

# E.G. Miles Parkway SR 196 / SR 119

Corridor Study



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Appendix A: Traffic Counts

Appendix B: Synchro Analysis Results (Unsignalized Intersections)

Appendix C: Synchro Analysis Results (Signalized Intersections)

Appendix D: Synchro Analysis Results (Full Build Condition)

Appendix E: ICE and Signal Warrants

Appendix F: Intersection Analysis Memo – Deal Street at E.G. Miles Parkway

Appendix G: Detailed Concept



# Appendix E: ICE and Signal Warrants





#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**

| GDOT PI#:   |  | F  | Reque                          | st By:               |                         |   |  |  |                              |                       | 1                    |        |        |                                  |                             |                       | 2022                    | EXIST                                     | ING Y  | EAR V   | OLUM           | ES                  | Λ                    |                                |
|---|--|--|--------------------------------|----------------------|-------------------------|---|--|--|------------------------------|-----------------------|----------------------|--------|--------|----------------------------------|-----------------------------|-----------------------|-------------------------|---|--|---|----------------|---------------------|----------------------|--------------------------------|
| County:   | Liborty  |  |                                | ,                    | SDOT E                  | )ictrict:                                 | 5 los  | un   |                              |                       |                      |        |        | CH SP<br>kwy:                    |                             | ķ                     |                         | 66 (54)                                   | [1700]   |   |                |                     |                      |                                |
| County.   | Liberty  |  |                                |                      | ם ו טטנ                 | nsuict.                                   | J - JES  | up   |                              |                       |                      |        |        | Ave:                             |                             | ton A                 | (0)                     | (31)                                      | (0)  | (23)  |                |                     | •                    | •                              |
| Major Road:   | EG Mile  | es Pkwy                                  | /                              | Road<br>Class:       | Minor A                 | Arterial                                  |  | Speed<br>Limit:                                      | 40 ı                         | mph                   |                      | AIII   | rigion | Ave.                             | 1 /0                        | SB Arlington Ave      | 0                       | 21  | 0  | 45  |                | WB E                | G Miles              | Pkwy                           |
| Crossing Road:  | Arlinato   | n Ave                                    |                                | Road                 | Local                   |   |  | Speed  | 35 ו                         | mph                   | 1                    |        |        |                                  |                             | SB /                  | Peds                    | <b>A</b>                                  | û  | \$  | Peds           | 0                   | (0)                  | 700]                           |
| •   |  |  |                                | Class:               |                         |   |  | Limit:   |                              |                       | J                    |        |        | 977                              | (49)                        | 19                    | Ð                       |   | ntersectio   |   | ŶET            | 9                   | (66)                 | 463 (760) [14700]              |
| Major Rd Direction:   | East/W   | est                                      | Area                           | Type:                | Suburb                  | /Trans                                    | ition  | ]  |                              |                       |                      |        |        | (655)                            | (599)                       | 955                   | ↔                       |   | •  | , ,   | 1              | 452                 | (685)                | 3 (76                          |
| Intersection Control:   | Conver   | ntional (N                               | Minor                          | Stop)                |                         |   | Pro  | ject ID:   |                              |                       | 1                    |        |        | 977 (655) [14500]                | (7)                         | 3                     | ₽                       |   | 15,600   |   | ₱              | 2                   | (9)                  | 46                             |
|   | 00   |  |                                | otop)                |                         |   |  |  |                              |                       | <u>.</u>             |        |        |                                  | (0)                         | 0                     | Peds                    | <b>₽</b>                                  | Û  | 命   | Peds           | Ave (               |                      |                                |
| Prepared By:  | Atlas To   | echnical                                 | I Cons                         | sultant              | S                       |   |  | Date:  | 8/1/                         | 2022                  |                      |        |        | EB EC                            | Miles                       | Pkwy                  |                         | 4   | 0  | 10  | 0              | NB Arlington Ave    |                      |                                |
| Project Purpose:  |  |  |                                |                      |                         |   |  |  |                              |                       | 1                    | PEAK   | HR 9   | 6 TRU                            | CKS:                        |                       |                         | (5)                                       | (0)  | (4)   | (0)            | . Arlii             |                      |                                |
| r rojourr ai poco.  |  |  |                                |                      |                         |   |  |  |                              |                       |                      | EB     | WB     | NB                               | SB                          |                       |                         |   | 14 (9  | ) [300]   |                | 핃                   |                      |                                |
|   |  |  |                                |                      |                         |   |  |  |                              |                       |                      |        |        |                                  |                             |                       |                         |   |  |   |                |                     |                      |                                |
| Existing Data Year  | 202  | 2  |                                |                      | 0000                    | 0051                                      | NO W   | - 4 D V  |                              |                       |                      | 2%     | 2%     | 0%                               | 0%                          |                       | 000                     | 0 DE0                                     | 10111  |   |                |                     |                      |                                |
| Existing Data Year:   |  |  |                                | ·                    | 2022                    | OPEN                                      | ING Y  | EAR V  | OLUM                         | ES                    |                      | 2%     | 2%     | 0%                               | 0%                          |                       | 202                     | 2 DES                                     | IGN Y  | ΈAR \   | OLUN           | IES                 |                      |                                |
| Project Opening Year:   | 202  | 2  |                                |                      | 2022                    |   | ING Y  |  | OLUM                         | ES                    |                      | 2%     | 2%     | 0%                               | 0%                          | ıve                   | 202                     | 2 DES<br>66 (54)                          |  | EAR \   | OLUM           | IES                 |                      |                                |
| Project Opening Year: Project Design Year:  | 202  | 2  |                                |                      | (0)                     |   |  |  | OLUM                         | ES                    |                      | 2%     | 2%     | 0%                               | 0%                          | ton Ave               | (0)                     |   |  | (23)  | OLUN           | IES                 |                      |                                |
| Project Opening Year: Project Design Year: Annual Growth Rate:  | 202  | 22 // // // // // // // // // // // // / |                                |                      |                         | 66 (54)                                   | [1700]   | 1  | OLUM                         |                       | :G Miles             |        | 2%     | 0%                               | 0%                          | rlington Ave          |                         | 66 (54)                                   | [1700]   |   | OLUM           |                     | G Miles I            | <sup>2</sup> kwy               |
