

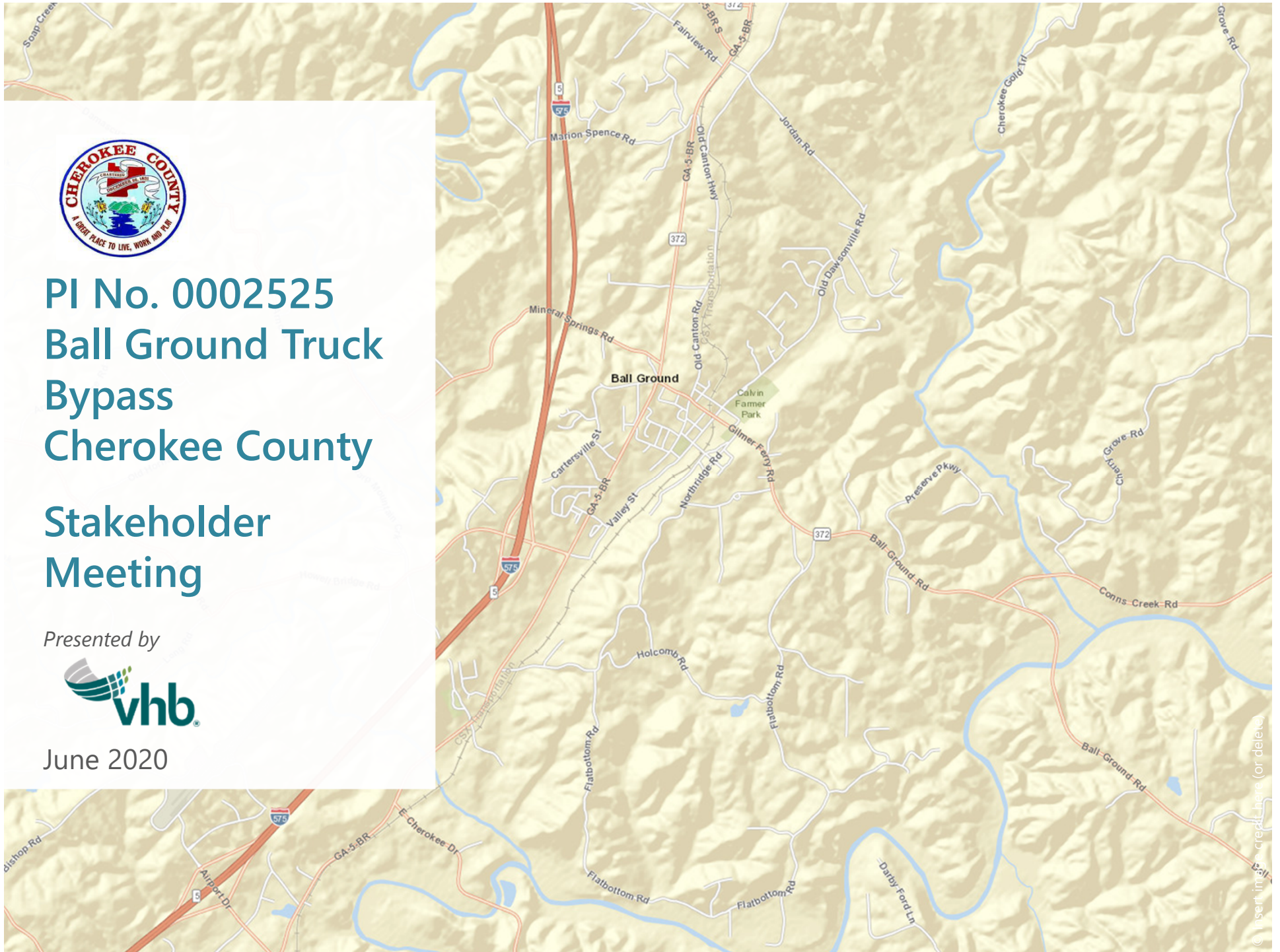


PI No. 0002525 Ball Ground Truck Bypass Cherokee County Stakeholder Meeting

Presented by



June 2020



BALL GROUND TRUCK BYPASS ALTERNATIVES ANALYSIS MATRIX (Estimated Impacts & Costs)

