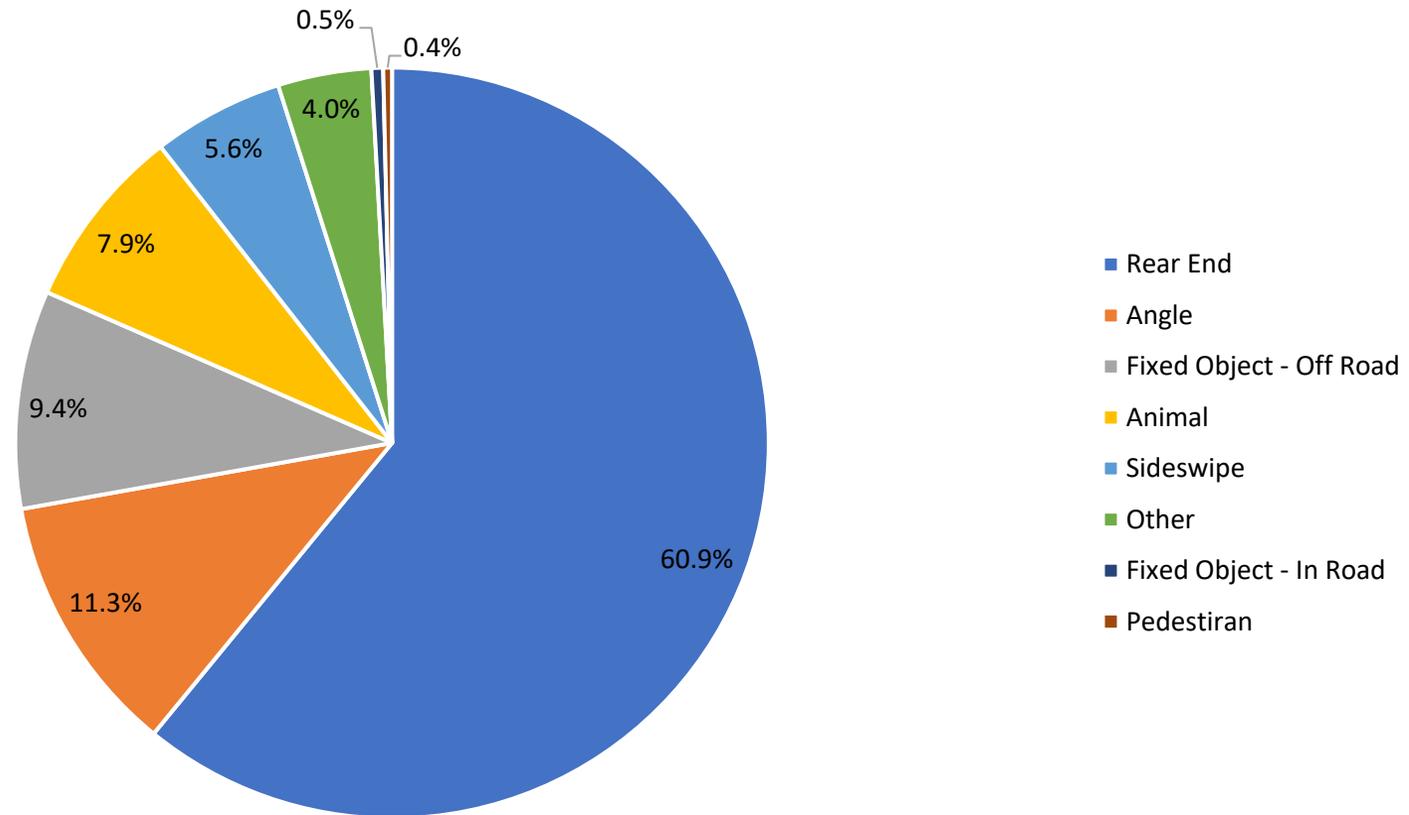
# Safety

## Crashes by Severity (2015-2020)



