



Louisville Road Connector to I-20

P.I. # 0019424

Project Team Initiation Process (PTIP) Meeting

Columbia County

Background

IJR for interchange approved by FHWA on 01/22/2022.

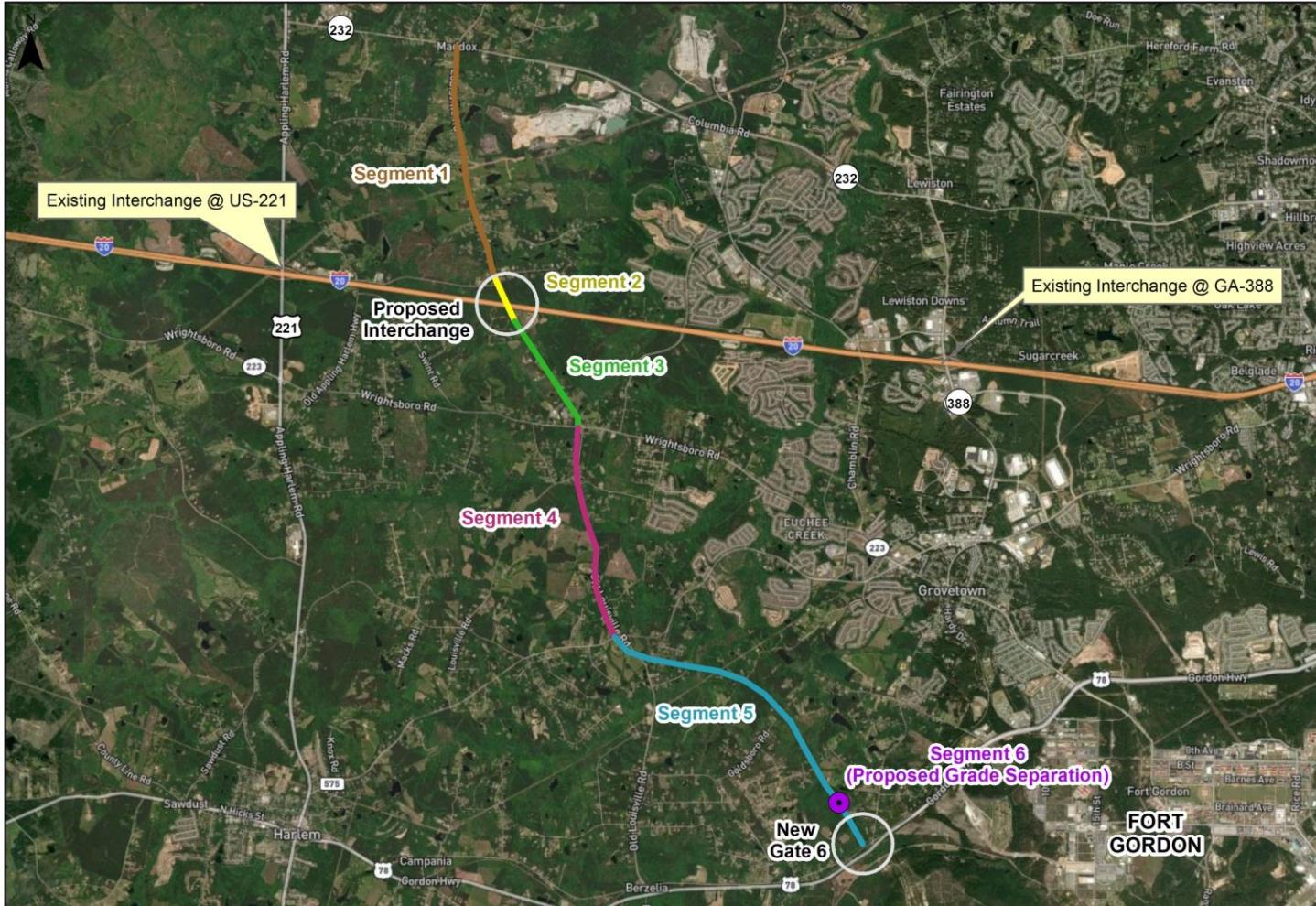
GDOT Conventional Batch 2022 #2/Scoping phase expected to begin in Summer 2023 (FY 23 Scoping Funds).

- PI# 0019424 is only programmed for the new interchange at this time.
- No ROW or CST funds programmed at this time.

Scoping schedule will be developed.

New interchange currently programmed in ARTS TIP for \$5.5M in Z230 funds for 2022.

Project Location



- Existing interchanges at US-221 and GA-388 are approximately 7 miles apart
- Segments 1 through 4 involve improvements to existing roadways
- Segments 5 and 6 require new construction

Programming Information

\$4 million is scoping funds programmed for FY 23; no ROW/Utilities/CST funds programmed at this time

Information presented below is early evaluation provided by GDOT – needs further verification in scoping

Segment	1: Columbia Road to Natures Way	2: Interchange	3: Interchange Limits to Wrightsboro Road	4: Wrightsboro Road to Harlem Grovetown Road	5: Harlem Grovetown Road to Grade Separation Limits (NEW ALIGNMENT)	6: Grade Separation, ending at US 78 new Gate 6 (NEW ALIGNMENT)	Total
Length (mi)	2.46	0.66	1.06	2.18	3.57	0.5	10.43
Preliminary Engineering	\$2,009,000	\$1,800,000	\$862,000	\$1,856,000	\$4,927,000	\$930,000	\$12,384,000
Right of Way	\$4,924,000	\$2,000,000	\$2,114,000	\$4,366,000	\$10,710,000	\$1,500,000	\$25,614,000
Utilities	\$1,847,000	\$500,000	\$793,000	\$1,637,000	\$0	\$0	\$4,777,000
Construction	\$16,742,000	\$15,000,000	\$7,186,000	\$15,470,000	\$41,055,000	\$7,750,000	\$103,203,000
Contingency	\$4,703,000	\$3,500,000	\$2,019,000	\$4,295,000	\$10,353,000	\$1,850,000	\$26,720,000
Total	\$30,225,000	\$22,800,000	\$12,974,000	\$27,625,000	\$67,345,000	\$12,030,000	\$172,698,000

* Scoping phase already authorized

Project Justification

Information derived from IJR

From 1990 to 2019, population and employment in Columbia increased by 314% and 219%, respectively.