RFQ 2018-048, Cherokee County P.I. No. 0002525

June 2020

| Alternative No. | A | A-2 | B | B-C | C | C-D | D |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Displacements | | | | | | | |
| Residential | 4 | 2 | 0 | 2 | 1 | 0 | 0 |
| Commercial | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Church | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Proximity of proposed roadway to residences | | | | | | | |
| less than 25' | 3 | 1 | 0 | 1 | 0 | 0 | 0 |
| less than 50' | 6 | 3 | 0 | 2 | 1 | 0 | 0 |
| less than 100' | 10 | 7 | 3 | 5 | 4 | 3 | 3 |
| less than 200' | 12 | 11 | 9 | 11 | 10 | 5 | 6 |
| less than 300' | 17 | 16 | 11 | 13 | 13 | 13 | 14 |
| less than 400' | 20 | 20 | 19 | 17 | 15 | 29 | 29 |
| less than 500' | 22 | 24 | 22 | 23 | 17 | 33 | 34 |
| Neighborhood Impacts | | | | | | | |
| Neighborhoods impacted | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Required Right of Way | | | | | | | |
| Required R/W Area (acres) | 40 | 40 | 43 | 44 | 47 | 72 | 76 |
| Wetlands and Waters Impacts | | | | | | | |
| Wetland Impact Area (acres) | 0.00 | 0.00 | 1.36 | 1.36 | 0.08 | 0.82 | 0.96 |
| Open Water (Pond) Impact Area (acres) | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 |
| Stream Impact Length (feet) | 632 | 650 | 1026 | 704 | 413 | 1874 | 2067 |
| Stream buffers (acres) | 0.77 | 0.80 | 1.41 | 0.71 | 0.31 | 2.13 | 2.40 |
| Historical properties impacts | | | | | | | |
| Historical properties impacted (each) | 4 | 2 | 2 | 6 | 6 | 3 | 3 |
| Severity of impacts | Adverse/Moderate | Not Adverse | Adverse/Low | Adverse/Severe | Adverse/Severe | Adverse/Low | Not Adverse |
| Section 4f | Yes | No | Yes | Yes | Yes | No | No |
| Roadway Lengths (miles) | | | | | | | |
| Bypass Length (SR 5 BU to SR 372) | 1.28 | 1.32 | 1.47 | 1.73 | 1.81 | 2.30 | 2.30 |
| Comparative Travel Length Along Bypass and SR 372 (SR 5 BU to SR 372 at Hawkins Farm Lane/Preserve Parkway) | 2.02 | 2.00 | 2.08 | 2.08 | 2.16 | 2.41 | 2.41 |
| Cost | | | | | | | |
| Construction | \$15,850,000 | \$14,840,000 | \$14,880,000 | \$18,770,000 | \$18,820,000 | \$18,390,000 | \$22,550,000 |
| Right of Way | \$4,941,000 | \$4,610,000 | \$4,235,000 | \$4,655,000 | \$4,500,000 | \$5,122,000 | \$5,575,000 |
| Utilities | \$150,000 | \$150,000 | \$130,000 | \$170,000 | \$170,000 | \$160,000 | \$160,000 |
| Mitigation | \$561,000 | \$578,000 | \$1,389,000 | \$1,178,000 | \$377,000 | \$1,910,000 | \$2,153,000 |
| TOTAL COST | \$21,502,000 | \$20,178,000 | \$20,634,000 | \$24,773,000 | \$23,867,000 | \$25,582,000 | \$30,438,000 |

