

Phase II – Preferred Alternatives

US 301 (Chamberlayne Road) from I-295 to Atlee Road



PROJECT DESCRIPTION

The improvements proposed include:

INTERSECTION OF CUDLIPP AVE/LOCKWOOD BLVD

- Restripe Lockwood Blvd approach lane configuration to 2 exclusive left turn lanes, 1 thru/right
- Install lane extension pavement marking guidance for dual left turns
- Modify Cudlipp/Lockwood signal phasing to permissive

INTERSECTION OF LEON LN/TIMES DISPATCH BLVD

- Restripe Times Dispatch Blvd approach lane configuration to 1 left, 1 through, 1 right
- Remove channelizing island on Times Dispatch Blvd approach, extend stop line for right turn lane and pull median nose back
- Remove channelizing island on Leon Ln and extend stop line for right-turn lane
- Modify Leon Ln/Times Dispatch Blvd signal phasing to permissive
- Extend the median/median nose along the SW leg of Chamberlayne Rd
- Install marked crosswalks and pedestrian signals to three legs of the intersection
- Add sidewalks along both sides of Chamberlayne Rd

PROJECT BENEFITS

These traffic control, geometric, and pedestrian improvements will improve the safety and operation of these intersections. These improvements will reduce rear-end crash risk through signal timing optimization and a reduced number of signal phases. In addition, adding pedestrian facilities and signal controlled right turns at Leon Ln/Times Dispatch Blvd will improve pedestrian safety while providing pedestrian access and connectivity.

PROJECT NEEDS

This project helps address VTrans needs associated with safety, congestion, and pedestrian access.

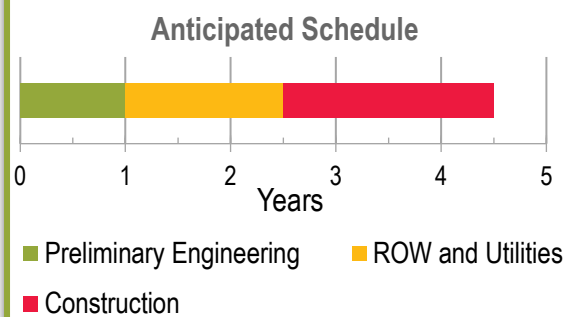
Need	Priority
Pedestrian/Bicycle Access	High
Transit/TDM	Very High
Congestion Mitigation	Medium
Safety Improvement	Very High

PUBLIC SURVEY RESULTS SUMMARY

IMPROVEMENT CONCEPT	AVERAGE RATING	NUMBER OF RESPONDENTS
Cudlipp Ave / Lockwood Blvd	4.4	1196
Leon Ln / Times Dispatch Blvd	3.6	1018
Pedestrian / Bicycle	3.7	843
Average Rating	3.9	Alternatives were rated out of 5

PublicInput.com Survey ran between April 29 to May 13, 2024 (15 days)

