



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

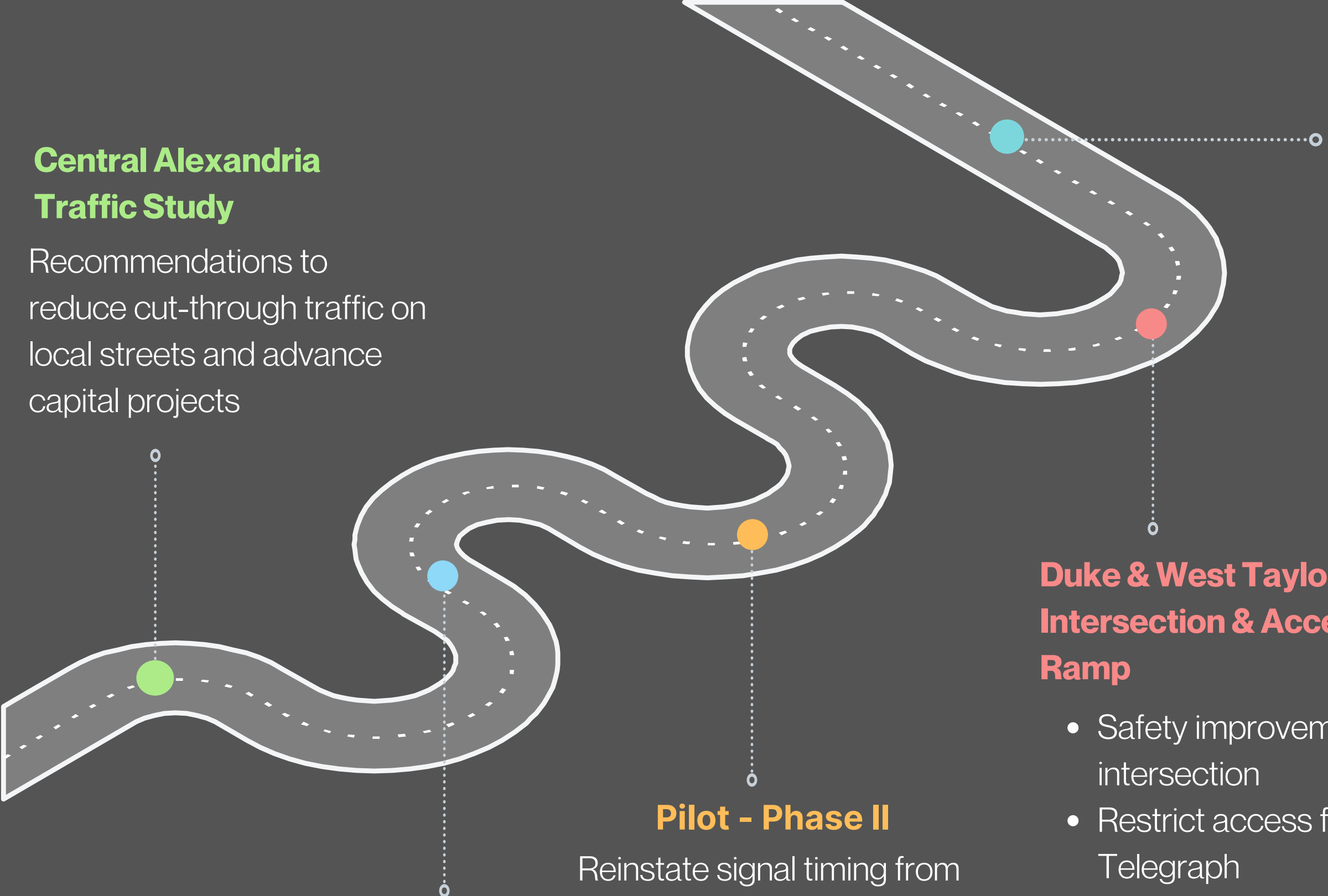
▶ **04.**

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 tranist 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