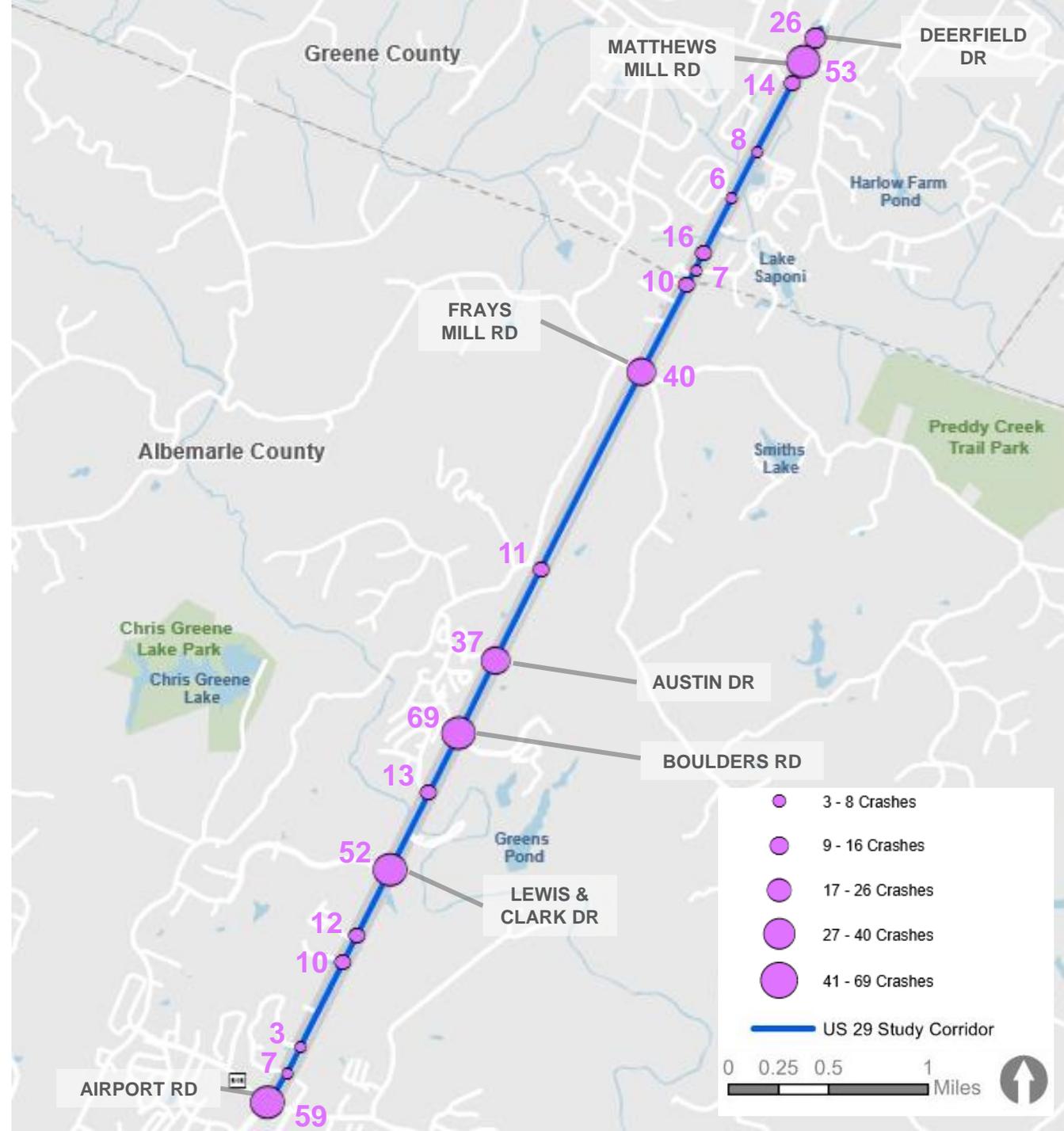
# Safety

## Crashes by Collision Type (2015-2020)



# Safety

## Study Intersection