SCHEDULE AND ESTIMATE

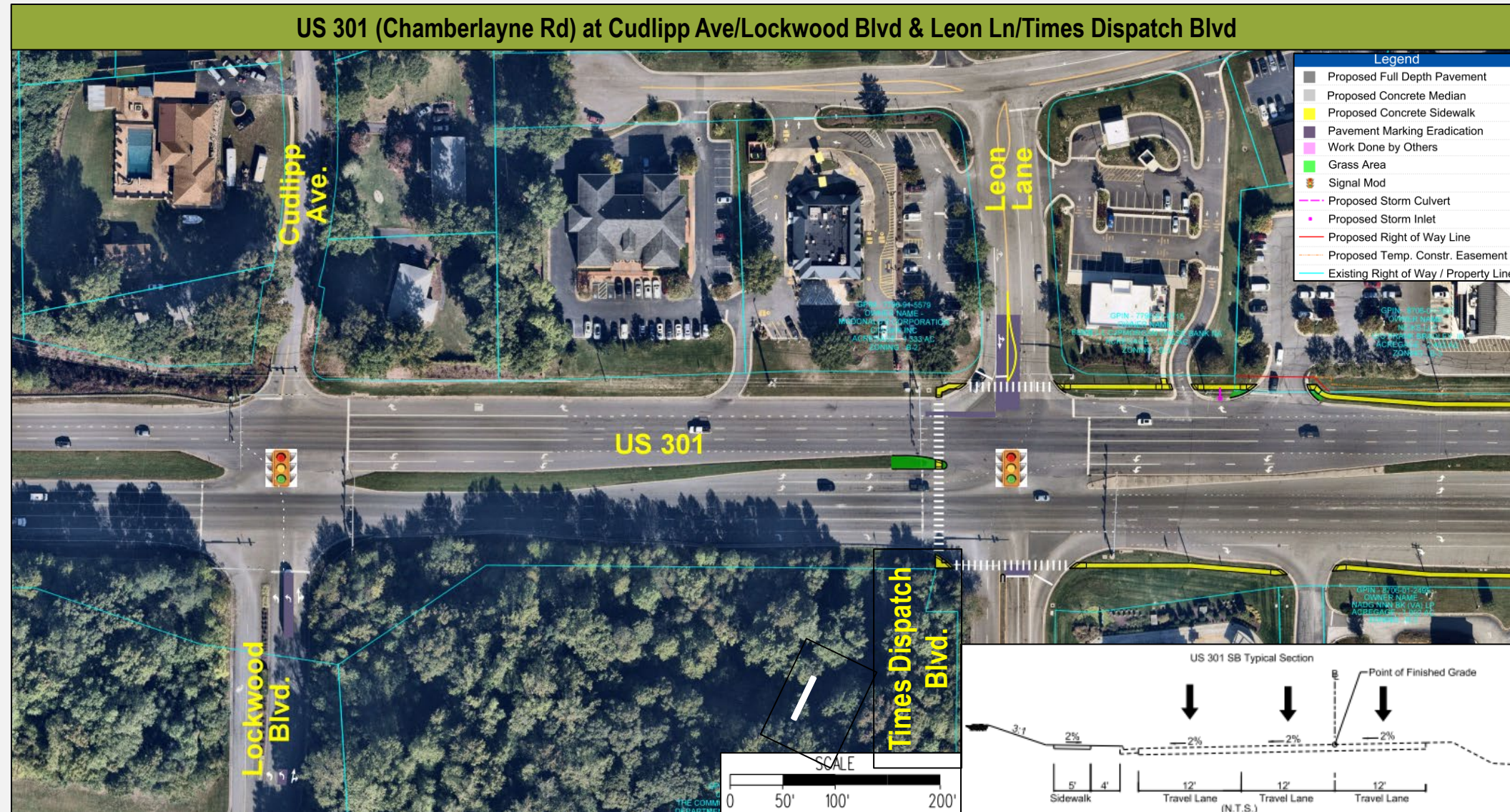


Note: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Chamberlayne Corridor Cost Estimate*

Construction Cost	\$5,494,658
PE Cost	\$1,910,250
RW Cost	\$1,164,850
CEI	\$1,022,262
Total	\$9,592,020

- * Includes all improvements at Chamberlayne Rd and:
1. Lockwood Blvd/Cudlipp Ave
 2. Leon Ln/Times Dispatch Blvd
 3. Atlee Station Rd
 4. Atlee Rd



Phase II – Preferred Alternatives

US 301 (Chamberlayne Road) from I-295 to Atlee Road



PROJECT DESCRIPTION

The improvements proposed include:

INTERSECTION OF VA-637 (ATLEE STATION ROAD)

- Restripe NW Atlee Station Rd lane configuration to 1 left, 1 through, 1 right
- Restripe SE Atlee Station Rd lane configuration to 1 left, 1 through, 1 right
- Add left-turn extension pavement marking for SE Atlee Station Road
- Remove channelizing island on SE Atlee Station Rd approach, extend stop line for right turn lane, and pull median nose back
- Modify Atlee Station Road signal phasing to permissive
- Add 3rd lane on SW Chamberlayne Road operating as a shared through/right
- Install marked crosswalks and pedestrian signals for three legs
- Add sidewalks along both sides of Chamberlayne Road
- Modify railroad underpass to accommodate additional lane and sidewalk