Use data to inform
decisions about
long-term projects



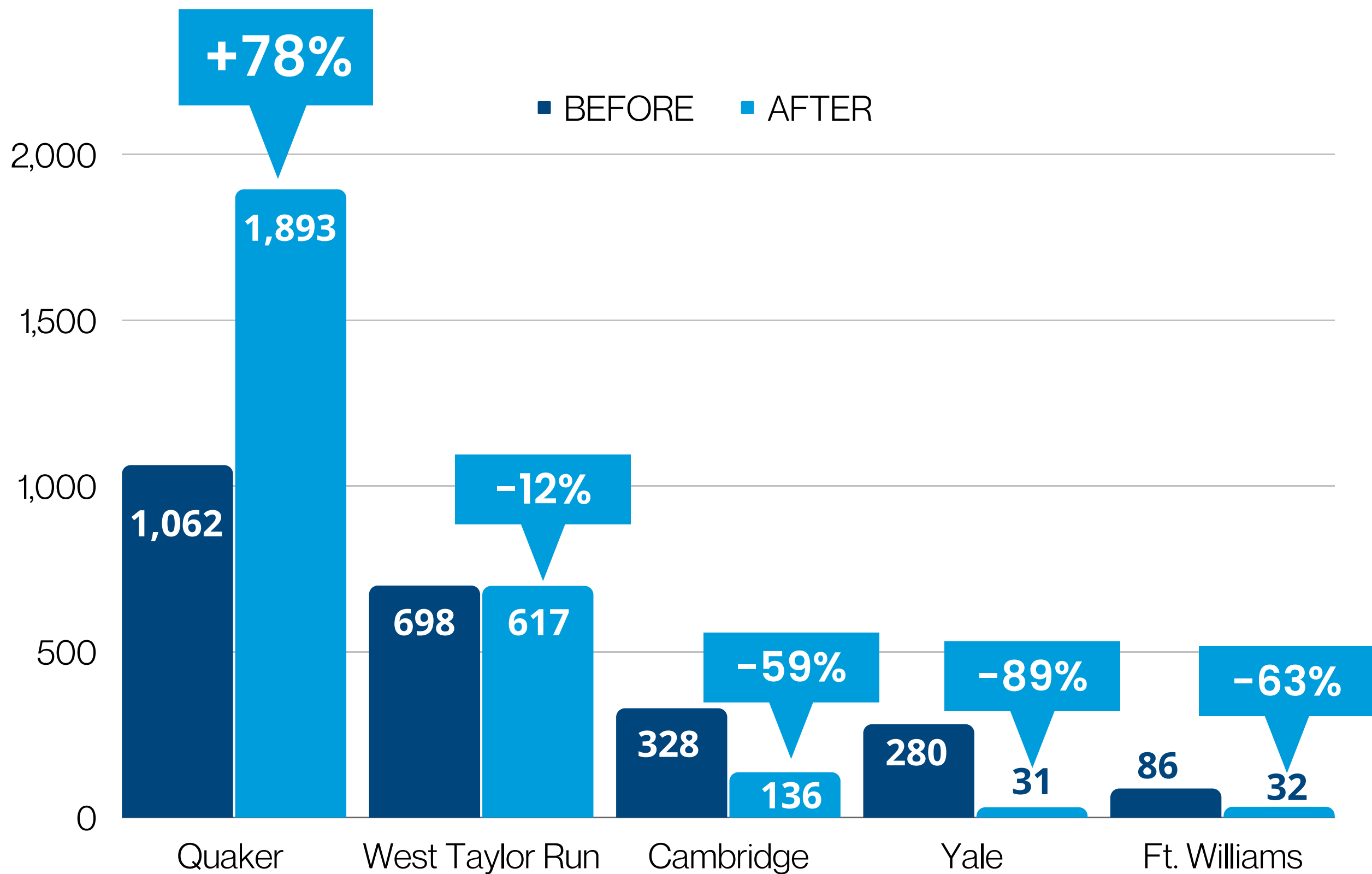
Improve the
quality of life for
residents

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





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- An aerial map of a street intersection. A green line with arrows indicates a proposed route starting from the top, turning right at the intersection of Duke St and Witter Dr, and then continuing along Witter Dr. A red dashed line runs horizontally across the middle of the map, likely representing a boundary or a different route. The map shows various streets including Duke St, Witter Dr, and W Taylor Run. There are also labels for 'D J Enterprises Inc' and 'Old Town'. A blue location pin is visible near 'D J Enterprises Inc'. The map includes street names, building footprints, parking lots, and green spaces.