Residential development has expanded west of Evans and Grovetown, resulting in significant traffic demands on roadways in western Columbia County.

Existing interchanges (US 221 and SR 388) have experienced significant congestion and queueing.

Existing interchanges are projected to fail over the next 10 – 20 years absent additional interstate access in western Columbia County.

Louisville Road Connector improvements needed to improve network connectivity in support of new interstate access.

Logical Termini

Unlikely that all six phases will be constructed at once.

Initial recommendation that Segments 1 through 3 could be constructed as first phase.

Logical termini evaluation would need to be an early TO for scoping.

LT evaluations may need to be completed for subsequent segments to determine final overall phasing strategy.

Local Coordination

Steve Exley, Deputy Director – County Engineering Division

Local need for to reduce volumes and prolong capacity of area two-lane east-west corridors

Project will allow county to better control development from sprawling further west into the rural end of the county

Any opposition expected to arise from area property owners affected by project or opposed to additional development in otherwise “quiet” area

Potential environmental challenges to new alignment south of Old Louisville Rd/Harlem Grovetown Rd. County suggests multiple alignment options should be studied to limit displacements and structure costs since most or all of the new section is expected to be a 4-lane with bridge culverts and overpasses (creek and railroad) in order to meet Fort Gordon’s traffic projections over the 20-year period.

Local Coordination (cont'd)

Steve Exley, Deputy Director – County Engineering Division

No expected developments that may affect project – practically zero sanitary sewer infrastructure in or near corridor

County suggests that the existing rural corridors to the north and south would be designed with minimal shoulder widening to limit project costs. Perhaps the existing corridor would remain a rural section before the new alignment transitions into four-lane rural divided or urban section, which will aid in access management and improve travel times in this critical portion of the corridor. If existing corridor remains two-lane, would introduction of passing lanes help improve travel times to/from Gate 6?

Existing Conditions – Traffic Volumes



- I-20 volume ~ 45,000 near proposed interchange site
- Volumes along US-221 range from 7,000 to 9,500
- Volumes ~6,500 near proposed southern terminus
- Heaviest non-Interstate volumes near Grovetown



Louisville Road looking north towards proposed interchange

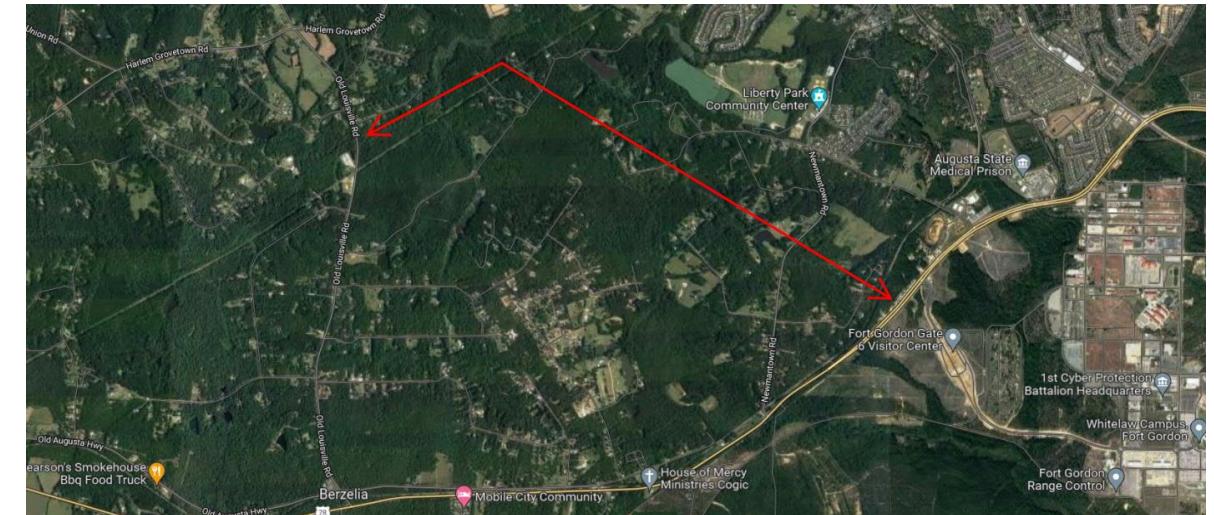
Louisville Road looking south towards proposed interchange





Representative typical section Old Louisville Road
(Likely Segment 4)

