



Duke Street Traffic Mitigation

**Phase II Pilot
August 2022**



Meeting Agenda

▶ **01.**

Duke Street Roadmap

How we got here
and where we
are going

▶ **02.**

Phase I Findings

What we learned
in Phase I

▶ **03.**

Phase II Discussion

Roadway
changes and
evaluation

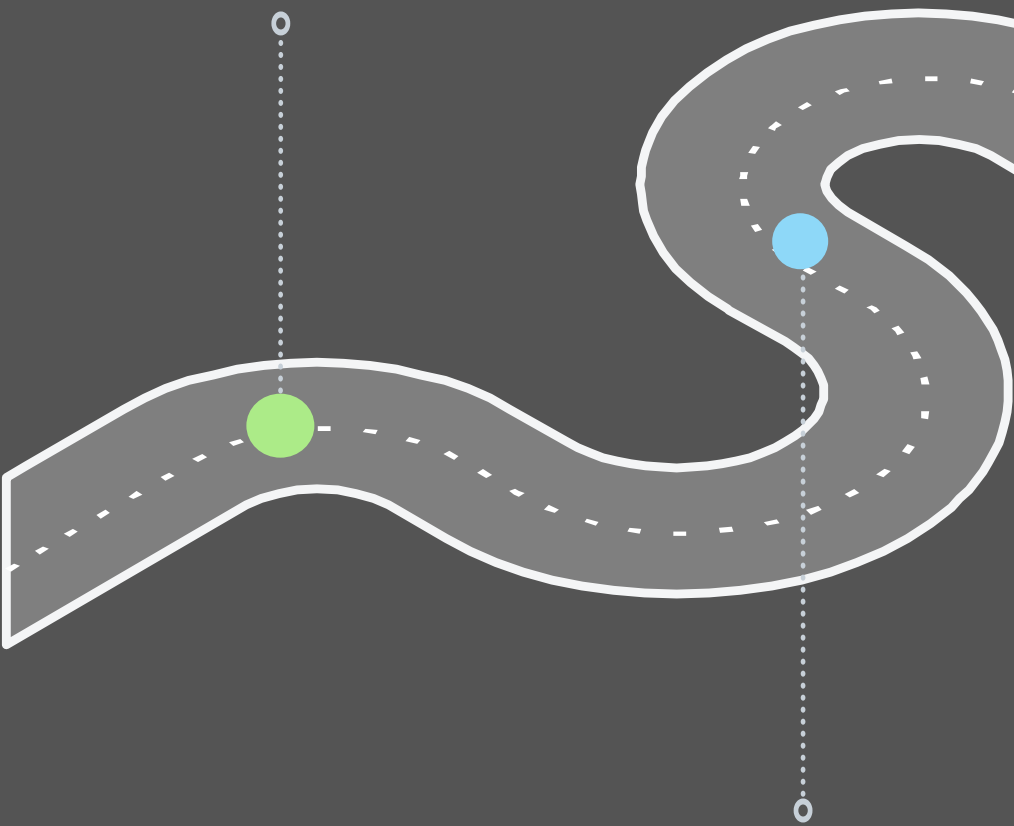
▶ **04.**

Q&A and Next Steps

Timing and input

Central Alexandria Traffic Study

Recommendations to reduce cut-through traffic on local streets and advance capital projects



Pilot - Phase I

Change signal timing to shift cut-through traffic patterns onto arterial streets and off neighborhood streets

Pilot - Phase II

Reinstate signal timing from Phase I Pilot and restrict access to Telegraph Road from West Taylor Run Parkway

Duke & West Taylor Run Intersection & Access Ramp

- Safety improvements at intersection
- Restrict access from WTR to Telegraph
- Construct new left turn access ramp to Telegraph from eastbound Duke Street

Duke Street Transitway

- Full corridor redesign of Duke Street to provide high capacity transit along the corridor
- Includes new transit stations, enhanced frequency, signal technology to move people along the corridor
- Could include upgrades to the streetscape, pedestrian and bicycle access depending on design