Duke St

236

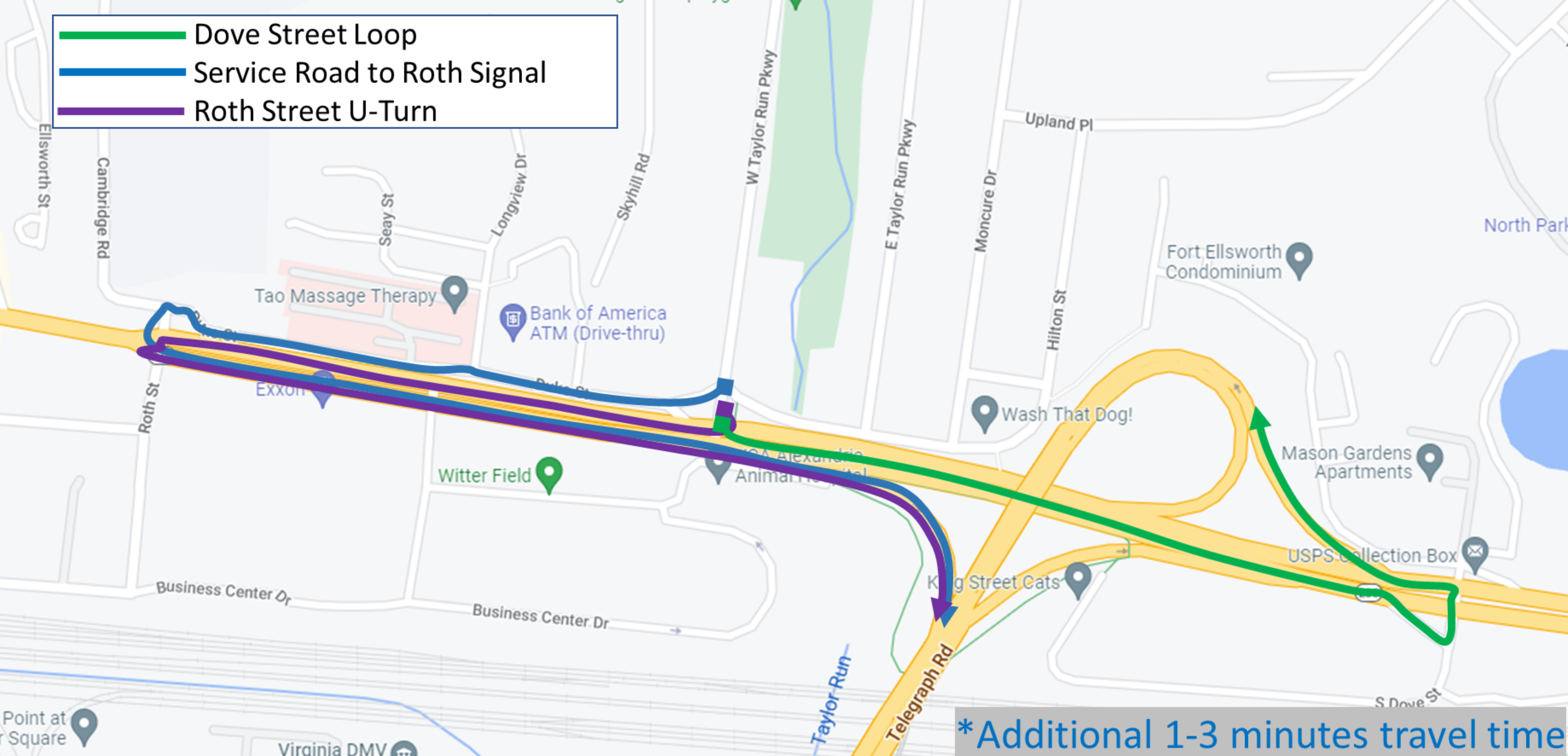
Witter Dr

2700

Alexandria Car dealer

Water Damage Experts of Old Town

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



West Taylor Run Parkway Access Options

Impacts to local residents – Is the tradeoff worth the benefit?

- Different access route to telegraph road (1-3 minutes)
- Trips from area
 - Weekday PM peak had the most trips (90/hr) but only 21% were home-to-work based
 - Weekday AM peak had 44% home-to-work trips but half as many trips at the PM
 - Weekend trips were distributed throughout the day



Evaluation



West Taylor Run



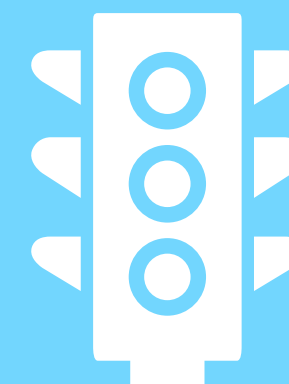
GOAL: Reduce cut-through traffic volumes on West Taylor Run Parkway by 20%

Neighborhood Streets



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

Duke Street Congestion



GOAL: Improve travel times and reduce vehicles queues on Duke Street

Fall 2021

Planning - Phase I

- Resident feedback
- Seminary Hill & CCPCA meetings
- Social & print media
- Traffic & Parking Board
- Feedback form

June- Aug 2022

Planning - Phase II

- Resident feedback
- Traffic & Parking Board Briefing
- CCPCA meeting 8/10
- Public meeting 8/11
- Social & print media