New Location Connection Points





US 78 looking east at new Gate 6

Approx. at Gate 6 looking west





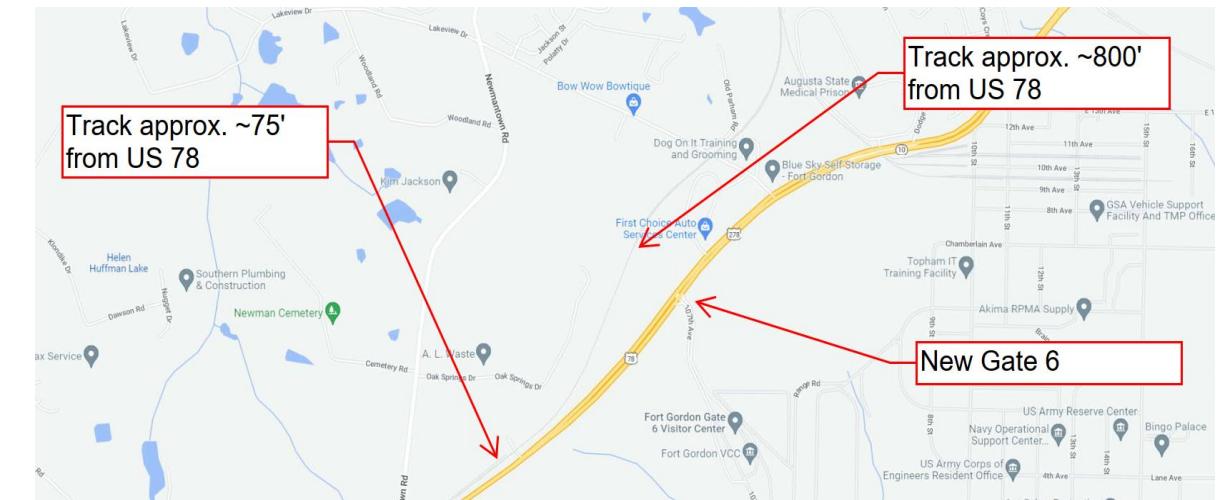
Approx. Gate 6 looking north

Approx. new location start on Old Louisville Road

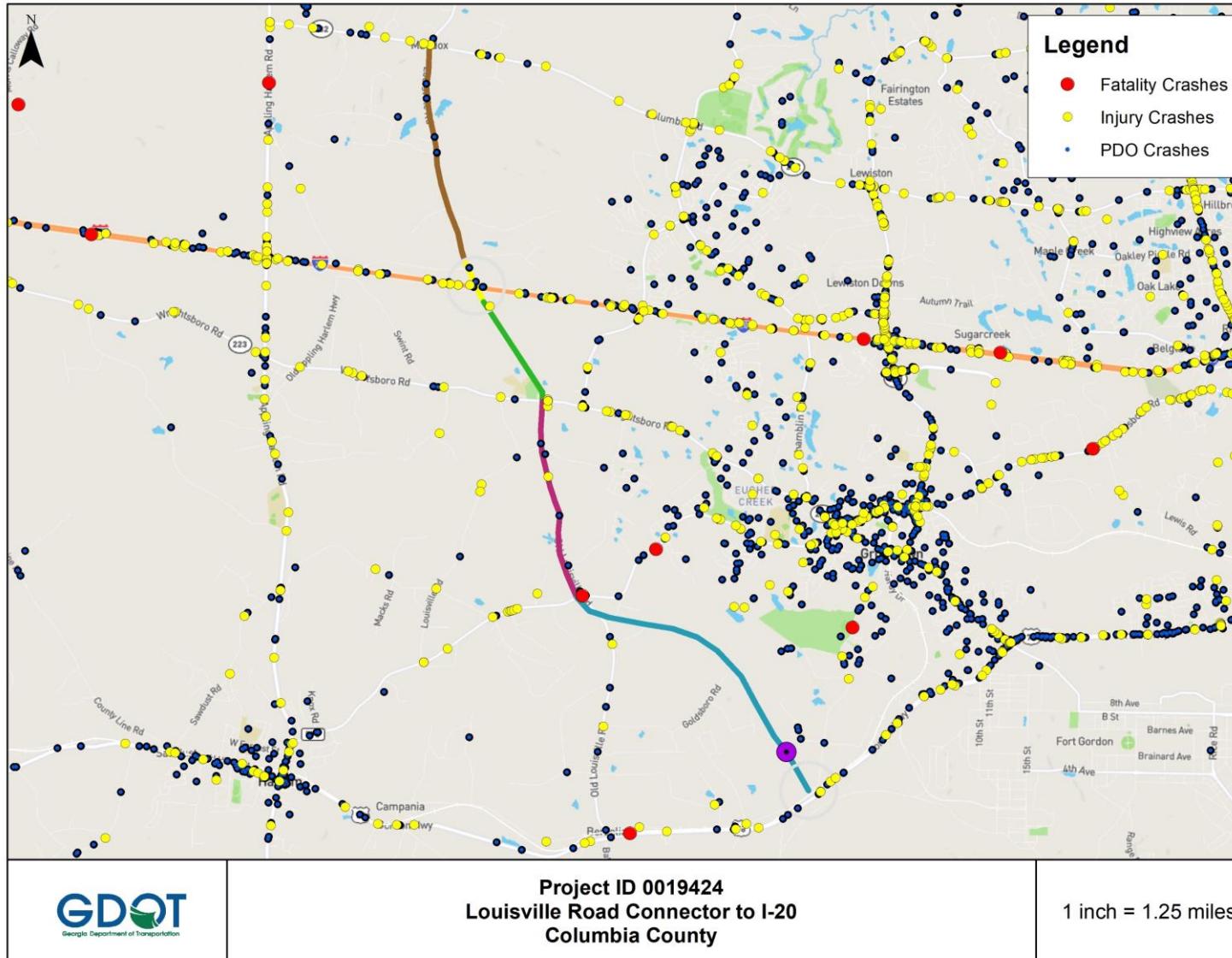




Railroad track varies in proximity to US 78