Existing and Projected Traffic Volumes

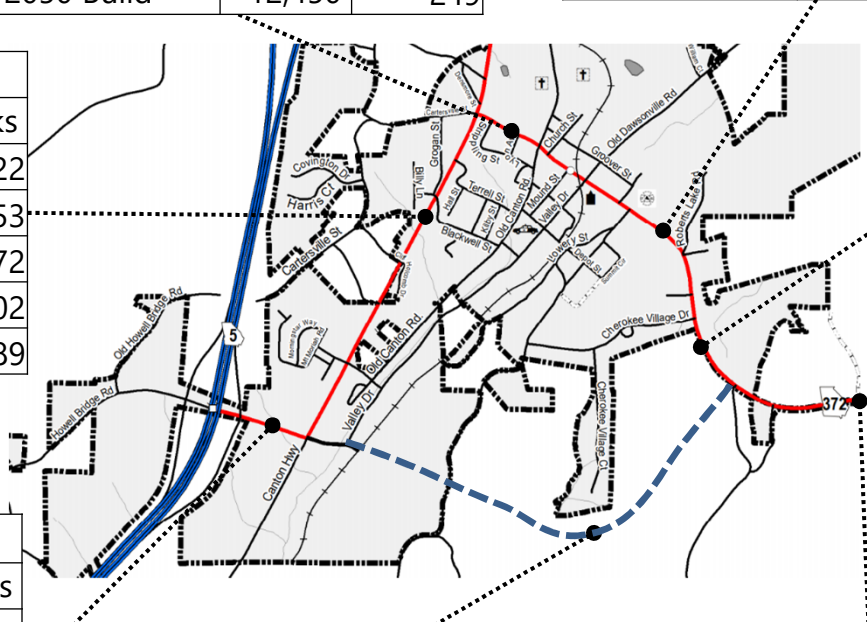
- Average Daily Traffic (ADT)

| SR 372 | | |
|---------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 8,650 | 1,125 |
| 2030 No Build | 10,950 | 1,424 |
| 2030 Build | 8,350 | 167 |
| 2050 No Build | 16,300 | 2,119 |
| 2050 Build | 12,450 | 249 |

| SR 372 | | |
|---------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 8,600 | 1,118 |
| 2030 No Build | 10,900 | 1,417 |
| 2030 Build | 7,600 | 152 |
| 2050 No Build | 16,250 | 2,113 |
| 2050 Build | 11,350 | 227 |

| SR 5BU | | |
|---------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 9,050 | 1,222 |
| 2030 No Build | 11,500 | 1,553 |
| 2030 Build | 9,600 | 1,872 |
| 2050 No Build | 17,050 | 2,302 |
| 2050 Build | 14,300 | 2,789 |

| SR 372 | | |
|---------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 8,850 | 1,151 |
| 2030 No Build | 11,250 | 1,463 |
| 2030 Build | 7,850 | 157 |
| 2050 No Build | 16,700 | 2,171 |
| 2050 Build | 11,700 | 234 |



| Howell Bridge Road | | |
|--------------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 9,050 | 1,358 |
| 2030 No Build | 11,500 | 1,725 |
| 2030 Build | 11,500 | 1,725 |
| 2050 No Build | 17,050 | 2,558 |
| 2050 Build | 17,050 | 2,558 |

| Ball Ground Truck Bypass | | |
|--------------------------|-------|--------|
| | Total | Trucks |
| 2018 Existing | - | - |
| 2030 No Build | - | - |
| 2030 Build | 3,800 | 426 |
| 2050 No Build | - | - |
| 2050 Build | 5,550 | 622 |

| SR 372 | | |
|---------------|--------|--------|
| | Total | Trucks |
| 2018 Existing | 8,600 | 1,118 |
| 2030 No Build | 10,900 | 1,417 |
| 2030 Build | 10,900 | 1,417 |
| 2050 No Build | 16,250 | 2,113 |
| 2050 Build | 16,250 | 2,113 |