| Project Opening Year: Project Design Year:  | 202  | 22 // // // // // // // // // // // // / |                                | SB Arlington Ave     | (0)                     | 66 (54)                                   | [1700]<br>(0)  | (23)   | Peds                         |                       | G Miles              | s Pkwy | 2%     | 0%                               | 0%                          | SB Arlington Ave      | (0)                     | 66 (54)                                   | [1700]<br>(0)  | (23)  | Peds           |                     | G Miles              |                                |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*: * K Factor = Proport  | 202<br>202<br>1.0°<br>109                                    | 2 %                                      | (49)                           | Arlington Ave        | (0)                     | 66 (54)<br>(31)<br>21                     | (0)<br>0<br>0  | (23)<br>45<br>\$\times_{\text{n Daily}}              |                              | WB E                  |                      | s Pkwy | 2%     |                                  | (49)                        | 58 Arlington Ave      | (0)                     | 66 (54)<br>(31)<br>21<br>2022 I           | (0)<br>0<br>1  | (23)<br>45<br>\$\square\$\square\$\text{on Daily} |                | WB E                |                      |                                |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proport average annual dail occurring in the high                 | 202<br>202<br>1.0°<br>109                                    | 2 2 %                                    | (49)<br>(611)                  | SB Arlington Ave     | (0)<br>0                | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | (23)<br>45<br>45<br>n Daily<br>e (est):              | Peds                         | <b>WB E</b>           | (0)                  | s Pkwy |        | 10 <u>9</u> 1.6<br>[16           |                             | _                     | (0)<br>0                | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0) 0 therefore the control of the c | (23)<br>45<br>45<br>In Daily<br>e (est):          | Peds           | <b>WB E</b>         | (0)                  |                                |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proport average annual dail                                       | 202<br>202<br>1.0°<br>109                                    | 2<br>2<br>2<br>396.1(666<br>114800)      | ` '                            | SB Arlington Ave     | (0)<br>0<br>Peds        | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0)<br>0<br>0  | (23)<br>45<br>45<br>n Daily<br>e (est):              | Peds<br>◆ ◆                  | <b>WB E</b> 0 9       | (0)<br>(66)          |        |        | 10 <u>9</u> 1.6 (726.<br>[16200] | (49)                        | 19                    | (0)<br>0<br>Peds        | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0)<br>0<br>1  | (23)<br>45<br>45<br>In Daily<br>e (est):          | Peds<br>◆      | <b>WB E</b> 0 9     | (0)<br>(66)          | 517.24 (842.2) [1640 <b>34</b> |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proport average annual dail occurring in the high                 | 202<br>202<br>1.0°<br>109                                    | 2<br>2<br>2<br>396.1(666.98<br>114800)   | (611)                          | 974 SB Arlington Ave | (0)<br>0<br>Peds ↓      | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | (23)<br>45<br>45<br>n Daily<br>e (est):              | Peds  Ct                     | <b>WB E</b> 0 9 461 2 | (0)<br>(66)<br>(699) | s Pkwy |        | 10 <u>9</u> 1.6<br>[16           | (49)<br>(671)               | 19<br>1,070           | (0)<br>0<br>Peds ↓<br>⇒ | 66 (54)<br>(31)<br>21<br>2022 I<br>Enteri | (0) 0 therefore the control of the c | (23)<br>45<br>45<br>In Daily<br>e (est):          | Peds           | <b>WB E</b> 0 9 506 | (0)<br>(66)<br>(767) |                                |
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Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| GD01                       | PI#   |   | Nata II  | - t- E -lt-  | wa akii sa a  |  |   |              |                | ICE Version 2.21   Revised 2/4/2022  |
|----------------------------|---|---|----------|--|---|--|---|--------------|----------------|--|
| _                          | t Location:   | EG Miles Pkwy @ Arlington Ave   | note: U  | p to 5 alte<br>selected a  | rnatives  |  | /   | /-           | /              | / / /  |
| ,                          | ng Control:   | Conventional (Minor Stop)   | evaluate | ed; Use thi  | is ICE  | 3500   | 1 (8)                                     | deligies     | g. /600 -J     | in the same of the |
|                            | red by:   | Atlas Technical Consultants   | Stage 1  | to screen  | 5 or  | USEC TICLES  | Minani                                    | COLINGIACITY | Majirate.      | Title text.  |
| Date:                      | ,   | 8/1/2022  | tewer al | ternatives<br>in Stage   | to  | 11110 161  | o step                                    | indiot ser   | applied, le al | or or with stall   |
| cor<br>e                   | trol type to ide<br>valuated in the<br>justification<br>rsection Alte | No" to each policy question for each entify which alternatives should be a Stage 2 Decision Record; enter on in the rightmost column ernative (see "Intersections" tab for on of intersection/interchange type) | O S      | Hending of State of S | and is ICE 5 or to 2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | A STATE OF S | LI CO | No           |                | And the district of the control of t |
|                            | Conventional  | (Minor Stop)  | No       | No   | No  | No   | No  | No           | Yes            | Current Control  |
|                            | Conventional  | (All-Way Stop)  | No       | No   | No  | No   | No  | No           | No             | Too many lanes on mainline   |
|                            | Mini Roundal  | bout  | No       | No   | No  | No   | No  | No           | No             | More than 90% of volume on Mainline  |
|                            | Single Lane F   | Roundabout  | No       | No   | No  | No   | No  | No           | No             | More than 90% of volume on Mainline  |
| ctions                     | Multilane Rou   | undabout  | No       | No   | No  | No   | No  | No           | No             | More than 90% of volume on Mainline  |
| Unsignalized Intersections | RCUT (stop of   | control)  | Yes      | Yes  | No  | Yes  | Yes                                       | Yes          | Yes            | Potential Alternative  |
| ed Int                     | RIRO w/dowi   | n stream U-Turn   | No       | No   | No  | No   | No  | No           | No             | U Turn restriction   |
| gnaliz                     | High-T (unsig   | gnalized)   | No       | No   | No  | No   | No  | No           | No             | U Turn restriction   |
| Unsig                      | Offset-T Inter  | rsections   | No       | No   | No  | No   | No  | No           | No             | 3 Leg Intersection   |
|                            | Diamond Inte  | erch (Stop Control)   | No       | No   | No  | No   | No  | No           | No             | No grade seperation  |
|                            |   | erch (RAB Control)  | No       | No   | No  | No   | No  | No           | No             | No grade seperation  |
|                            | Add LT Lanes<br>No RT Lane In   | on Arlington Ave nprovements  | Yes      | Yes  | No  | No   | Yes                                       | Yes          | Yes            | Potential Alternative  |
|                            | Other unsign  | alized (provide description):   | No       | No   | No  | No   | No  | No           | No             |  |
|                            | Traffic Signal  | l   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
|                            | Median U-Tu   | rn (Indirect Left)  | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
|                            | RCUT (signa   | lized)  | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| S                          | Displaced Le  | ft Turn (CFI)   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| ction                      | Continuous C  | Green-T   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| nterse                     | Jughandle   |   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| zed lı                     | Quadrant Ro   | adway   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| Signalized Intersections   | Diamond Inte  | erch (Signal Control)   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
| S                          | Diverging Dia   | amond   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
|                            | Single Point I  | · ·   | No       | No   | No  | No   | No  | No           | No             | No signal warranted  |
|                            | No LT Lane Im<br>No RT Lane Im  |   | No       | No   | No  | No   | No  | No           | No             |  |
|                            | Other Signali   | zed (provide description):  | No       | No   | No  | No   | No  | No           | No             |  |
|                            |   | = Intersection type selected for  | more d   | etailed a  | nalveie   | in Stage   | 2 Altern                                  | ative Se     | lection [      | Decision Record  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ Arlington Ave Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty