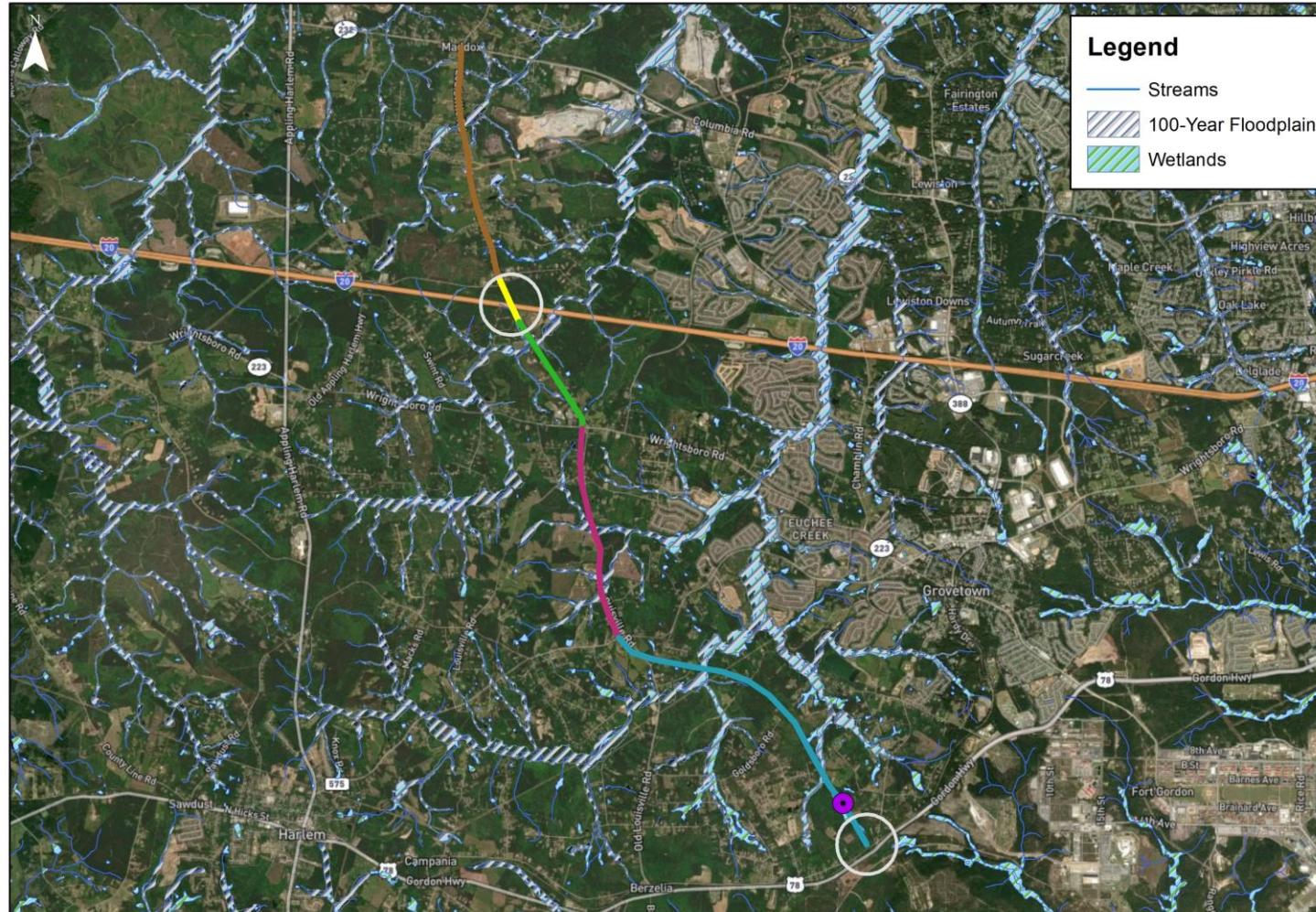


Existing Conditions – Crashes (2019 – 2022)



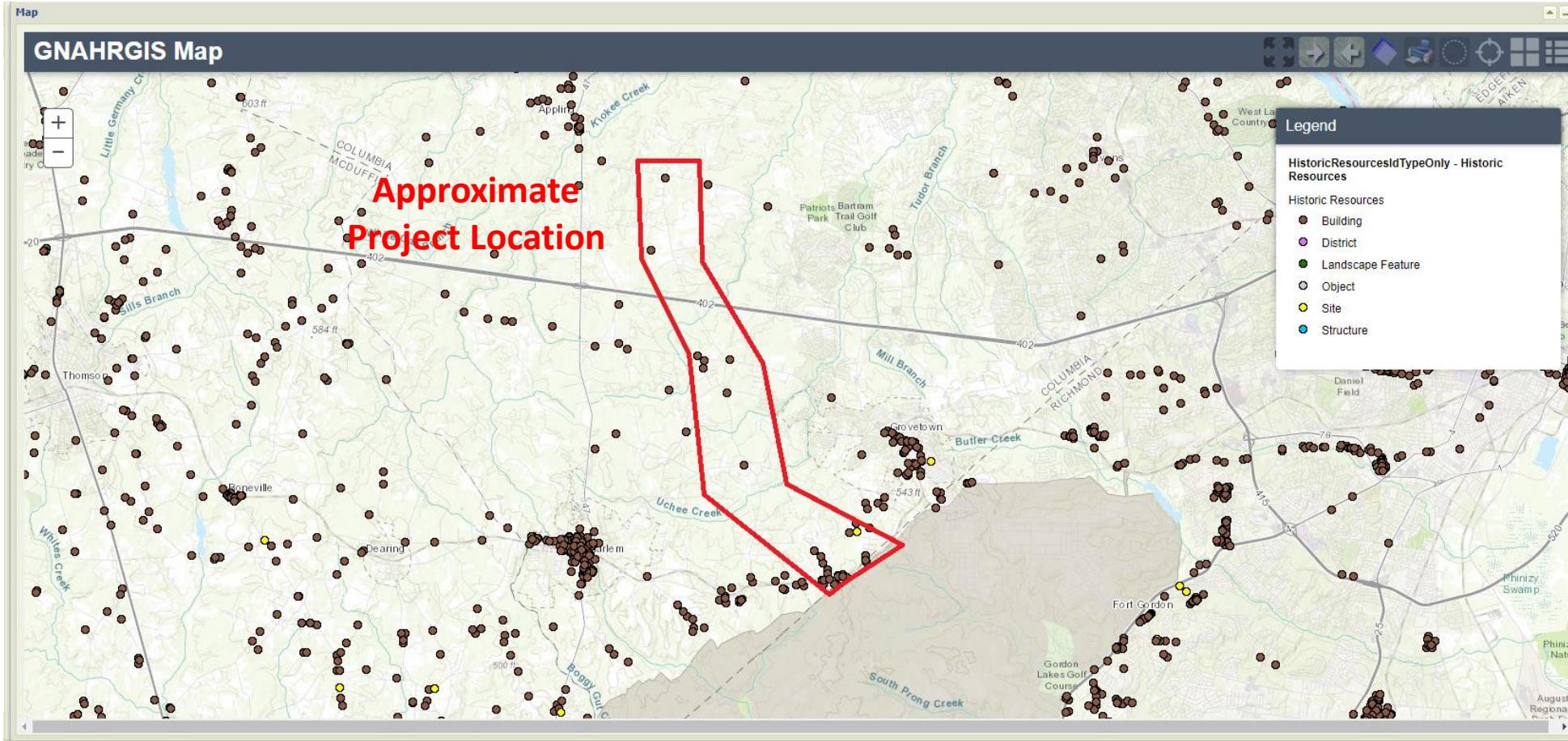
- Crashes from 2019 to 2022 (August)
- One (1) fatal crash at Old Louisville Rd / Harlem Grovetown Road
- Injury crashes largely located at interchange / intersection areas