September 2022

Informing

- Social & print media
- eNews
- Resident mailing
- Traffic & Parking Board public hearing

Planning - Major Projects

- Concept design feedback on Transitway and WTR Access projects

Fall 2022

Feedback

- Pilot Phase II neighborhood feedback
- Evaluation & Key findings

Winter- Spring 2023

Community Outreach & Engagement

Continual Engagement & Information Sharing



AUG

- Community Feedback
- Refine Plan
- Finalize Pilot



SEPT

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



FALL

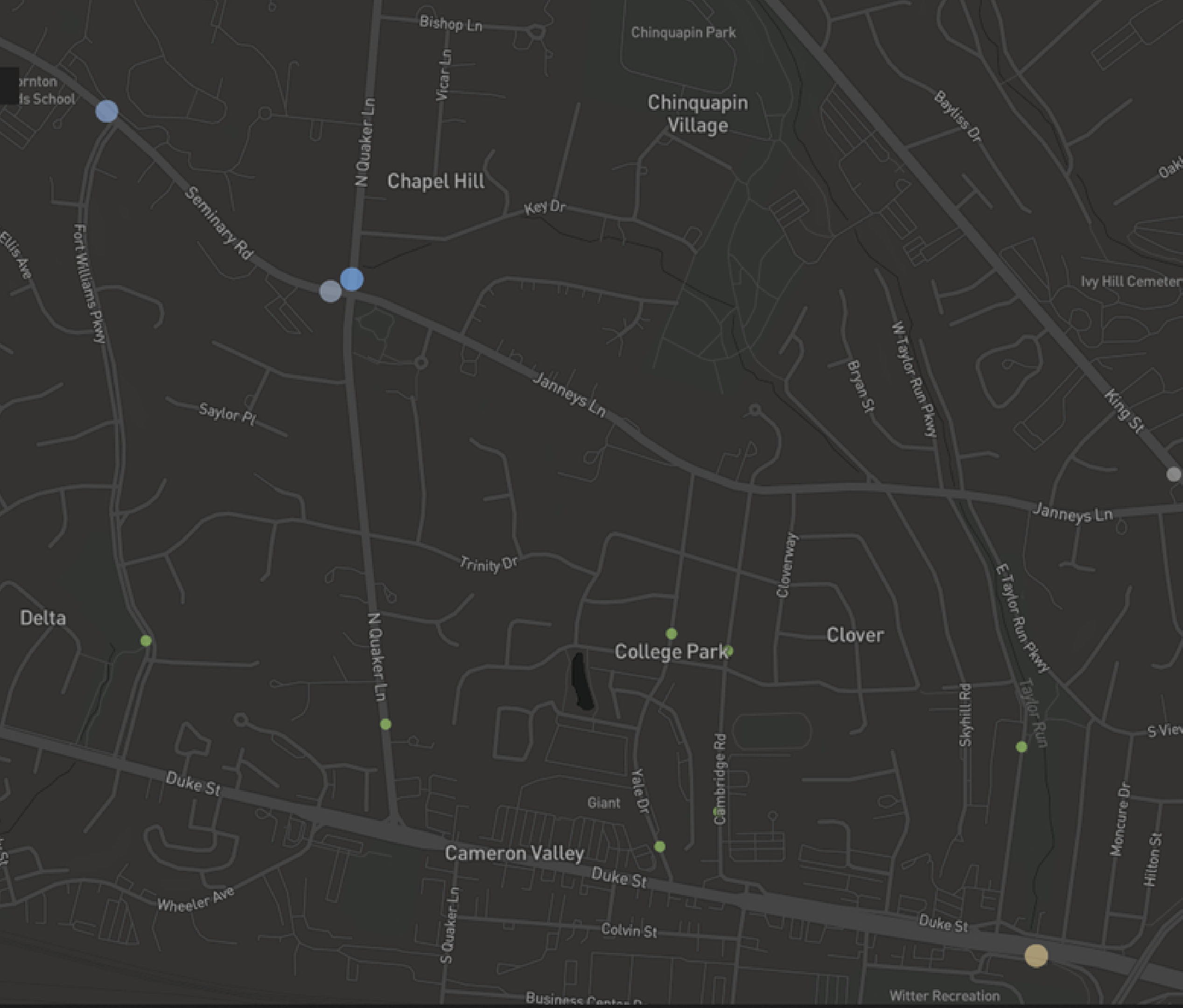
- Duke Street Transitway & West Taylor Run Project Input



SPRING

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

NEXT STEPS



Contact & Project Information



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