Area: Suburb/Transitic

GDOT PI#:

Prepared by: Atlas Technical Cons

Date: 8/1/2022

| Opening / | / Design | Year | Traffic | Operations |
|-----------|----------|------|---------|------------|
|-----------|----------|------|---------|------------|

| Intersection meets signal/AWS warrants?             | None               |            |  |  |  |  |  |
|---|--------------------|------------|--|--|--|--|--|
| Traffic Analysis Measure of Effectiveness           | Intersection Delay |            |  |  |  |  |  |
| Traffic Analysis Software Used                      | Syn                | chro       |  |  |  |  |  |
| Analysis Time Period                                | AM Peak Hr         | PM Peak Hr |  |  |  |  |  |
| 2022 Opening Yr No-Build Peak Hr Intersection Delay | 28.9 sec           | 37.7 sec   |  |  |  |  |  |
| 2022 Opening Yr No-Build Peak Hr Intersection V/C   | 0.33               | 0.23       |  |  |  |  |  |
| 2022 Design Yr No-Build Peak Hr Intersection Delay  | 35.5 sec           | 30.3 sec   |  |  |  |  |  |
| 2022 Design Yr No-Build Peak Hr Intersection V/C    | 0.33               | 0.29       |  |  |  |  |  |

Complete Streets
Warrants Met?