Crashes (2015-2020)



# Safety

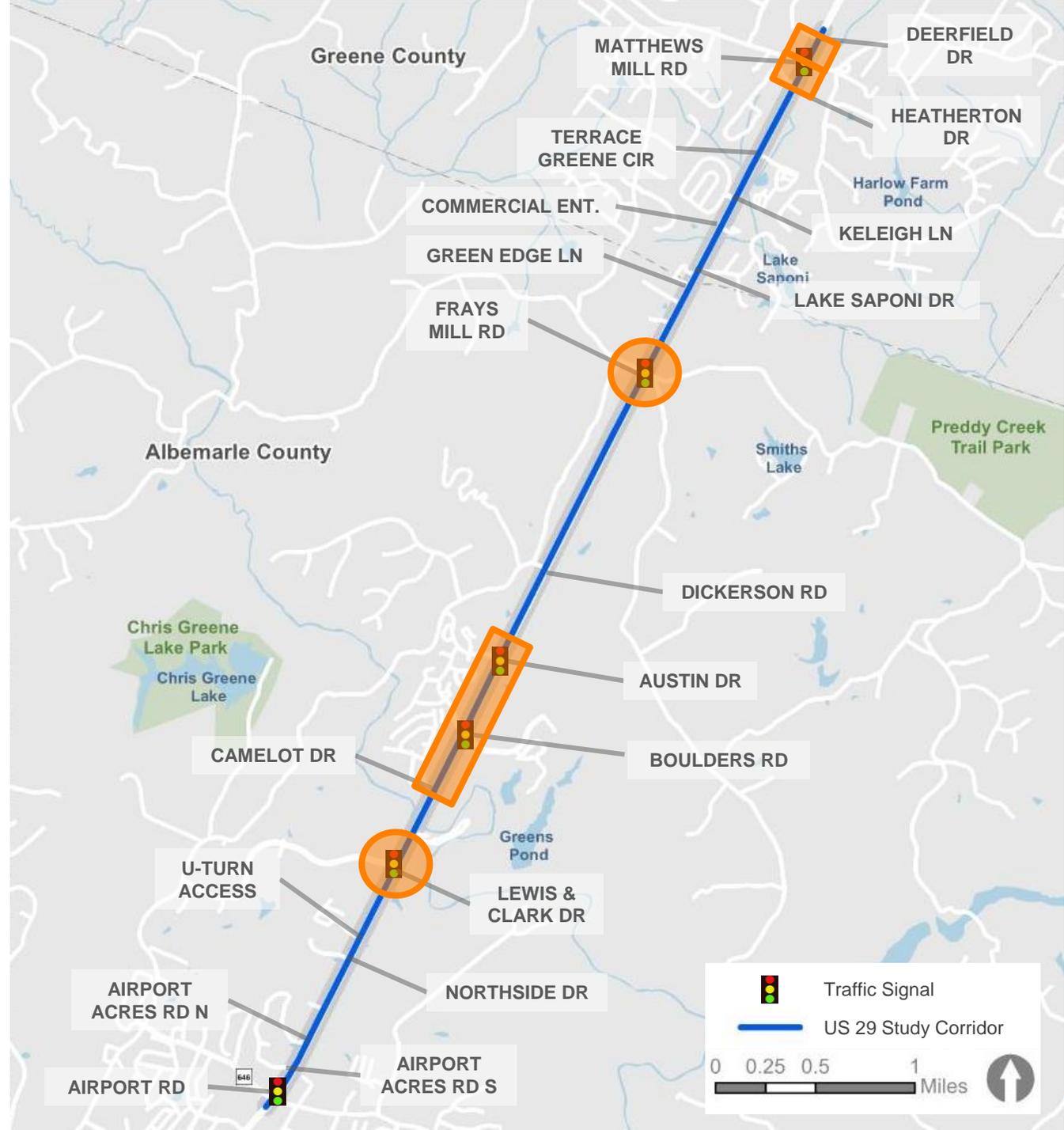
## VDOT PSI (Vtrans2040)