INTERSECTION OF ATLEE ROAD

- Restripe NW Atlee Road lane configuration to 1 left, 2 through, 1 right
- Add 3rd through lane and new exclusive right-turn lane on SW Chamberlayne
- Pull back channelizing island and change right turn on SE Atlee Rd to have no merge area; accommodating the 3rd SW through lane on Chamberlayne
- Add left-turn extension pavement marking for SE Atlee Road
- Add 2nd right-turn lane and channelizing island along NE Chamberlayne Rd
- Extend double left-turn lanes along NE Chamberlayne Rd by 225-ft
- Modify signal to accommodate all lane configuration changes
- Install marked crosswalks and pedestrian signals for crossing all legs
- Add sidewalk along SW Chamberlayne Road

PROJECT BENEFITS

These traffic control, geometric, and pedestrian improvements will help address VTrans needs associated with safety, congestion, and pedestrian access. Signal timing optimization, reduced signal phases, and lane configuration changes will increase capacity and reduce rear-end crash risk. Adding pedestrian facilities will improve pedestrian safety while providing better access and connectivity.

PROJECT NEEDS

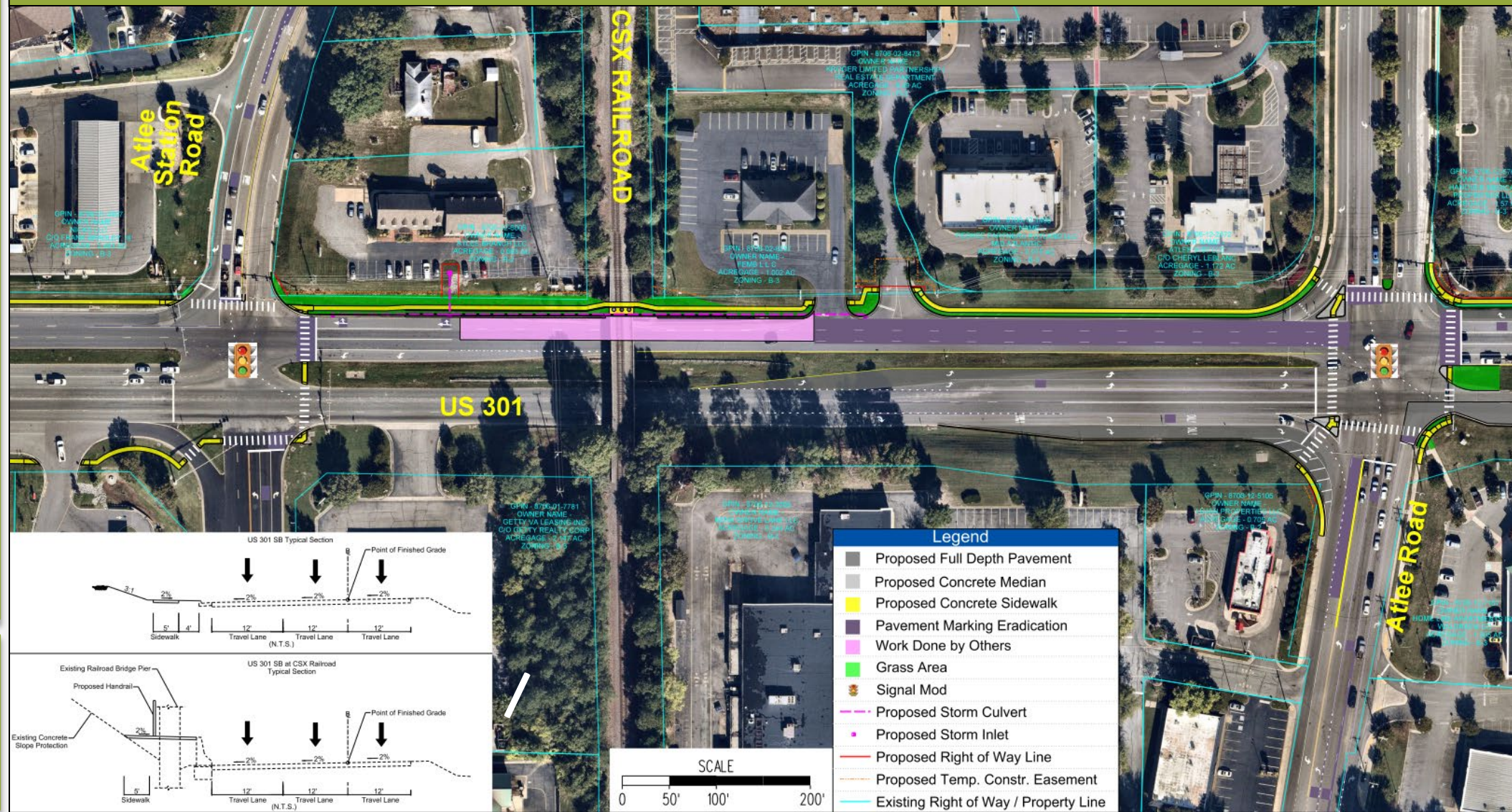
Need	Priority
Pedestrian/Bicycle Access	High
Transit/TDM	Very High
Congestion Mitigation	Medium
Safety Improvement	Very High