PEDESTRIANS
BICYCLES
TRANSIT

| Crash Data: Enter most recent 5          |    | Cras       | h Sev | erity |    | Years: |  |  |
|--|----|------------|-------|-------|----|--------|--|--|
| years of crash data                      | K* | <b>A</b> * | В*    | C*    | 0  | 5      |  |  |
| Angle                                    | 0  | 1          | 0     | 4     | 5  | 26%    |  |  |
| Head-On<br>Rear End                      | 0  | 0          | 0     | 1     | 0  | 3%     |  |  |
| Rear End                                 | 0  | 0          | 0     | 4     | 19 | 61%    |  |  |
| Sideswipe - same                         | 0  | 0          | 0     | 2     | 1  | 8%     |  |  |
| Sideswipe - same<br>Sideswipe - opposite | 0  | 0          | 0     | 0     | 0  | 0%     |  |  |
| Not Collision w/Motor Veh                | 0  | 0          | 0     | 0     | 1  | 3%     |  |  |
| TOTALS:                                  | 0  | 1          | 0     | 11    | 26 | 38     |  |  |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:  | Alterna                      | ative 1    | Altern        | ative 2        | Altern        | ative 3                               | Altern | ative 4 | Alterna | ative 5    |
|---|------------------------------|------------|---------------|----------------|---------------|---------------------------------------|--------|---------|---------|------------|
| Proposed Control Type/Improvement:  | Convention<br>Sto            |            | RCUT (sto     | op control)    | Add Left T    | urn Lanes                             | N,     | /A      | N/      | A          |
| Project Cost: (From CostEst Worksheet)                                      | Additional des               | . /        | Additional de | scription here | Additional de | scription here                        |        |         |         |            |
| Construction Cost   | \$0                          |            | \$299         | ,000           | \$114         | ,000                                  |        |         |         |            |
| ROW Cost  | \$(                          | )          | \$253         | .000           | \$            |                                       |        |         |         |            |
| Environmental Cost  | \$0                          |            | \$            | <u> </u>       | \$            | 0                                     |        |         |         |            |
| Reimbursable Utility Cost   | \$(                          |            | \$4,0         |                | \$1,0         |                                       |        |         |         |            |
| Design & Contingency Cost   | \$0                          | )          | \$            | 0              | \$            | 0                                     |        |         |         |            |
| Cost Adjustment (justification reg'd)                                       | 09                           | %          | 0'            | %              | 0'            | %                                     |        |         |         |            |
| Total Cost  | \$0                          | )          | \$556         | ,000           | \$115         | ,000                                  |        |         |         |            |
| Traffic Operations:   |                              |            |               |                |               |                                       |        |         |         |            |
| Traffic Analysis Software Used  | Synd                         | chro       | Synchro       |                | Syn           | chro                                  |        |         |         |            |
| Analysis Period   | AM Peak Hr                   | PM Peak Hr | AM Peak Hr    | PM Peak Hr     | AM Peak Hr    | PM Peak Hr                            |        |         |         |            |
| 2022 Design Yr Build Intersection Delay                                     | 35.5 sec                     | 30.3 sec   | 13.2 sec      | 11.8 sec       | 51.3 sec      | 49.1 sec                              |        |         |         |            |
| 2022 Design Yr Build Intersection V/C                                       | 0.33                         | 0.29       | 0.10          | 0.10           | 0.05          | 0.24                                  |        |         |         |            |
| Safety Analysis:  |                              |            |               |                |               |                                       |        |         |         |            |
| Predefined CRF: PDO   | 09                           | %          | 31            | %              | 3'            | %                                     |        |         |         |            |
| Predefined CRF: Fatal/Inj   | 09                           | %          | 53            | 3%             | 2             | %                                     |        |         |         |            |
| Predefined CRF Source:  | CRF unavaila<br>user defined | · ·        | NC/MO         | Table 4-7      |               | ringhouse #s<br>/ 274                 |        |         |         |            |
| User Defined CRF: PDO   |                              |            |               |                |               |                                       |        |         |         |            |
| User Defined CRF: Fatal/Inj   |                              |            |               |                |               |                                       |        |         |         |            |
| User Defined CRF Source   |                              |            |               |                |               |                                       |        |         |         |            |
| (write in if applicable):   |                              |            |               |                |               |                                       |        |         |         |            |
| Environmental Impacts:1   |                              |            |               |                |               |                                       |        |         |         |            |
| Historic District/Property  | No                           | ne         | No            | ne             | No            | one                                   |        |         |         |            |
| Archaeology Resources   | No                           | ne         | No            | ne             | No            | ne                                    |        |         |         |            |
| Graveyard   | No                           | ne         | No            | ne             | No            | ne                                    |        |         |         |            |
| Stream  | No                           | ne         | No            | ne             | No            | ne                                    |        |         |         |            |
| Underground Tank/Hazmat   | No                           |            | No            | ne             |               | ne                                    |        |         |         |            |
| Park Land   | No                           | -          |               | ne             |               | ne                                    |        |         |         |            |
| EJ Community  | No                           |            |               | ne             |               | ne                                    |        |         |         |            |
| Wooded Area   | No                           |            |               | ne             |               | one                                   |        |         |         |            |
| Wetland   | No                           |            |               | ne             |               | ne                                    |        |         |         |            |
| Stakeholder Posture:  |                              |            |               |                |               | act won't jeopard<br>ntal impact docu |        |         |         | ept report |
| Local Community Support   | Unkr                         | own        | Unkr          | nown           |               | nown                                  |        |         |         |            |
| GDOT Support  | Unkn                         | own        | Unkr          | nown           | Unkr          | nown                                  |        |         |         |            |
| Final ICE State 2 Security  | 4.                           | 4          |               | 2              |               | 0 -                                   |        |         |         |            |
| Final ICE Stage 2 Score:  | 4.<br>3                      |            | 6             | .3             | -             | .0                                    |        |         |         |            |
| Rank of Control Type Alternatives:<br>Final Intersection Control Selection: | ,                            |            |               |                |               | 2                                     |        |         |         |            |
|   |                              |            |               |                |               |                                       |        |         |         |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles Pkwy and Arlington Ave/ Surrey Dr COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