Existing Conditions – Water Resources



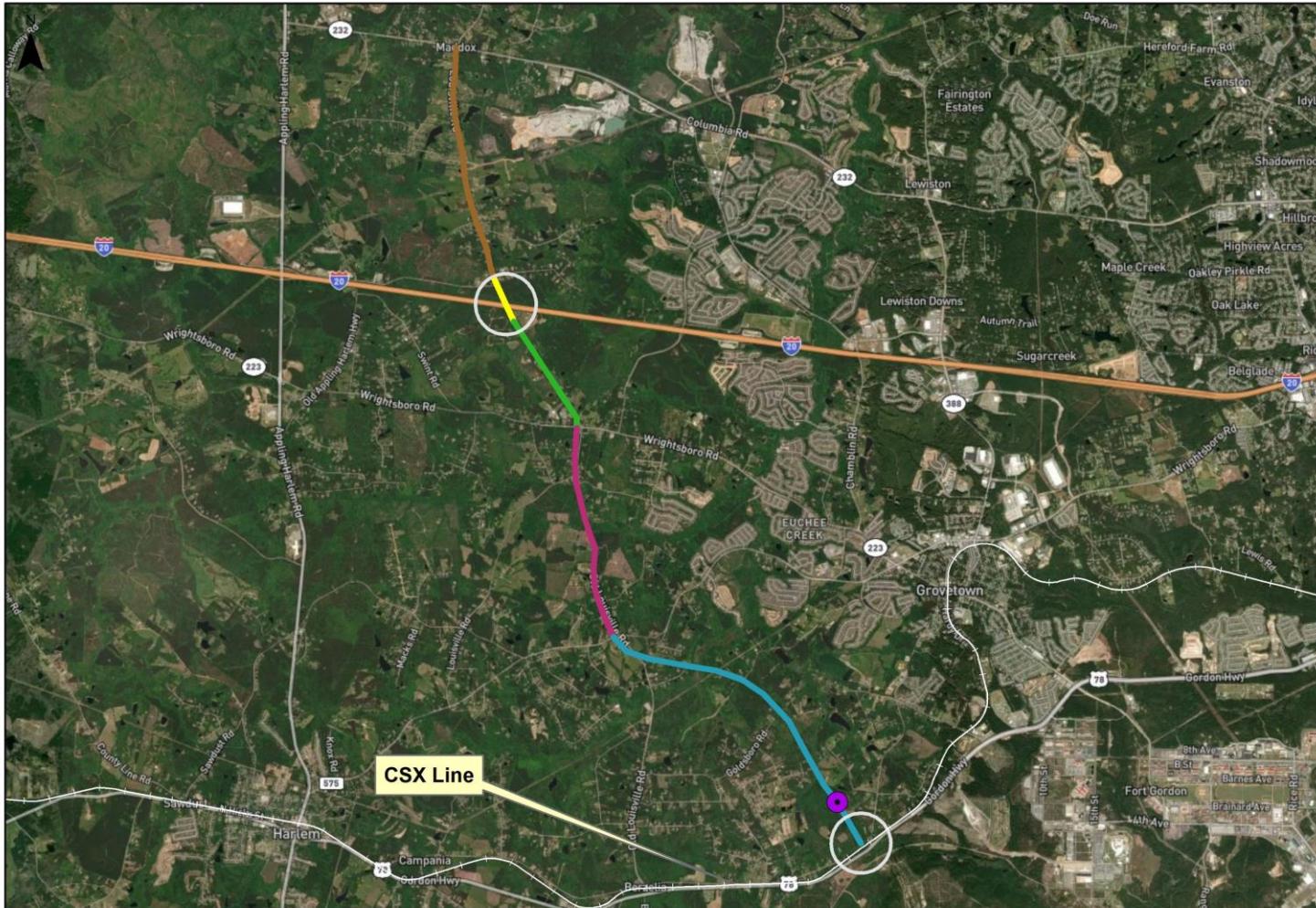
- Wetlands and floodplains associated with extensive creek system throughout study area
- New crossing of Uchee Creek and associated wetlands
- No major longitudinal crossings based on conceptual alignment
- LCP coordination after LT evaluation and programming of ROW/CST funds

Existing Conditions – Historic Sites



- Historic structures located throughout project study area
- Heavy concentration of historic structures near southern terminus
- RR near southern terminus will likely require evaluation

Existing Conditions – Rail Crossings



- Currently 5 trains / week at 50 mph
- Reply to any future track requirement requests is to span entire ROW.
- If crossing is at-grade, then CSX will require 2 to 3 at-grade crossings closed on same line