PUBLIC SURVEY RESULTS SUMMARY

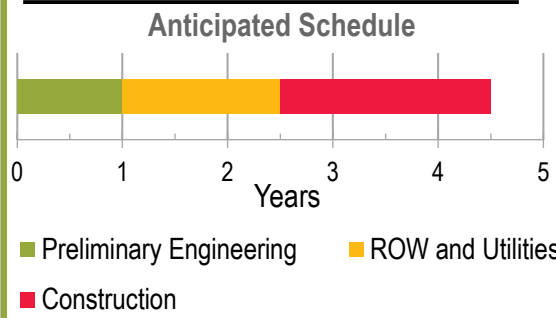
IMPROVEMENT CONCEPT	AVERAGE RATING	NUMBER OF RESPONDENTS
VA-637 (Atlee Station Road)	3.6	935
Atlee Road	3.8	895
Pedestrian / Bicycle	3.7	843
Average Rating	3.7	Alternative were rated out of 5

PublicInput.com Survey ran between April 29 to May 13, 2024 (15 days)

US 301 (Chamberlayne Rd) at VA-637 (Atlee Station Road) & Atlee Road



SCHEDULE AND ESTIMATE



Note: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Chamberlayne Corridor Cost Estimate*

Construction Cost	\$5,494,658
PE Cost	\$1,910,250
RW Cost	\$1,164,850
CEI	\$1,022,262
Total	\$9,592,020

- * Includes all improvements at Chamberlayne Rd and:
1. Lockwood Blvd/Cudlipp Ave
 2. Leon Ln/Times Dispatch Blvd
 3. Atlee Station Rd
 4. Atlee Rd

Phase II – Preferred Alternatives

US 301 (Chamberlayne Road) from I-295 to Atlee Road



PROJECT DESCRIPTION

The improvements proposed include:

- Install new roundabout (2 lanes on Atlee Road, 1 lane on Barnfield Lane)
- Widen median and remove exclusive left and right turn lanes along both Atlee Road approaches
- Modify existing median on west leg of Barnfield Lane
- Install new median on east leg of Barnfield Lane
- Install complete intersection lighting
- Install marked crosswalks with median refuges across all four legs
- Reconstruct existing sidewalks to accommodate the roundabout footprint
- Install new sidewalks along north side of Barnfield lane on both sides of Atlee Road