### District Rank by Intersection

- #12** US 29 / Frays Mill Road
- #20** US 29 / Lewis and Clark Drive

### District Rank by Segment

- #90** US 29 from Heatherton Dr to Matthews Mill Rd
- #93** US 29 from Matthews Mill Rd to Deerfield Drive
- #127** US 29 from Camelot Dr to Austin Dr

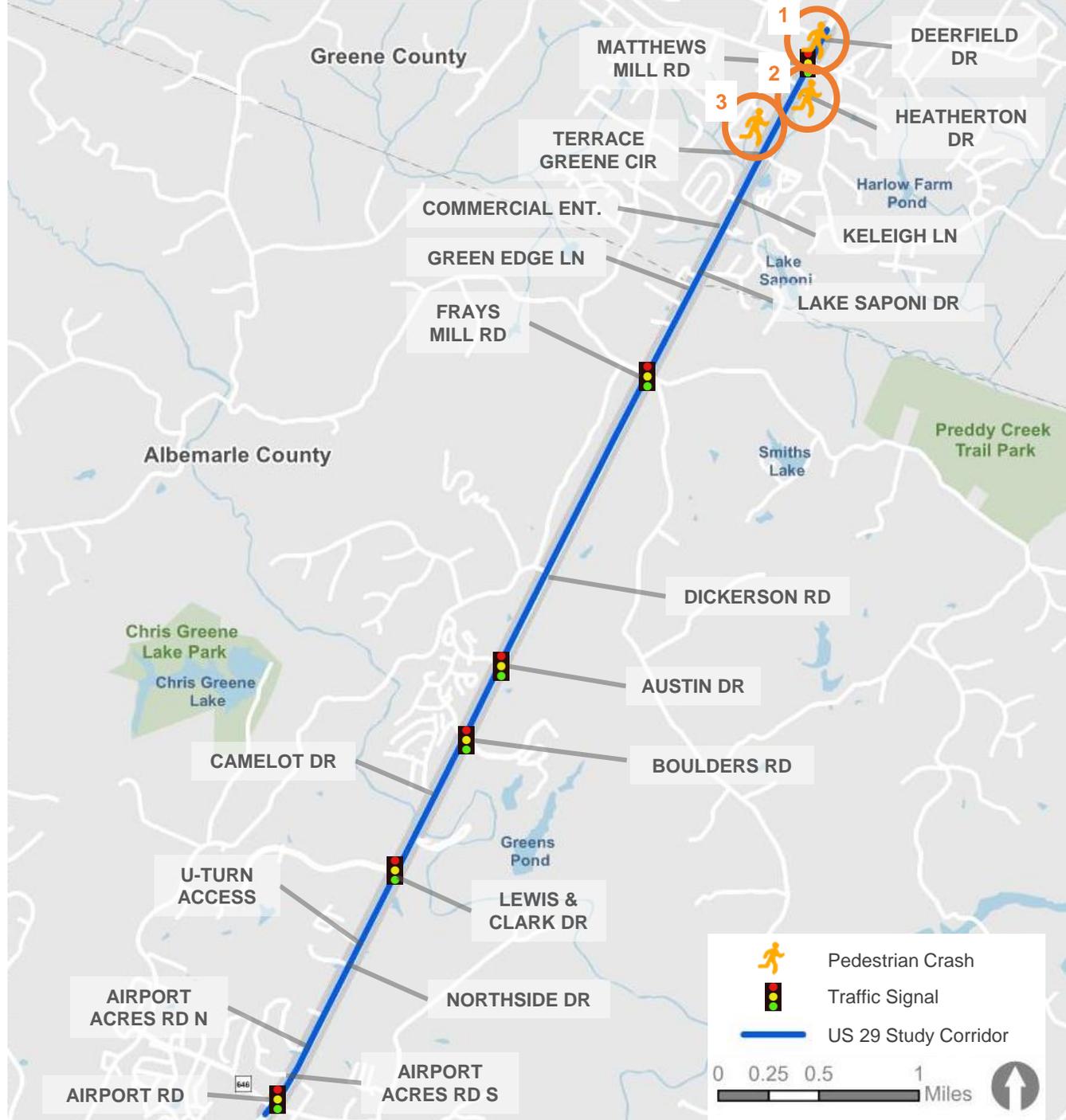