MAJOR STREET: Main Street EG Miles Pkwy #OF APPROACH LANES: 2
MINOR STREET: Cross Street Arlington Ave/ Surrey Dr #OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|          |        |          |            |          | WARRA  | NT 1, Cond | ition A | WARRA         | ANT 1, Cond | lition B |        | WARR      | ANT 1, Co | mbination W | /arrant    |      |               |               |
|----------|--------|----------|------------|----------|--------|------------|---------|---------------|-------------|----------|--------|-----------|-----------|-------------|------------|------|---------------|---------------|
|          |        |          | MAJOR ST   | MINOR ST |        |            |         |               |             |          | С      | ONDITION  | A         | С           | ONDITION I | В    | WARRANT 2     | WARRANT 3     |
|          |        |          | BOTH       | HIGHEST  | MAJOR  | MINOR      | вотн    | MAJOR         | MINOR       | вотн     | MAJOR  | MINOR     | BOTH      | MAJOR       | MINOR      | BOTH | •             |               |
|          |        |          | APPROACHES | APPROACH | STREET | STREET     | MET     | STREET        | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET     | MET  |               |               |
| THRESHOL | D VALU | es —     |            | <b></b>  | 420    | 105        |         | 630           | 53          |          | 480    | 120       |           | 720         | 60         |      |               |               |
| 06:00 AM | TO     | 07:00 AM | 696        | 37       | Υ      |            |         | Υ             |             |          | Υ      |           |           |             |            |      |               |               |
| 07:00 AM | TO     | 08:00 AM | 885        | 49       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 AM | TO     | 09:00 AM | 1,380      | 41       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 09:00 AM | TO     | 10:00 AM | 1,355      | 32       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 10:00 AM | TO     | 11:00 AM | 797        | 32       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 11:00 AM | TO     | 12:00 PM | 969        | 24       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 12:00 PM | TO     | 01:00 PM | 1,289      | 19       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 01:00 PM | TO     | 02:00 PM | 1,316      | 29       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 02:00 PM | TO     | 03:00 PM | 1,395      | 32       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 03:00 PM | TO     | 04:00 PM | 1,439      | 14       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 04:00 PM | TO     | 05:00 PM | 1,537      | 21       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 05:00 PM | TO     | 06:00 PM | 1,566      | 20       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 06:00 PM | TO     | 07:00 PM | 1,416      | 22       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 07:00 PM | TO     | 08:00 PM | 1,044      | 15       | Υ      |            |         | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 PM | TO     | 09:00 PM | 680        | 8        | Υ      |            |         | Υ             |             |          | Υ      |           |           |             |            |      |               |               |
| 09:00 PM | TO     | 10:00 PM | 558        | 3        | Υ      |            |         |               |             |          | Υ      |           |           |             |            |      |               |               |
|          |        |          | 18,322     | 398      |        | <u> </u>   | 0       |               | <u> </u>    | 0        |        |           | 0         |             |            | 0    | 0             | 0             |
|          |        |          |            | •        |        |            |         |               |             |          |        |           |           |             |            |      |               |               |
|          |        |          |            |          | 8 HC   | OURS NEED  | ED      | 8 HC          | OURS NEED   | ED       | 8 HOI  | URS OF BO | TH COND   | . A AND CO  | ND. B NEE  | DED  | 4 HRS NEEDED  | 1 HR NEEDED   |
|          |        |          |            |          | NO     | T SATISFII | ED      | NOT SATISFIED |             |          |        |           | NOT SA    | TISFIED     |            |      | NOT SATISFIED | NOT SATISFIED |

INTERSECTION NAME: EG Miles Pkwy at Curtis St COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