Roadmap for Duke Street

Traffic Mitigation Pilots

Project Goals



Reduce
congestion on
Duke Street



Reduce cut-through
traffic on
neighborhood
streets



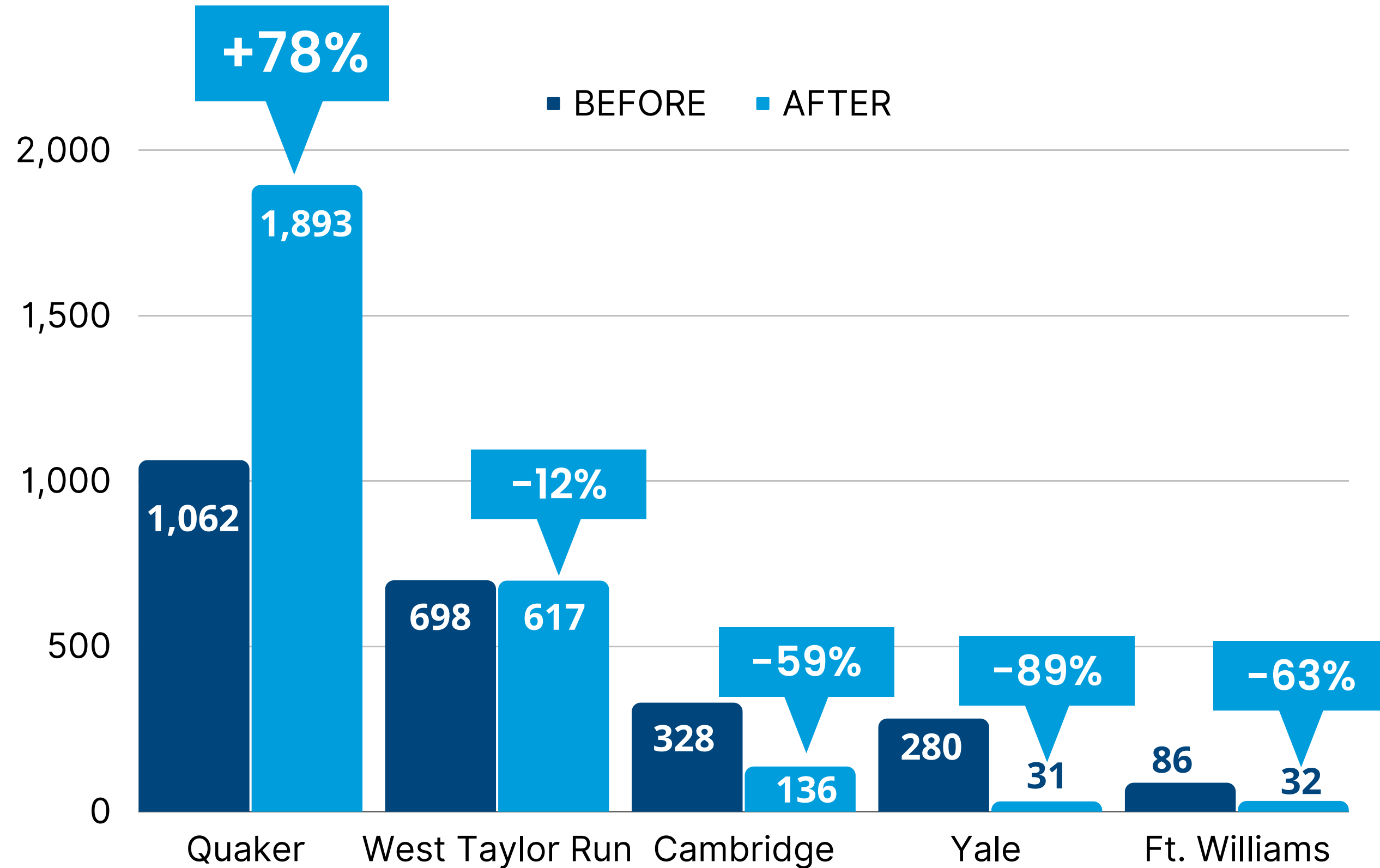
Improve the
quality of life for
residents

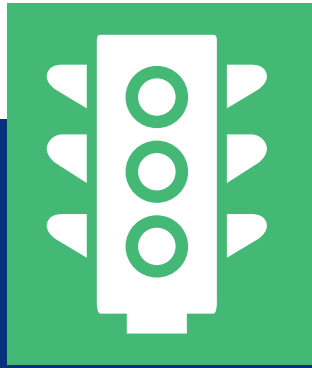
Phase I Pilot

Key Findings

- 41% of cut-through traffic shifted off local streets
- Cut-through traffic increased by 10% overall
- Travel times using Quaker Lane were 20% faster