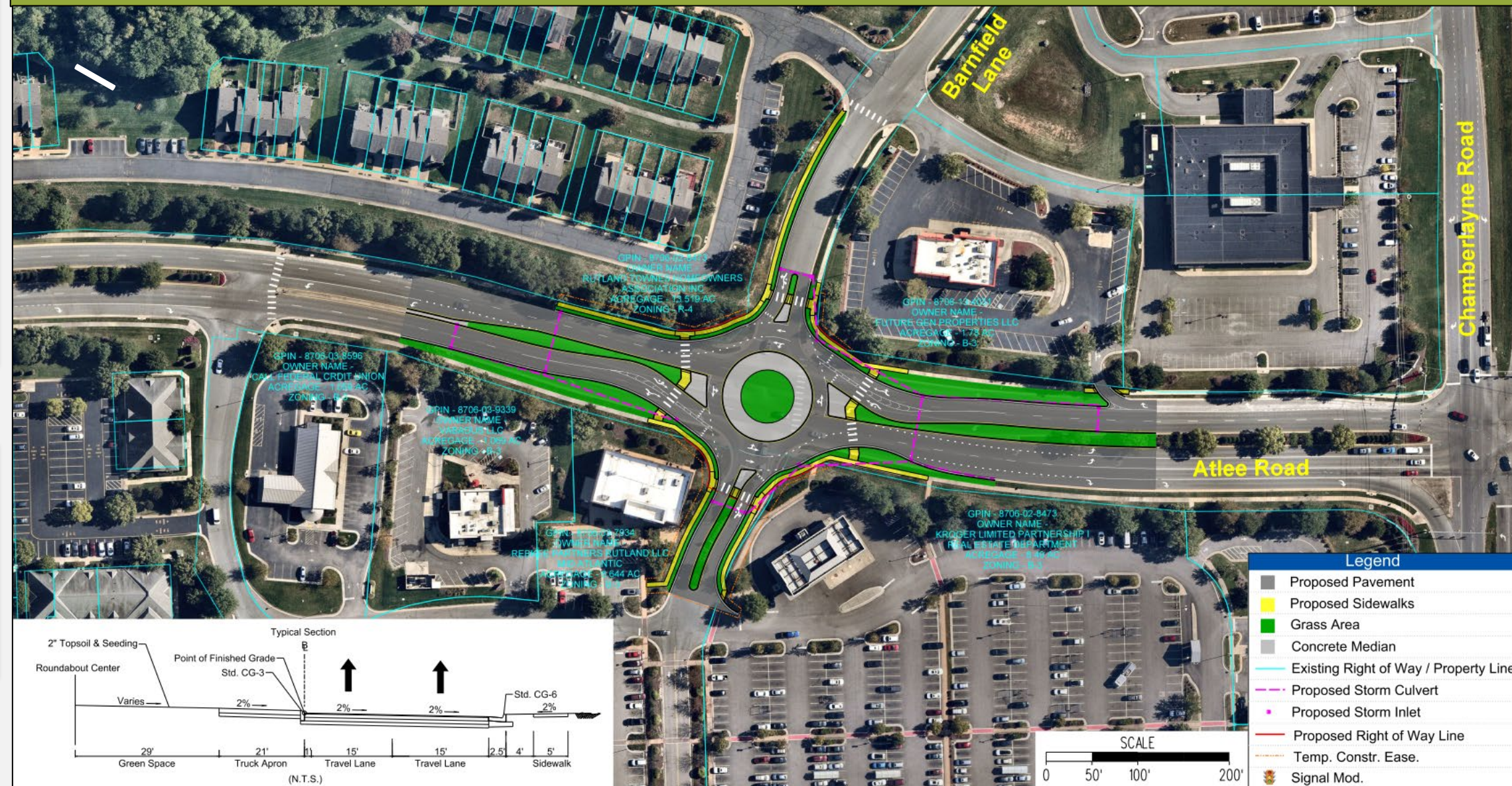
PROJECT BENEFITS

These traffic control, geometric, and pedestrian improvements will help address VTrans needs associated with safety, congestion, and pedestrian access. Installation of a roundabout will reduce overall and severe crash risk by reducing speeds and the number of conflict points. Intersection lighting and designated pedestrian crossings with median refuges will enhance multimodal safety. New sidewalks will provide improved pedestrian access and connectivity.