MAJOR STREET: Main Street EG Miles Pkwy # OF APPROACH LANES: 2
MINOR STREET: Cross Street Curtis St # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|          |        |          |            |          | WARRA  | NT 1, Cond | lition A | WARRA         | ANT 1, Cond | lition B |        | WARR      | ANT 1, Co | mbination W | /arrant    |      |               |               |
|----------|--------|----------|------------|----------|--------|------------|----------|---------------|-------------|----------|--------|-----------|-----------|-------------|------------|------|---------------|---------------|
|          |        |          | MAJOR ST   | MINOR ST |        |            |          |               |             |          | С      | ONDITION  | A         | С           | ONDITION I | В    | WARRANT 2     | WARRANT 3     |
|          |        |          | BOTH       | HIGHEST  | MAJOR  | MINOR      | вотн     | MAJOR         | MINOR       | вотн     | MAJOR  | MINOR     | вотн      | MAJOR       | MINOR      | вотн |               |               |
|          |        |          | APPROACHES | APPROACH | STREET | STREET     | MET      | STREET        | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET     | MET  |               |               |
| THRESHOL | D VALU | ES —     |            | <u> </u> | 420    | 105        |          | 630           | 53          |          | 480    | 120       |           | 720         | 60         |      |               |               |
| 06:00 AM | TO     | 07:00 AM | 902        | 7        | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 07:00 AM | TO     | 08:00 AM | 1,787      | 37       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 AM | TO     | 09:00 AM | 1,340      | 17       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 09:00 AM | TO     | 10:00 AM | 1,098      | 20       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 10:00 AM | TO     | 11:00 AM | 1,019      | 15       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 11:00 AM | TO     | 12:00 PM | 1,152      | 17       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 12:00 PM | TO     | 01:00 PM | 1,218      | 10       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 01:00 PM | TO     | 02:00 PM | 1,262      | 14       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 02:00 PM | TO     | 03:00 PM | 1,538      | 22       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 03:00 PM | TO     | 04:00 PM | 1,537      | 12       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 04:00 PM | TO     | 05:00 PM | 1,728      | 15       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 05:00 PM | TO     | 06:00 PM | 1,897      | 14       | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 06:00 PM | TO     | 07:00 PM | 1,283      | 7        | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 07:00 PM | TO     | 08:00 PM | 948        | 7        | Υ      |            |          | Υ             |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 PM | TO     | 09:00 PM | 606        | 4        | Υ      |            |          |               |             |          | Y      |           |           |             |            |      |               |               |
| 09:00 PM | TO     | 10:00 PM | 499        | 4        | Υ      |            |          |               |             |          | Y      |           |           |             |            |      |               |               |
|          |        |          | 19,814     | 222      |        |            | 0        |               |             | 0        |        |           | 0         |             |            | 0    | 0             | 0             |
|          |        |          |            |          |        |            |          |               |             |          |        |           |           |             |            |      |               |               |
|          |        |          |            |          | 8 HC   | OURS NEED  | ED       | 8 HC          | OURS NEED   | ED       | 8 HOI  | URS OF BO | TH COND   | . A AND CO  | ND. B NEE  | DED  | 4 HRS NEEDED  | 1 HR NEEDED   |
|          |        |          |            |          | NO     | T SATISFII | ED       | NOT SATISFIED |             |          |        |           | NOT SA    | TISFIED     |            |      | NOT SATISFIED | NOT SATISFIED |