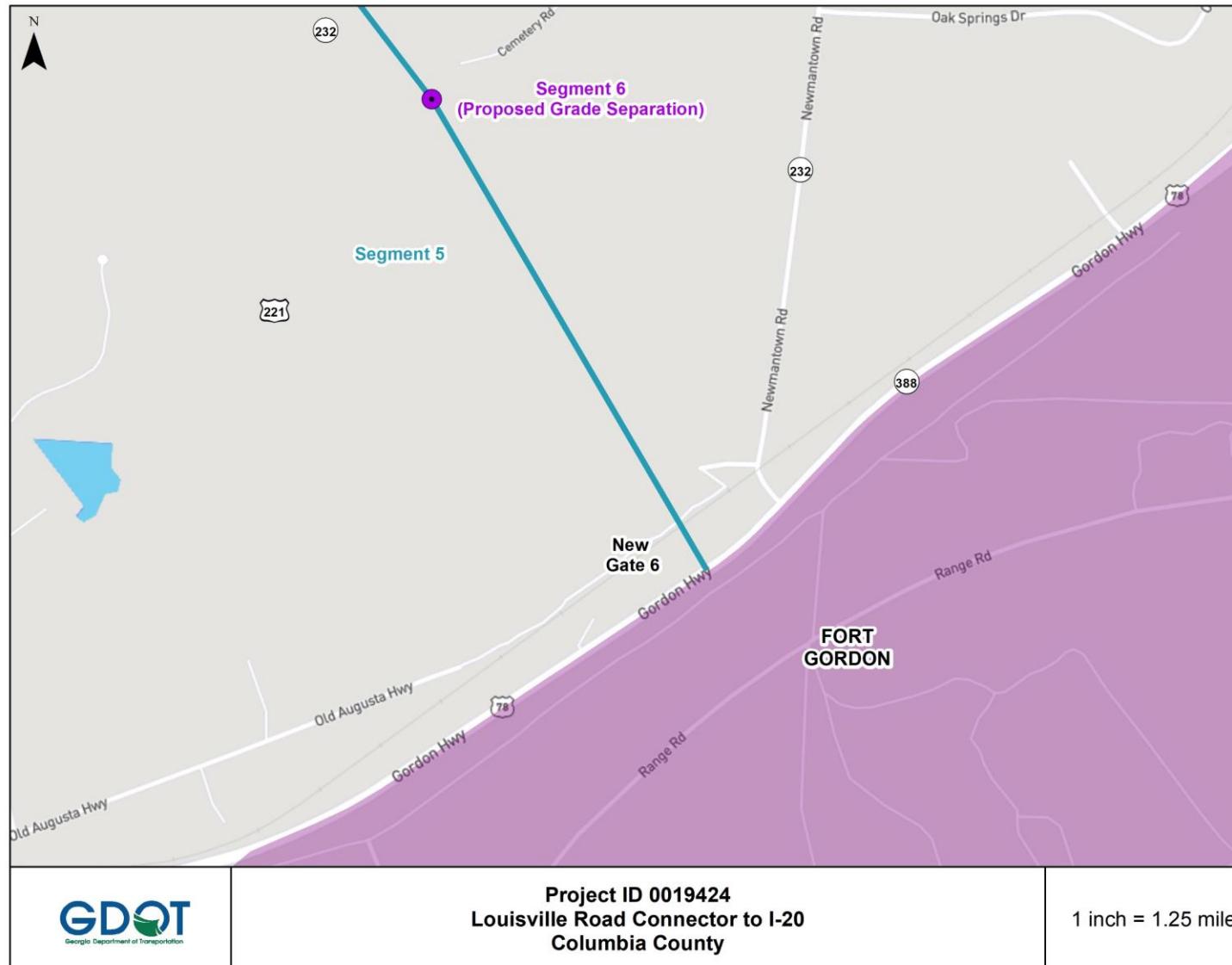
Rail Crossings

Edlin Regis, GDOT Railroad Safety Program Assistant

In addition to closure of 2 to 3 existing crossings, additional roadway improvements would be needed