PROJECT NEEDS

Need	Priority
Pedestrian/Bicycle Access	High
Transit/TDM	Very High
Congestion Mitigation	Medium
Safety Improvement	Very High

Atlee Road at Barnfield Lane

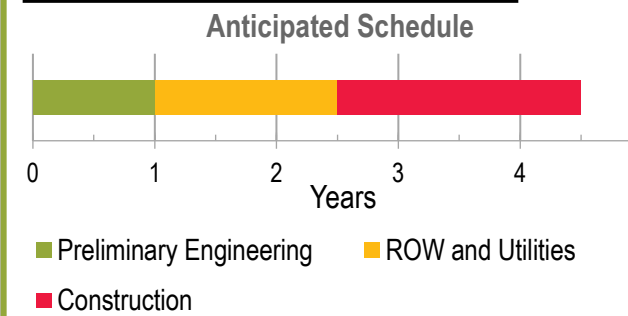


PUBLIC SURVEY RESULTS SUMMARY

IMPROVEMENT CONCEPT	AVERAGE RATING	NUMBER OF RESPONDENTS
Atlee Road at Barnfield Ln	3.7	898
Pedestrian / Bicycle	3.7	843
Average Rating	3.7	Alternatives were rated out of 5

PublicInput.com Survey ran between April 29 to May 13, 2024 (15 days)

SCHEDULE AND ESTIMATE



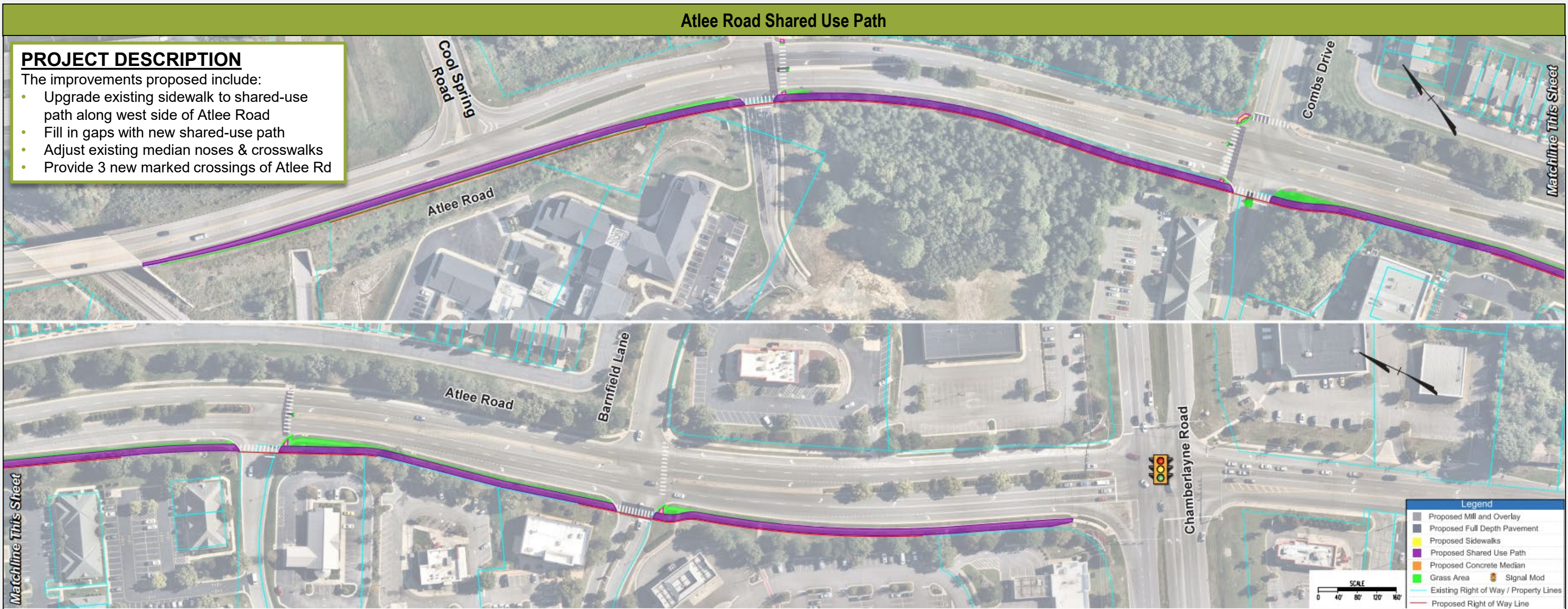
Atlee Rd & Barnfield Ln Cost Estimate

Construction Cost	\$8,129,043
PE Cost	\$2,346,300
RW Cost	\$5,504,850
CEI	\$1,512,380
Total	\$17,492,573

