

## MEMORANDUM - DRAFT

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Date: June 15, 2021 Project #: 21605.046

To: Charles Proctor, Virginia Department of Transportation

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Project: US 29 Corridor Study – Albemarle County and Greene County

Subject: Framework Document

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### INTRODUCTION

This document outlines the framework of the US 29 Corridor Study (Albemarle County and Greene County) and requests agreement on your roles and responsibilities during the study process. US 29 north of Charlottesville continues to experience growth and as such has experienced increasing safety and operational challenges. The purpose of the study is to identify and vet potential operational and safety improvements along US 29 north of Charlottesville in Albemarle County and Greene County.

### Study Area

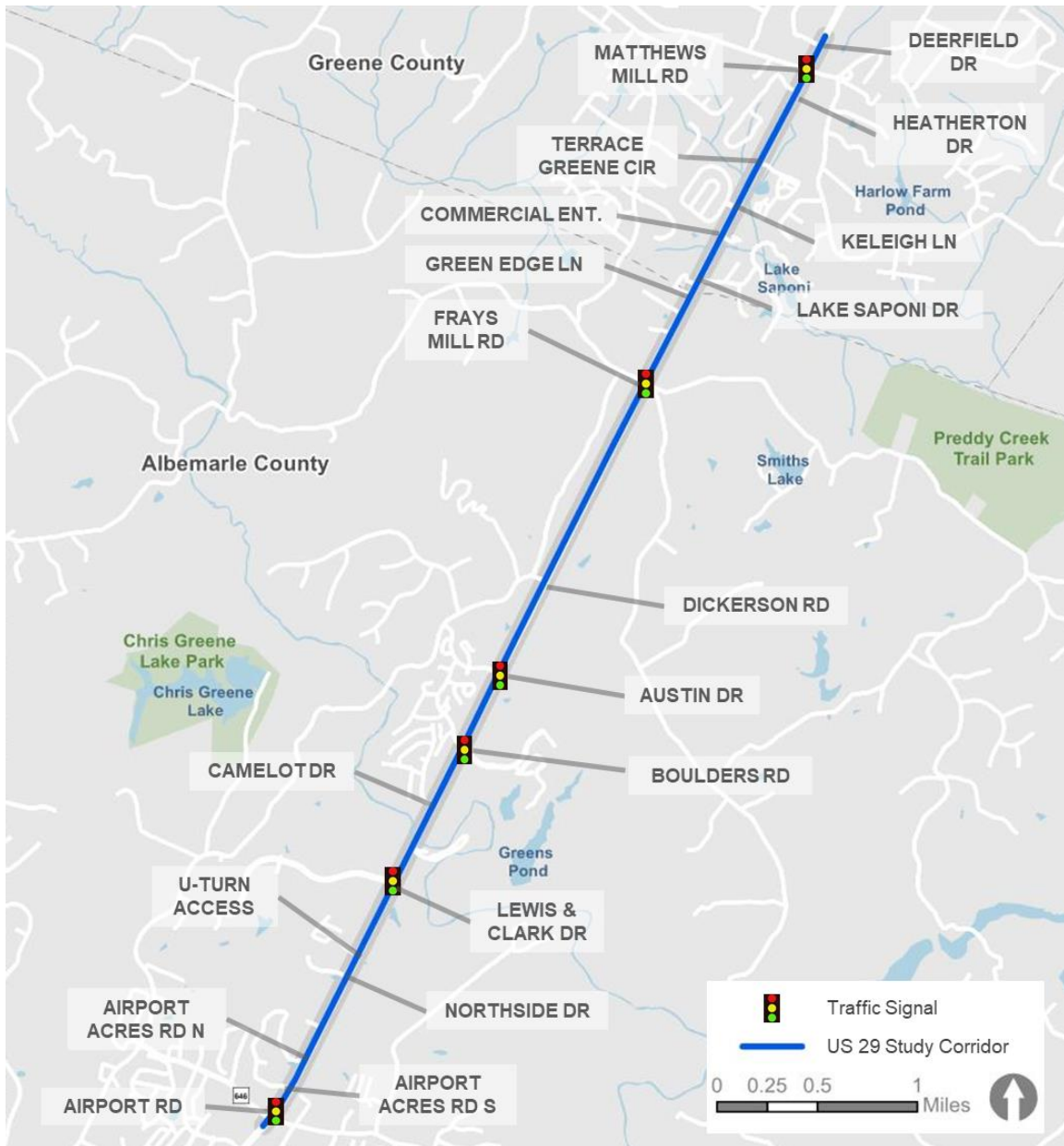
This study of US 29 includes the section between Route 649 (Airport Road) in Albemarle County and Deerfield Drive in Greene County. **Figure 1** illustrates the extents of the study area.