#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**



| GDOT PI#: Request By: HAMPO  |  |                                       |                  |                                       |                  |                                     |                     |          |                    |                       |                    |      |                    |                     |                  | 2022 I    | EXISTI             | ING YI                                      | EAR V               | OLUM         | ES                 | 1                     |                    |
|--|--|---------------------------------------|------------------|---------------------------------------|------------------|-------------------------------------|---------------------|----------|--------------------|-----------------------|--------------------|------|--------------------|---------------------|------------------|-----------|--------------------|---|---------------------|--------------|--------------------|-----------------------|--------------------|
| County: Liberty  | ,                                      | •                                     | l (              | GDOT D                                | lietrict:        | 5 - 100                             | un                  |          |                    |                       |                    |      | CH SP<br>kwy:      |                     |                  |           | 56 (33             | [800] (                                     |                     | j            |                    |                       | 1                  |
| County. Liberty  | /                                      |                                       | ١ '              | טטטו ב                                | isti ict.        | J - JES                             | up                  |          |                    |                       | LON                |      | is St:             |                     | ಘ                | (0)       | (20)               | (0)   | (13)                |              |                    | •                     | •                  |
| Major Road: EG Mi  | les Pk                                 | wy                                    | Road<br>Class:   | Minor A                               | Arterial         |                                     | Speed<br>Limit:     | 45 r     | mph                |                       |                    | Our  | 10 Ot.             | 0,0                 | SB Curtis        | 0         | 19                 | 0   | 37                  | $oxed{oxed}$ | WB E               | G Miles               | Pkwy               |
| Crossing Road: Curtis  | St                                     |                                       | Road             | Local                                 |                  |                                     | Speed               | 35 1     | mph                | 1                     |                    |      | . 1                |                     |                  | Peds      | <b>⇔</b>           | Û   | ₩                   | Peds         | 0                  | (0)                   | 9000]              |
| Major Rd Direction: East/V   | Vest                                   | 1 4                                   | Class:           | Culand                                | /                | iti a m                             | Limit:              |          |                    |                       |                    |      | 1176 (             | (15)                | 14<br>1,162      | <b>£</b>  |                    | ntersection<br>ng Volume                    |                     | 1) A         | 7<br>604           | (23)<br>(1087)        | 611 (1110) [19000] |
| Major Nu Direction. East/v   | vest                                   | Area                                  | i Type:          | Suburb                                | / rrans          | Ition                               |                     |          |                    |                       |                    |      | 787)               | (772)               |                  |           |                    | 19,350                                      |                     | 1            |                    | ` ′                   | 1 (1               |
| Intersection Control: Conve  | entional                               | l (Minor                              | Stop)            |                                       |                  | Proj                                | ect ID:             |          |                    |                       |                    |      | (787) [18900]      | (0)                 | 0                | Peds      | ₹ <del>1</del>     | ⇧   | क्रे                | Peds         | 0<br><b>%</b>      | (0)                   | 6                  |
| Prepared By: Atlas   | Technic                                | cal Con                               | sultant          | s                                     |                  |                                     | Date:               | 8/1/:    | 2022               | 1                     |                    |      |                    | Miles               |                  | <b>←→</b> | 0                  | 0   | Α <sup>γ</sup><br>0 | 0            | Curtis (           |                       |                    |
|  | r COI II II                            | our con                               | ountaint         |                                       |                  |                                     | Duto.               | 0/1//    | LULL               |                       | PFAK               | (HRº | 6 TRU              | CKS.                | •                |           | (0)                | (0)   | (0)                 | (0)          | NBC                |                       |                    |
| Project Purpose:   |  |                                       |                  |                                       |                  |                                     |                     |          |                    |                       | EB                 | WB   |                    | SB                  |                  |           | (0)                |   | ) [0]               | (0)          |                    |                       |                    |
|  |  | •                                     |                  |                                       |                  |                                     |                     |          |                    |                       | 0%                 | 0%   | 0%                 | 0%                  |                  | l         |                    | - (-  | / [-]               |              | i                  |                       |                    |
| Existing Data Year: 20   | 22                                     |                                       |                  | 2025                                  | OPEN             | ING YI                              | EAR V               | OLUM     | ES                 |                       | 0,70               | 070  | 0,0                | 0,70                |                  | 204       | 5 DES              | IGN Y                                       | EAR V               | /OLUM        | 1ES                |                       |                    |
| Project Opening Year: 20   |  |                                       |                  |                                       | 56 (33           | 3) [800]                            |                     | ]        |                    |                       |                    |      |                    |                     |                  |           | 56 (33             | [800]                                       |                     |              |                    |                       |                    |