Note: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Phase II – Preferred Alternatives

US 301 (Chamberlayne Road) from I-295 to Atlee Road



PROJECT DESCRIPTION

The improvements proposed include:

- Upgrade existing sidewalk to shared-use path along west side of Atlee Road
- Fill in gaps with new shared-use path
- Adjust existing median noses & crosswalks
- Provide 3 new marked crossings of Atlee Rd

PROJECT NEEDS

Need	Priority
Pedestrian/Bicycle Access	High
Transit/TDM	Very High
Congestion Mitigation	Medium
Safety Improvement	Very High

PROJECT BENEFITS

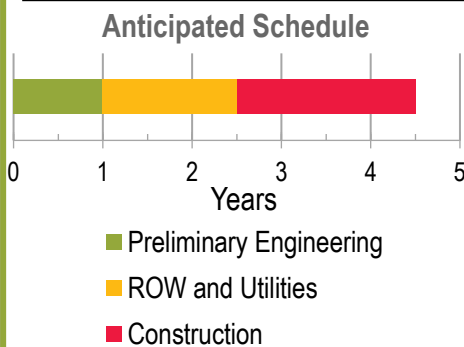
These improvements will help address VTrans needs associated with safety and pedestrian/bicycle access. Designated bicycle/pedestrian path and crossings will enhance multimodal safety, access, and connectivity.

PUBLIC SURVEY RESULTS SUMMARY

IMPROVEMENT CONCEPT	AVERAGE RATING	NUMBER OF RESPONDENTS
Pedestrian / Bicycle	3.7	843

Alternatives were rated out of 5
PublicInput.com Survey ran between April 29 to May 13, 2024 (15 days)

SCHEDULE & ESTIMATE



Atlee Rd Shared Use Path Cost Estimate

Construction Cost	\$3,646,000
PE Cost	\$1,186,000
RW Cost	\$2,155,000
CEI	\$656,280
Total	\$7,643,280

Note: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Phase II – Preferred Alternatives

US 301 (Chamberlayne Road) from I-295 to Atlee Road



PROJECT DESCRIPTION

The improvements proposed include:

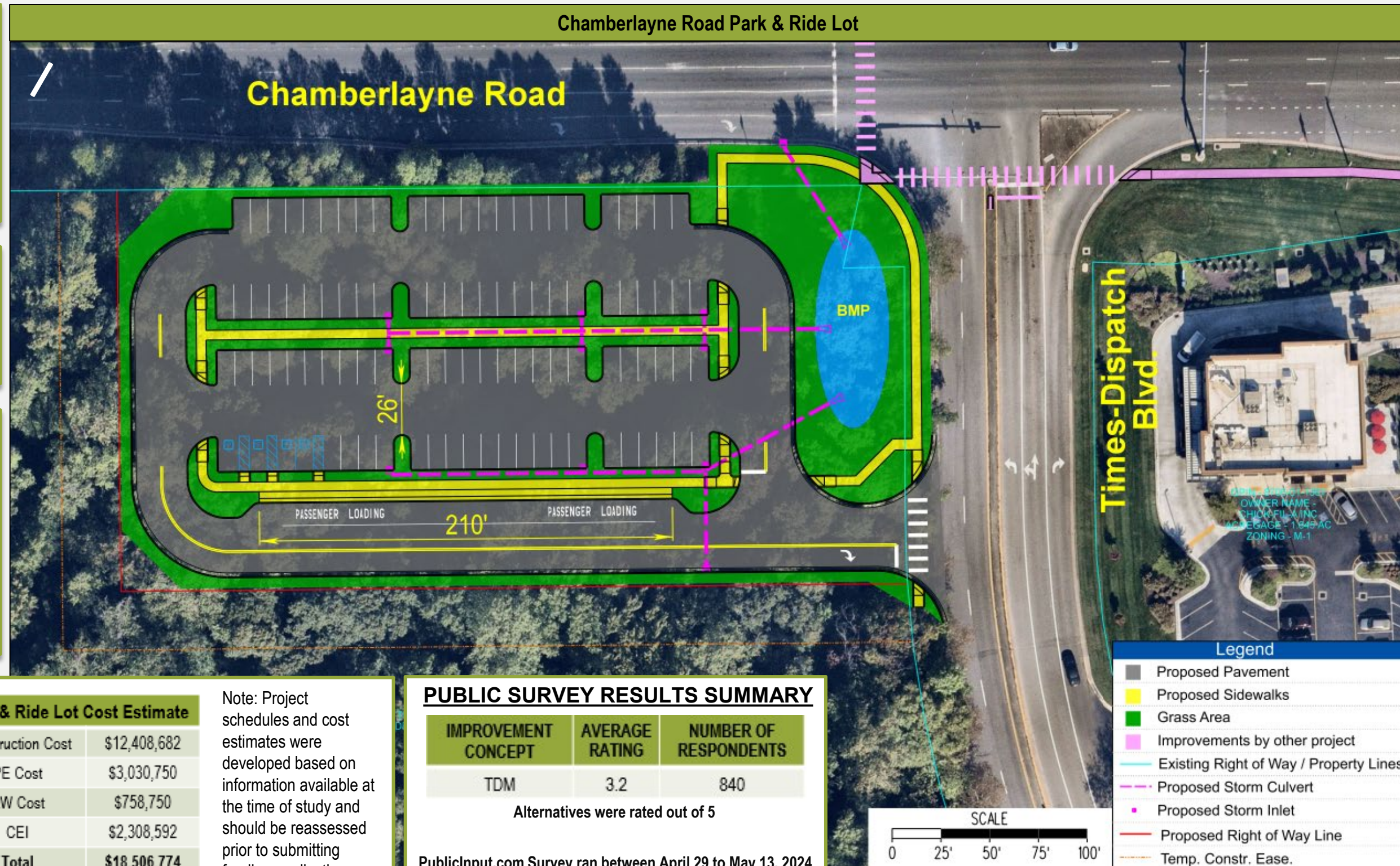
- Install new park and ride facility in the SW quadrant at the intersection of Chamberlayne Road and Leon Lane/Times Dispatch Boulevard
- Lot will include 96 general parking spaces and 4 accessible parking spaces
- Add sidewalk connecting to new sidewalk at Chamberlayne Road/Times Dispatch Blvd intersection

PROJECT BENEFITS

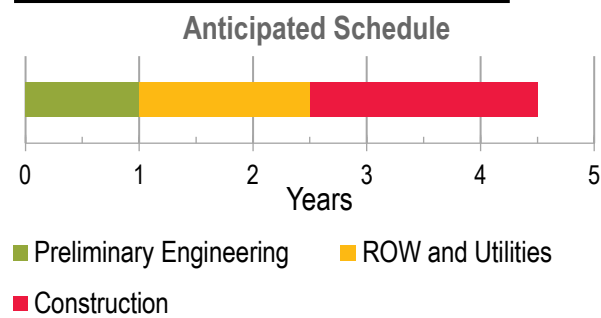
The new park and ride lot improvement will help address VTrans needs associated with Transportation Demand Management (TDM). The park and ride lot will provide commuters more opportunity for ridesharing.

PROJECT NEEDS

Need	Priority
Pedestrian/Bicycle Access	High
Transit/TDM	Very High
Congestion Mitigation	Medium
Safety Improvement	Very High



SCHEDULE AND ESTIMATE



Park & Ride Lot Cost Estimate

Construction Cost	\$12,408,682
PE Cost	\$3,030,750
RW Cost	\$758,750
CEI	\$2,308,592
Total	\$18,506,774

Note: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

PUBLIC SURVEY RESULTS SUMMARY

IMPROVEMENT CONCEPT	AVERAGE RATING	NUMBER OF RESPONDENTS
TDM	3.2	840

Alternatives were rated out of 5

PublicInput.com Survey ran between April 29 to May 13, 2024 (15 days)