### Stakeholders

The project team will communicate with key stakeholders throughout the study as described in the subsequent sections. Key project deliverables will be circulated for review with members of the stakeholder group. The stakeholders identified for the study include:

- Virginia Department of Transportation (VDOT)
- Albemarle County
- Greene County
- Thomas Jefferson Planning District Commission (TJPDC)
- Transit Agencies: Jaunt and Charlottesville Area Transit (CAT)

Figure 1. US 29 Study Extents



## PROJECT SCOPE SUMMARY

Figure 2 illustrates the proposed schedule for the remaining activities for the project. Each activity and the assumed responsibilities of each of the stakeholders is described subsequently.

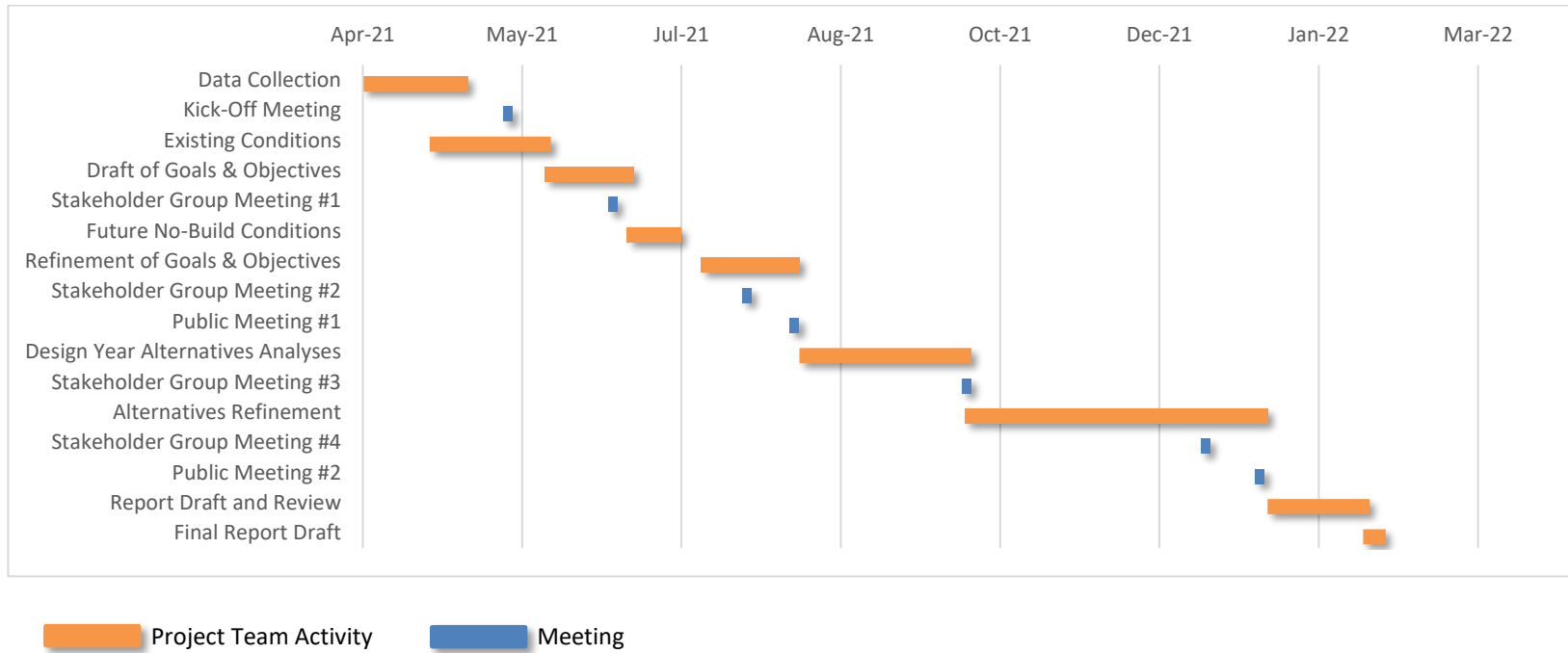


Figure 2. Anticipated Activities and Timeline

## Data Collection

The on-going data collection task involves coordination between the project team and the stakeholder group to collect all relevant information for the analysis of existing and design year conditions. This includes, but is not limited to:

- The most recent 6-years of crash data [**VDOT**]
- Existing traffic signal timing [**VDOT**]
- Known in-process developments (public and private) [**VDOT, County, and TJPDC**]
- Anticipated/planned roadway improvement projects [**VDOT, County, and TJPDC**]
- Relevant turning movement count/traffic data [**VDOT and County**]
- Two-hour weekday a.m. and weekday p.m. peak hour traffic counts at 13 of the 19 study intersections [**Project team**]

## Existing Conditions

The project team kicked off the study on May 18, 2021, with a meeting involving VDOT and TJPDC. The study will evaluate the existing safety and operational performance of the corridor as discussed below:

### *Operational Analyses*

The existing weekday a.m. and weekday p.m. peak hour operational conditions will be evaluated using Synchro 10 and SimTraffic (where intersections are shown to operate above capacity) at the following 19 intersections:

- Rte. 29 @ Commercial Crossover (Deerfield Dr)
- Rte. 29 @ Matthew Mills (607)
- Rte. 29 @ Heatherton Dr.
- Rte. 29 @ Terrace Greene Cir.
- Rte. 29 @ Frays Mill Rd. (641)
- Rte. 29 @ Keleigh Ln.
- Rte. 29 @ Commercial Entrance
- Rte. 29 @ Lake Saponi Dr.
- Rte. 29 @ Greene Edge Ln.
- Rte. 29 @ Dickerson Rd.
- Rte. 29 @ Austin Dr.
- Rte. 29 @ Boulders Rd. / Briarwood Dr.
- Rte. 29 @ Camelot Dr. (1513)
- Rte. 29 @ Lewis and Clark Dr.
- Rte. 29 @ U-Turn Access

- Rte. 29 @ Northside Dr.
- Rte. 29 @ Airport Acres N.
- Rte. 29 @ Airport Acres S.
- Rte. 29 @ Airport Rd. (649)

Measures of effectiveness for intersection operations will include level-of-service, control delay, and queue lengths. Summary graphics will be developed and shared with the stakeholders for review.

### ***Safety Analyses***

The project team will review the six most-recent years (2015-2020) of crash data obtained to identify crash patterns and high crash locations. Summary graphics (e.g., crash heat maps) will be developed for distribution to the stakeholder group.

### ***Field Review***

After completion of the operational and safety analyses as described above, the project team will conduct a field review of the corridor to confirm the findings and identify potential mitigation measures.

### **Draft of Goals & Objectives**

After completion of the existing conditions analyses, draft study goals and associated objectives are to be developed.

### ***Stakeholder Group Meeting #1 – Existing Conditions and Goals & Objectives***

The purpose of this stakeholder group meeting is to share and discuss initial findings, provide input on draft study goals, and receive information about projects within the study area.

### **Future Year No-Build Conditions**

This task involves the development of future year land uses and traffic projections to be assumed in the Design Year Analyses. Assumptions include:

- Design Year
  - 2045
- Traffic Growth
  - Growth in traffic volumes between existing conditions and the design year will be developed by integrating information from various planned developments in the study area.

## Refinement of Goals & Objectives

This task involves working with the stakeholder group to refine the vision, goals, and objectives developed in Phase 1.

### ***Stakeholder Group Meeting #2 – Future No-Build Conditions and Public Meeting Preparation***

The meeting will include a presentation of the existing and future no-build conditions and allow for refinement of goals and objectives. The meeting will also include discussion/preparation for the first Public Meeting.

### **Public Meeting #1**

An initial public meeting will be held after completion of the existing conditions analyses to inform the public of identified issues/concerns and discuss the draft goals/objectives of the study. Each of the stakeholder groups will conduct outreach to the public to advertise the meeting and will work together to identify an appropriate time/location to conduct the meeting. Once public input has been received, goals/objectives of the project will be finalized.

## Design Year Alternatives Analyses

After receiving concurrence from the stakeholders on the projected traffic volumes and assumed transportation improvements, the project team will evaluate forecast design year operations along the study corridor. The project team will assume updates to the existing signal timing in future year analyses in accordance with VDOT's *Traffic Operations and Safety Analysis Manual* (TOSAM) guidelines. Preliminary recommendations will be developed in annotated graphical format and circulated to the stakeholder group for subsequent discussions.

### ***Stakeholder Group Meeting #3 –Design Year Alternatives Analysis***

The purpose of this stakeholder group meeting is to present and discuss preliminary alternatives, including an opportunity to provide feedback and comments regarding any of the desired alternatives and recommendations, as well as a discussion on implementing short-, mid-, and long-term options.

## Alternatives Refinement

Based on the existing/design year analyses, field observations, and input from the stakeholder group, strategies and alternatives will be identified to address operational, safety, and access management deficiencies. Concepts will be developed and refined for the selected improvements.

### **Stakeholder Group Meeting #4 – Review Alternatives and Recommendations**

The project team will share the draft alternatives and recommendations with the stakeholder group, as well as prepare for the second Public Meeting.

### **Public Meeting #2**

A second public meeting will be held to inform the public on the proposed alternatives. Each of the stakeholder groups will conduct outreach to the public to advertise the meeting and will work together to identify an appropriate time/location to conduct the meeting.

### **Report Draft and Review**

After receiving feedback from the stakeholder group on the proposed alternatives, the project team will develop a draft report summarizing all the efforts/analysis to date. The stakeholder group will review the draft report submitted by the project team and provide comments/feedback for revisions.

### **Final Report Draft**

The project team will revise the draft report into final form based on comments/feedback from the stakeholder group.

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