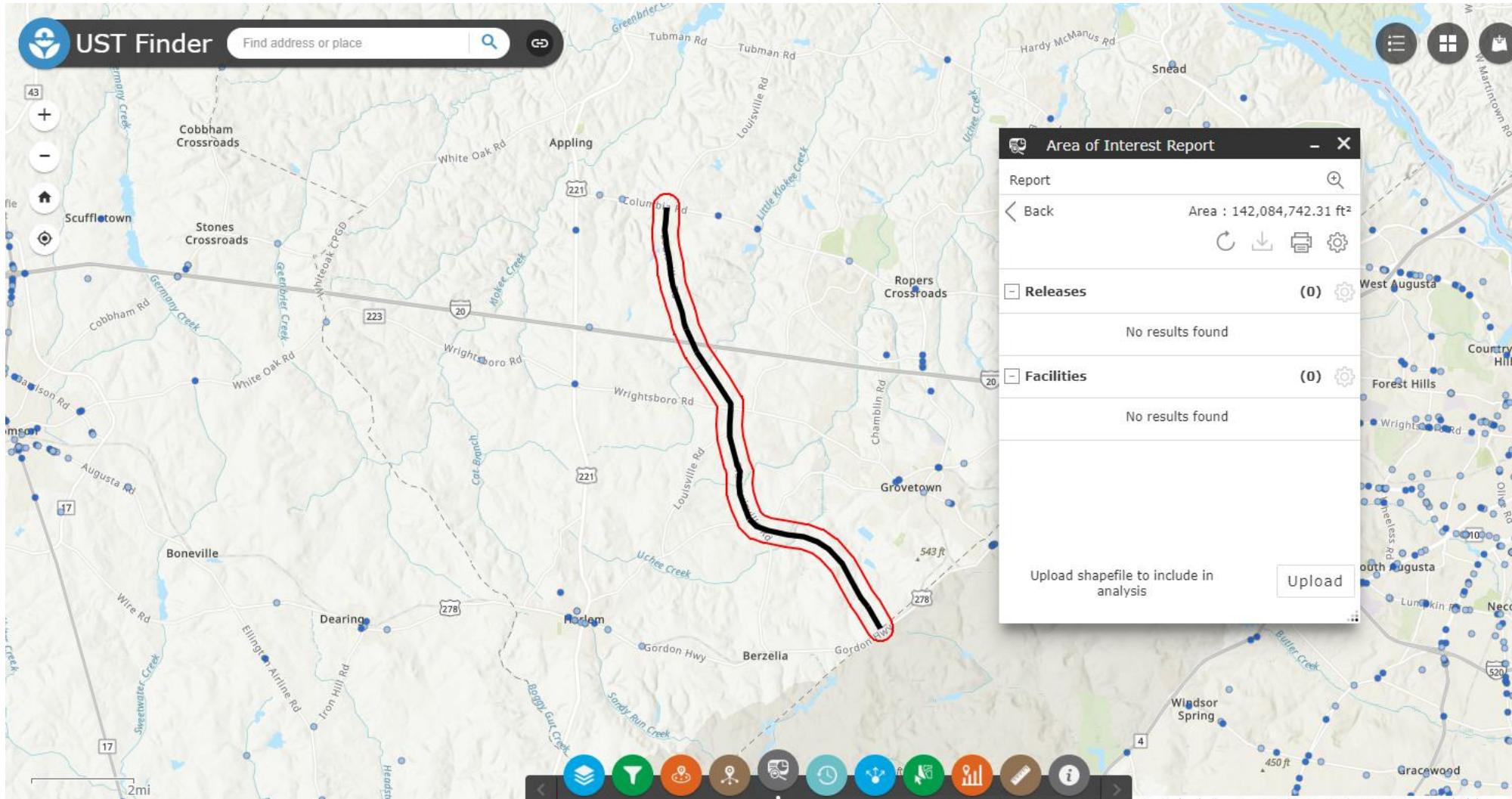
If, for example, the project were to close Old Louisville Road, Lone Oak Lane, and Newmantown Road, recommend extending Old Augusta Hwy to Newmantown Rd to allow access to the new crossing connecting SR 12/US 78.

Existing Conditions – Fort Gordon



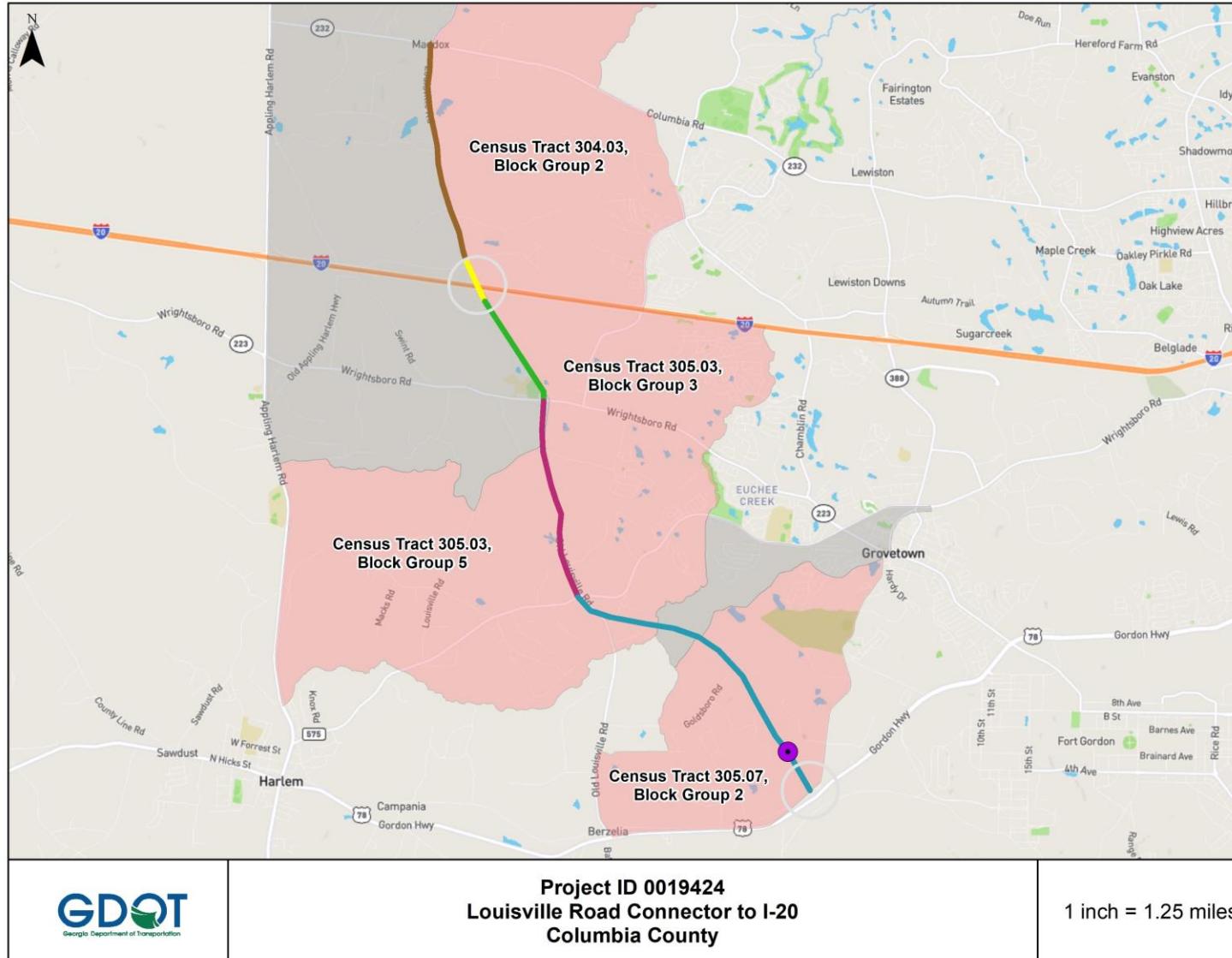
- As latter phases advance, coordination with Ft. Gordon would be advised.
- Potential issues include federal property, ARPA, and add'l NEPA considerations for any ROW needs from fort property