# Safety

## Pedestrian Crashes

1. Pedestrian – Fatal Injury
  - US 29 & Deerfield Drive (2015)
2. Pedestrian – Fatal Injury
  - US 29 & Heatherton Drive (2018)
3. Pedestrian – Fatal Injury
  - US 29 & Heatherton Drive (2019)

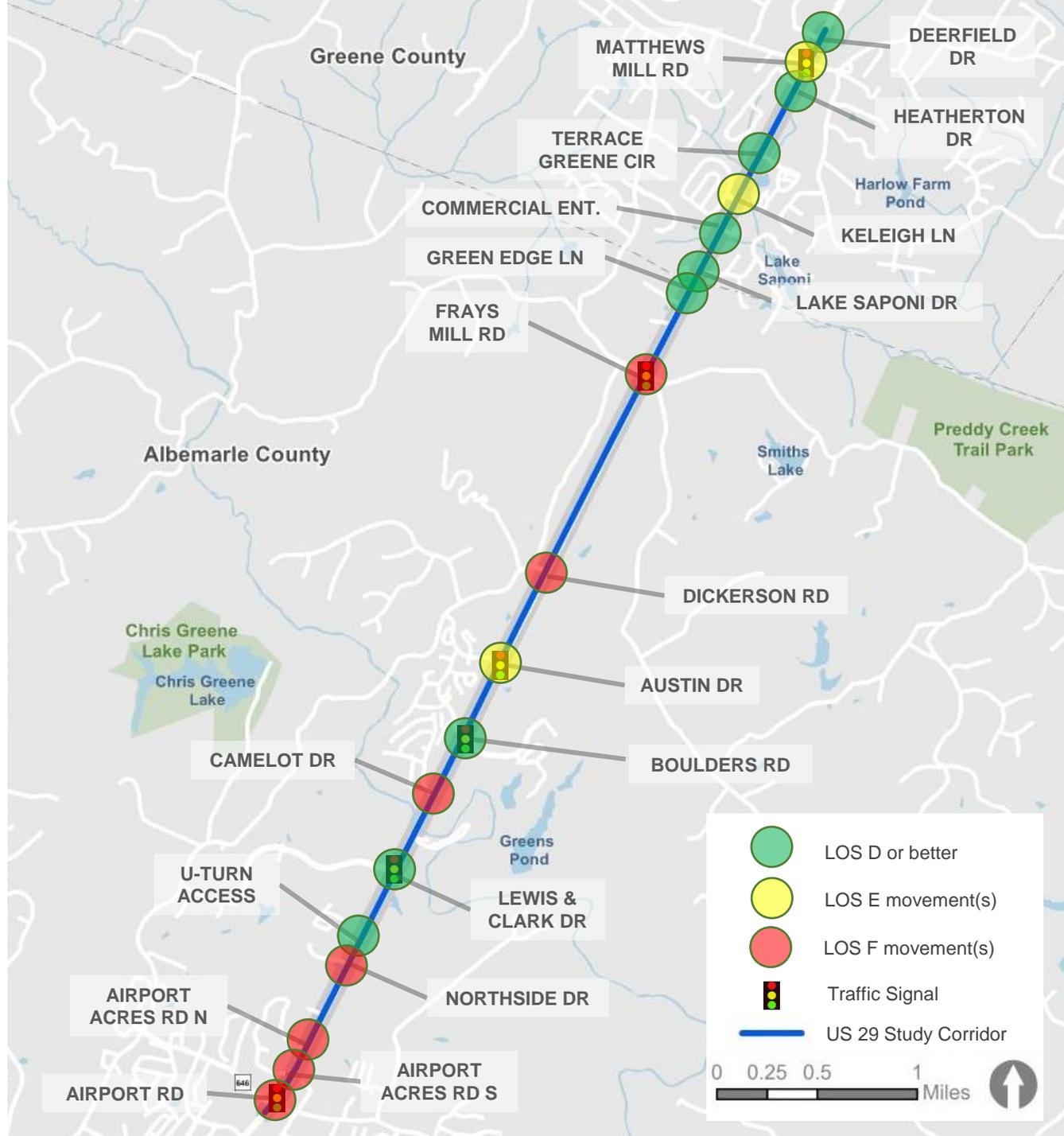
FR-300 reports are being collected for these three crashes to gather more information.