Changes in Cut-Through Traffic Volumes

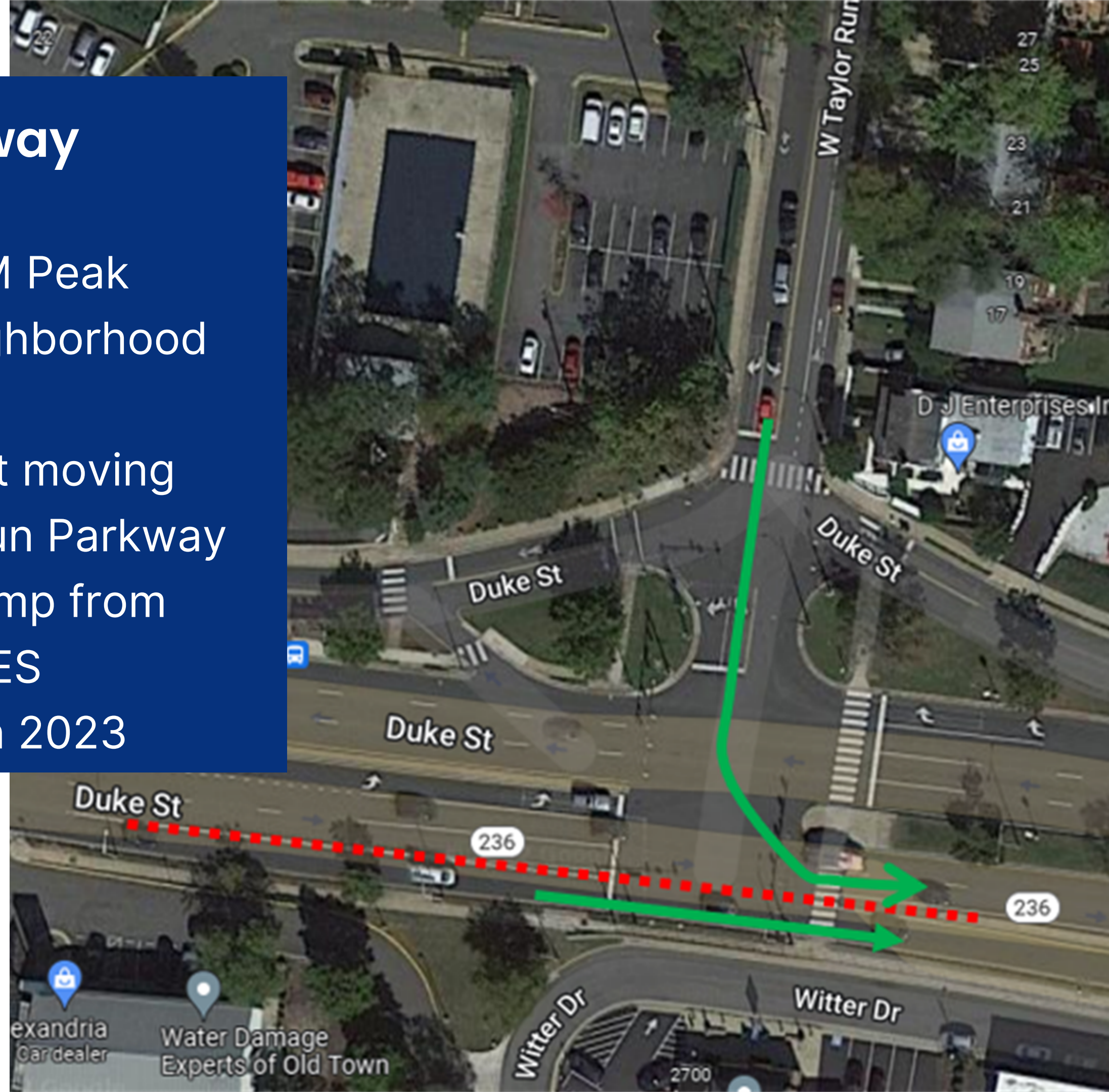







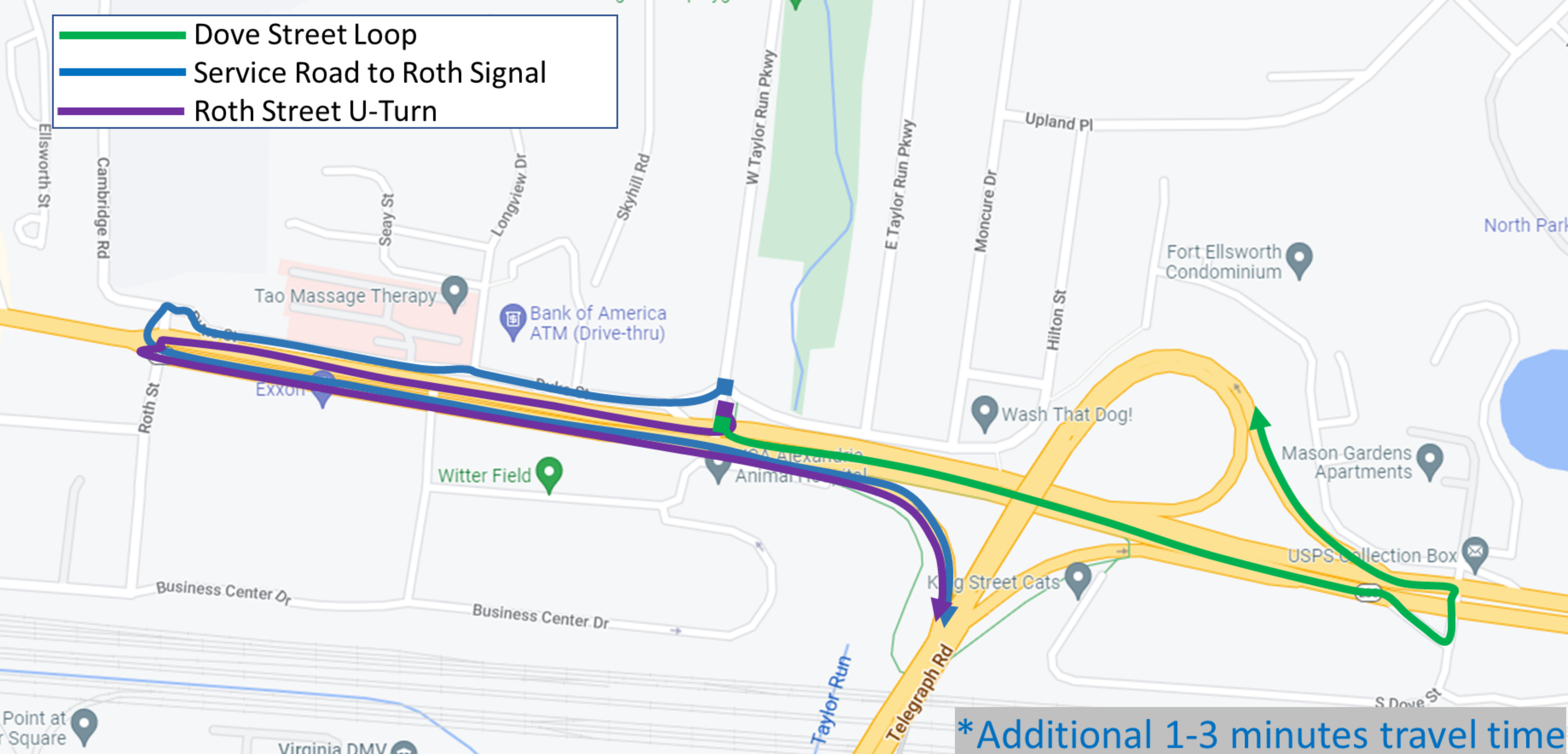
West Taylor Run Parkway

- Reinststate Phase I signal timing in PM Peak
 - Keep cut-through traffic off neighborhood streets
 - Keep Quaker Lane & Duke Street moving
- Restrict access from West Taylor Run Parkway directly onto the Telegraph Road ramp from eastbound Duke Street AT ALL TIMES
- Potential Timing: Sept 2022 - March 2023

Traffic Mitigation Pilot – Phase II



-  Dove Street Loop
-  Service Road to Roth Signal
-  Roth Street U-Turn



* Additional 1-3 minutes travel time

West Taylor Run Parkway Access Options

Evaluation



Neighborhood Streets



GOAL: Minimize impact to neighborhood streets by reducing cut-through traffic by 30% from BEFORE period