Existing Conditions – Hazardous Materials / USTs



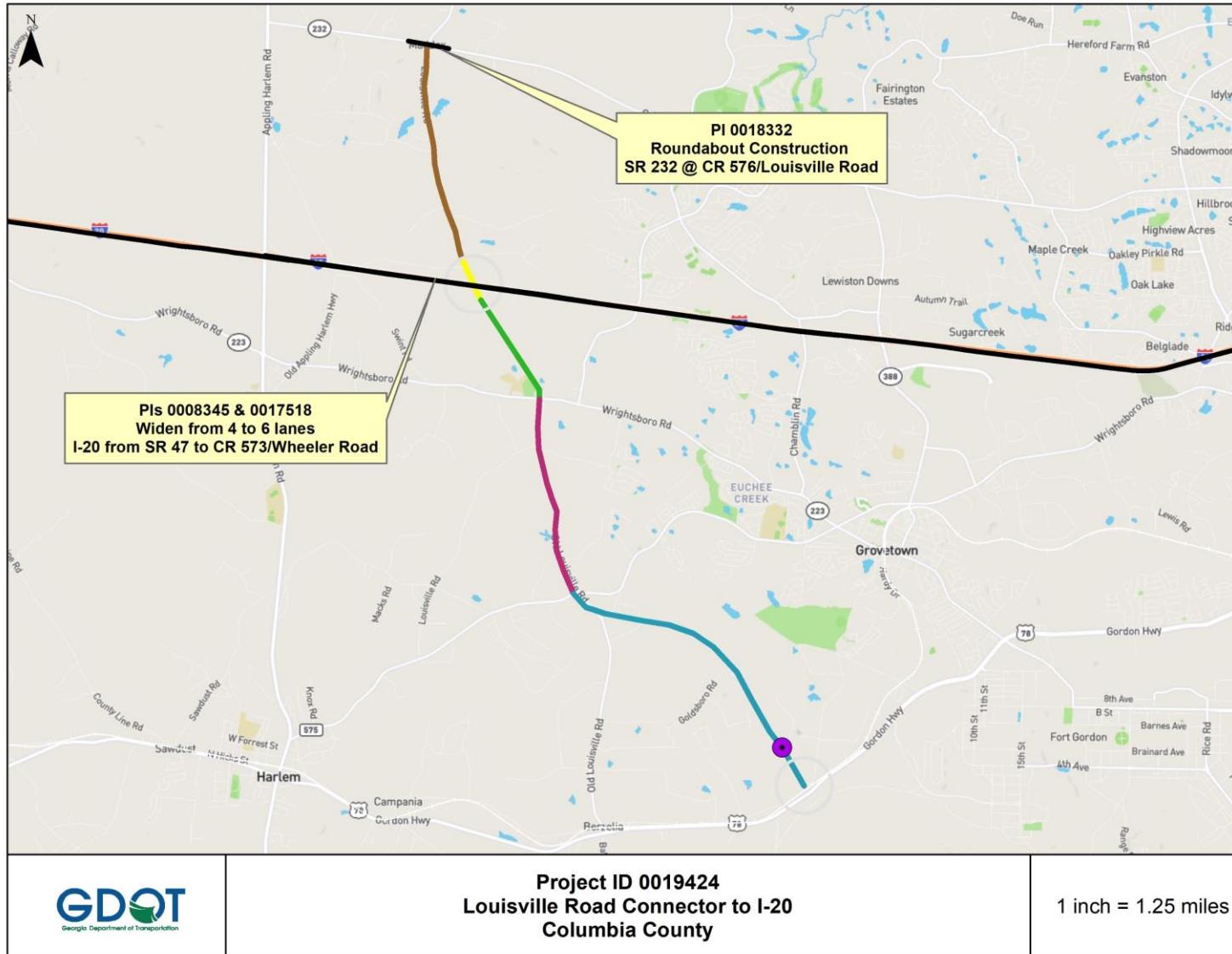
- No USTs within or adjacent to proposed alignment

Existing Conditions – Environmental Justice



- CT 304.03 / BG 2
 - Minority – 59%
 - Exceeds 50% of BG population and County Average by 10%
 - Low-Income – 30%
 - Exceeds County Average by 10%
- CT 305.03 / BG 3
 - Minority – 39%
 - Exceeds County Average by 10%
- CT 305.03 / BG 5
 - Minority – 48%
 - Exceeds County Average by 10%
- CT 305.07 / BG 2
 - Minority – 55%
 - Exceeds 50% of BG population and County Average by 10%

Other Area Projects



- Roundabout construction at SR 232 and CR 576 / Louisville Road (PI 0018332)
 - PM is Whitney Duncan.
 - PE authorized in FY 2022.
 - Schedule being submitted to Oct SRC with Lump Sum CST funds scheduled for FY 2026.
- Widening I-20 from 4 to 6 lanes (PIs 0008345 & 0017618)
 - PI 0017618 is a TIA project.

Discussion Points for Scoping Phase/TO#1

Phasing



- Potential to focus only on Segments 1 through 3 for initial phase
- Segments 4 through 6 could be Phases 2 / 3
- Do Segments 1 through 3 constitute logical termini and/or independent utility?

DISCUSSION