# Traffic Operations

## AM Peak Hour

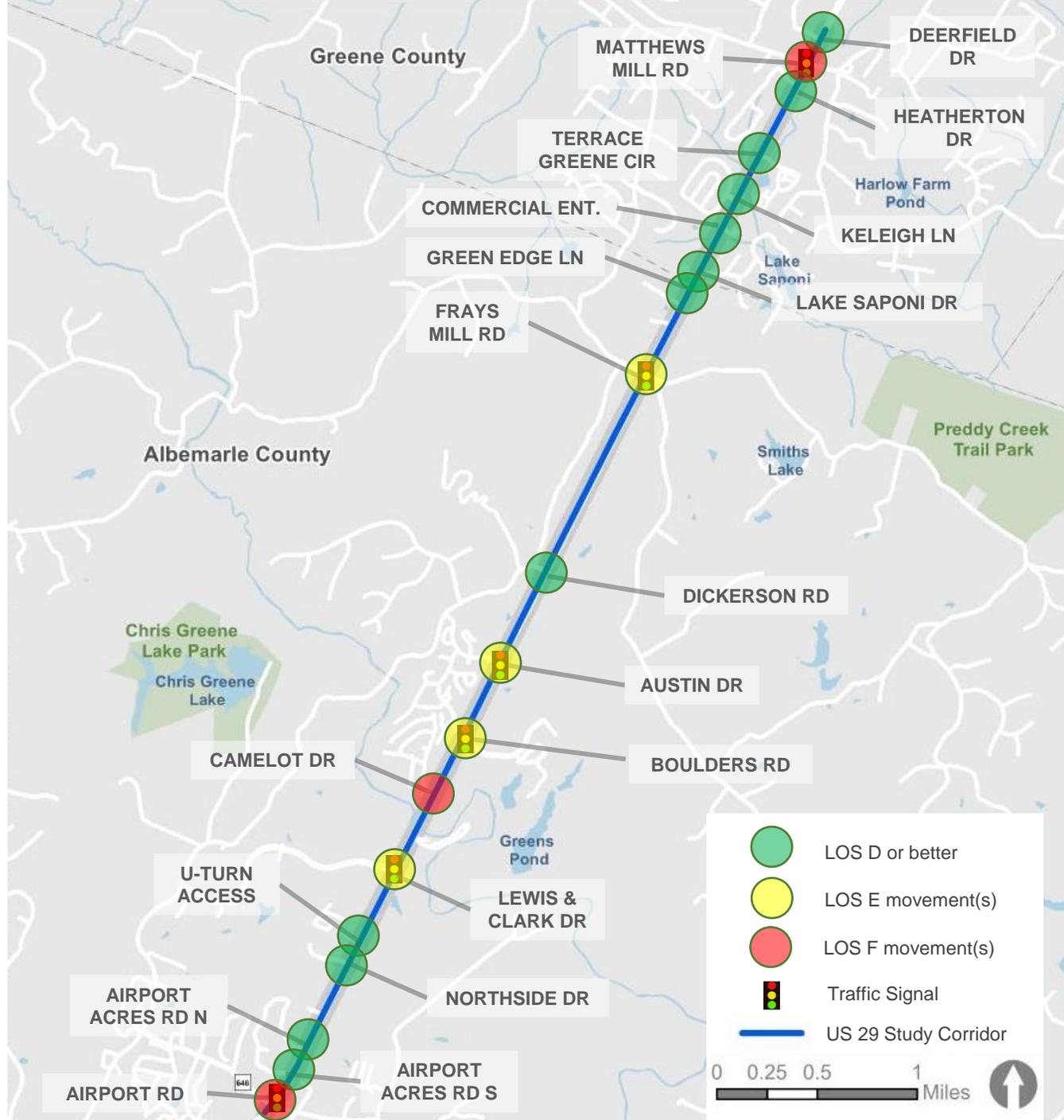
1. Most LOS E and LOS F movements are due to delay and are not near capacity
2. Heavy southbound through traffic
3. Four intersections over capacity
  - US 29/Matthews Mill Rd over capacity:  $v/c = 0.90$
  - US 29/Frays Mill Rd over capacity:  $v/c > 1.00$
  - US 29/Airport Acres Rd N slightly over capacity:  $v/c = 0.89$  (SBT)
  - US 29/Airport Rd over capacity:  $v/c > 1.00$