West Taylor Run



GOAL: Reduce cut-through traffic volumes on West Taylor Run Parkway by 20%

Duke Street Congestion



Improve travel times and reduce vehicles queues on Duke Street

Continual Engagement & Information Sharing



AUG

- Community Feedback
- Refine Plan
- Finalize Pilot



SEPT

- Implement Pilot Phase II
- Traffic & Parking Board for Public Hearing



FALL

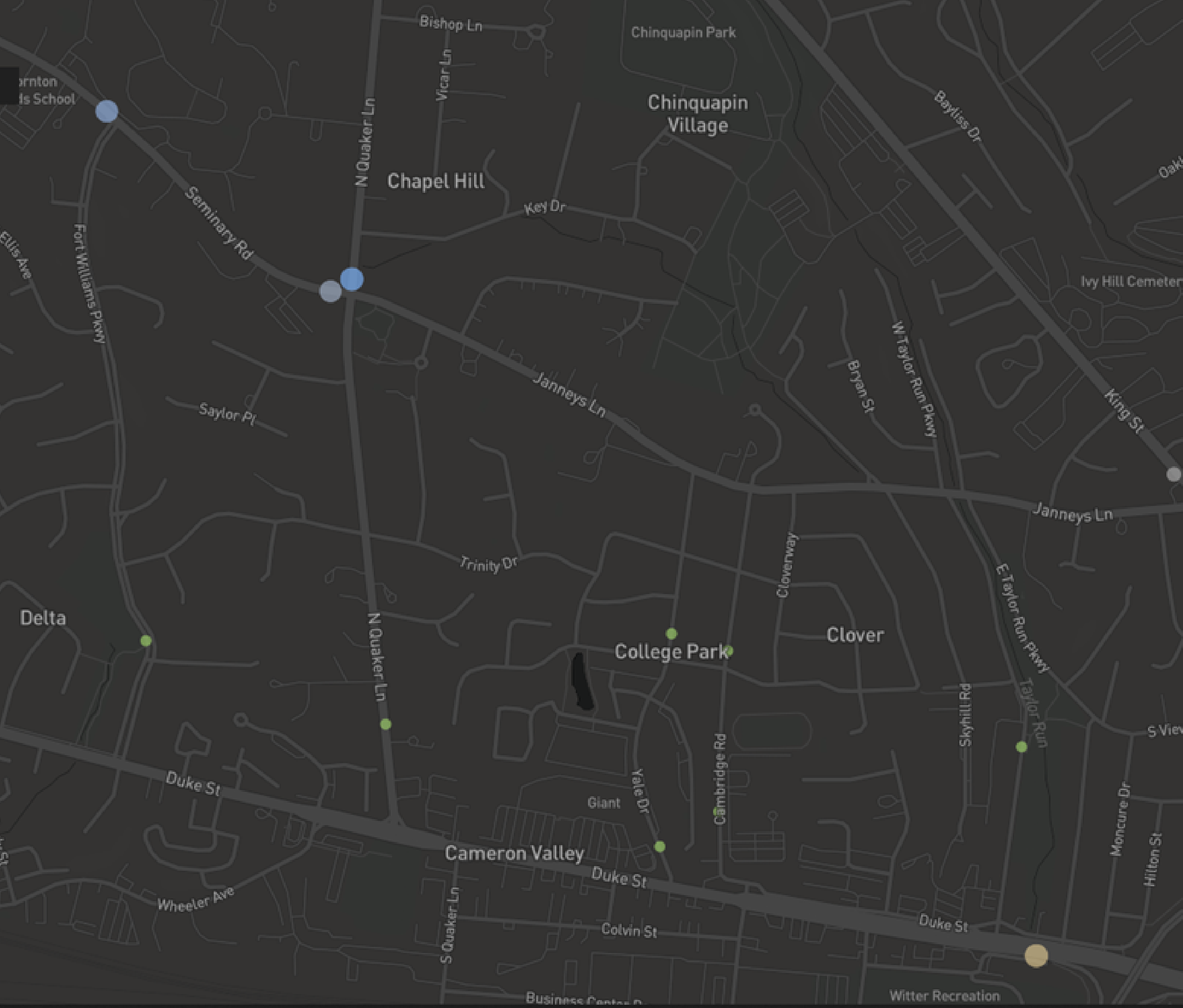
- Duke Street Transitway & West Taylor Run Project Input



SPRING

- Pilot Ends
- Evaluation
- Preferred Designs for Transitway & Intersections

NEXT STEPS



Contact



703-746-4017



hillary.orr@alexandriava.gov



www.alexandriava.gov/go/2649