# Traffic Operations

## PM Peak Hour

1. Most LOS E and LOS F movements are due to delay and are not near capacity
2. Four intersections over capacity
  - US 29/Frays Mill Rd slightly over capacity:  $v/c > 0.87$
  - US 29/Dickerson Rd slightly over capacity:  $v/c = 0.87$  (NBT)
  - US 29/Boulders Rd slightly over capacity:  $v/c = 0.86$
  - US 29/Airport Rd over capacity:  $v/c > 1.00$



# Intersection & Segment Trends

- **Matthews Mill Road** (and surrounding area)
  - Approaches at or near capacity
  - Only pedestrian crashes, all of which were fatal
  - Listed as VTrans PSI Segment from Heatherton Drive to Deerfield Drive (District Ranks: 90, 93)
- **Frays Mill Road** – *study completed 2018*
  - Approaches at or near capacity
  - Listed as VTrans PSI Intersection (District Rank: 12)
- **Austin Drive to Camelot Drive**
  - Intersection of Camelot Drive: approaches at or near capacity
  - Listed as VTrans PSI Intersection (District Rank: 127)
  - 64% of crashes were rear-end crashes along segment



## Vision

**US 29 is a corridor that provides safe travel and adequate capacity for all uses and users of the roadway.**



# Goals And Objectives

**Goal:**  
**Improve Safety**

## Objectives

- Reduce/manage vehicular conflict points
- Provide pedestrian crossing opportunities around commercial areas
- Provide separation between vehicle and bike/ped modes



# Goals And Objectives

**Goal:**  
**Manage**  
**Congestion**

## Objectives

- Increase person throughput capacity
- Evaluate best intersection control types
- Reduce travel time variability
- Make efficient use of right-of-way for all users



# Goals And Objectives

## Goal:

**Increase  
Multimodal  
Usability and  
Accessibility**

## Objectives

- Provide bicycle facilities that connect to nearby parks
- Provide ADA accessible transit stops along corridor
- Provide safe pedestrian crossings at target intersections



# Goals And Objectives

## Goal:

**Support Future Growth**

## Objectives

- Develop access management strategies
- Provide transit services that offer another mode choice for commuters



# Next Steps

- Please send along all relatable studies, developments, site plans, etc. by next Friday, June 18<sup>th</sup>.
- Kittelson will be sending along a Framework Plan with the meeting minutes in a few days acknowledging all that has been discussed today.
- Stakeholder Meeting #2 – aim for mid-late July.
  - Any schedule conflicts to avoid?
  - Will be discussing future no-build conditions, goal refinement, and public workshop preparation



**Thank You!**