| Project Design Year: 20  |  |                                       | ಕ                | (0)                                   | (20)             | (0)                                 | (13)                |          |                    |                       |                    |      |                    |                     | ₹                | (0)       | (20)               | (0)   | (13)                |              |                    |                       |                    |
| Annual Growth Rate: 0.5  |  |                                       |                  | 0                                     | 19               | 0                                   | 37                  | 1        | WRE                | G Miles               | DI                 |      |                    |                     |                  | 0         | 19                 | 0   | 37                  | 1            | WR F               | G Miles               | Pkwv               |
| K Factor*: 10  | 10/_                                   |                                       |                  |                                       |                  |                                     |                     |          |                    | G Milles              | PKWV               |      |                    |                     | =                |           |                    | U   | 31                  |              |                    |                       |                    |
|  | 70                                     | ļ                                     | SB Curtis        | Peds                                  | Ą                | Û                                   | ₩                   | Peds     | 0                  | (0)                   | 1                  |      |                    |                     | SB Curtis        | Peds      | <i>₹</i> ¥         | 1   | \$                  | Peds         | 0                  | (0)                   |                    |
| * K Factor = Proportion of   |  | (16)                                  | 14               | Peds ↓                                |                  | T,                                  |                     | Peds     |                    |                       | 1                  |      | 146                | (16)                | 16               |           | Ą                  |   | \$                  | Peds 🔶       |                    |                       |                    |
| average annual daily traffic occurring in the highest one                          | 1176                                   | (16)<br>(829)                         |                  | $\mathbf{M}$                          | 2025 I<br>Enteri | ntersection                         | n Daily<br>e (est): |          | 0                  | (0)                   | (1225) [20700]     |      | 1462 (92)          | (16)<br>(910)       |                  | Peds      | 2045 In<br>Enterin | ntersection<br>ng Volume                    | n Daily<br>e (est): |              | 0                  | (0)                   |                    |
| average annual daily traffic   | 1176                                   | ` '                                   | 14               | ₹<br>T                                | 2025 I<br>Enteri | ntersection                         | n Daily<br>e (est): | Œ        | 7                  | (0)<br>(25)           | 618 (1225) [20700] |      | 1462 (926) [22     |                     | 16               | Peds 🕽    | 2045 In<br>Enterin | T,  | n Daily<br>e (est): | Œ            | 0                  | (0)<br>(25)           | 743 (1342) [22700] |
| average annual daily traffic occurring in the highest one                          |  | (829)                                 | 14               | <b>∌</b>                              | 2025 I<br>Enteri | ntersection                         | n Daily<br>e (est): | <b>₽</b> | 0<br>7<br>604<br>7 | (0)<br>(25)<br>(1192) | (1225) [20700]     |      | 1462 (926) [22600] | (910)               | 16<br>1,446      | Peds ↓    | 2045 In<br>Enterin | ntersection<br>ng Volume                    | n Daily<br>e (est): | 1) A         | 0<br>8<br>727<br>8 | (0)<br>(25)<br>(1309) |                    |
| average annual daily traffic occurring in the highest one                          | 1176 (845) [20600]                     | (829)                                 | 14<br>1,162<br>0 | \$\frac{1}{2} \frac{1}{2} \frac{1}{2} | 2025 I<br>Enteri | Intersection<br>ng Volume<br>21,050 | n Daily<br>e (est): | <b>₩</b> | 0 7 604 7          | (0)<br>(25)<br>(1192) | (1225) [20700]     |      | (926) [22600]      | (910)               | 16<br>1,446<br>0 | Peds D    | 2045 In<br>Enterin | ntersection<br>ng Volume<br>23,050          | n Daily<br>e (est): | <b>♣</b> 1   | 0<br>8<br>727<br>8 | (0)<br>(25)<br>(1309) |                    |
| average annual daily traffic<br>occurring in the highest one<br>hour of the day    | 1176 (845) [20600] E                   | (829)<br>(0)<br>(0)<br>G Miles        | 14<br>1,162<br>0 | \$\frac{1}{2} \frac{1}{2} \frac{1}{2} | 2025 I<br>Enteri | ntersection ng Volume 21,050        | n Daily<br>e (est): | ← ← Peds | 0<br>7<br>604<br>7 | (0)<br>(25)<br>(1192) | (1225) [20700]     |      | (926) [22600]      | (910)<br>(0)<br>(0) | 16<br>1,446<br>0 | Peds D    | 2045 In<br>Enterin | ntersection by Volume 23,050                | n Daily e (est):    |              | 0<br>8<br>727<br>8 | (0)<br>(25)<br>(1309) |                    |
| average annual daily traffic occurring in the highest one hour of the day  LEGEND: | 1176 (845) [20600] <b>EB</b> Ecoach Vo | (829)<br>(0)<br>(0)<br><b>G Miles</b> | 14<br>1,162<br>0 | \$\frac{1}{2} \frac{1}{2} \frac{1}{2} | 2025 I<br>Enteri | ntersection ng Volume 21,050        | n Daily<br>e (est): | ← ← Peds | 0 7 604 7          | (0)<br>(25)<br>(1192) | (1225) [20700]     |      | (926) [22600]      | (910)<br>(0)<br>(0) | 16<br>1,446<br>0 | Peds D    | 2045 In Enterin    | the intersection of Volume 23,050 the 0 (0) | n Daily e (est):    |              | 0<br>8<br>727<br>8 | (0)<br>(25)<br>(1309) |                    |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| GD01                       | PI#   |  | N-4 11   | t. F -lt-  |   |  |  |                 |  | ICE Version 2.21   Revised 2/4/2022  |
|----------------------------|---|--|----------|--|---|--|--|-----------------|--|--|
| _                          | t Location:   | EG Miles Pkwy @ Curtis St  | note: U  | p to 5 alte<br>selected a                              | rnatives                                |  | /  | /-              | /  | / / /  |
| ,                          | ng Control:   | Conventional (Minor Stop)  | evaluate | ed; Use thi  | s ICE                                   | 108  | , Coll   | ilence          | 3. /46 -7  | SHO NO   |
|                            | red by:   | Atlas Technical Consultants  | Stage 1  | to screen  | 5 or                                    | de dige  | Minarie  | -OLINGIA PICHCH | Halligte.  | of the text.   |
| Date:                      | ,   | 8/1/2022   | tewer al | ternatives<br>in Stage                                 | to                                      | 1110 16  | de de la company   | udlot eser      | Spility, 16 di                                     | or con with set alle   |
| cor<br>e                   | atrol type to ide<br>valuated in the<br>justification<br>ersection Alte | lo" to each policy question for each entify which alternatives should be a Stage 2 Decision Record; enter on in the rightmost column rnative (see "Intersections" tab for on of intersection/interchange type) | OS       | selected a ded; Use this to screen ternatives in Stage | E S S S S S S S S S S S S S S S S S S S | A STANDARD OF STAN | THE STATE OF THE S | No              | SA STATE OF SA | And the district of the conditions of the condit |
|                            | Conventional  | (Minor Stop)   | No       | No   | No                                      | No   | No   | No              | Yes  | Existing Conidtions  |
|                            | Conventional  | (All-Way Stop)   | No       | Yes  | Yes                                     | No   | Yes  | No              | No   | Volume too high on the major street  |
|                            | Mini Roundab  | oout   | No       | Yes  | No                                      | No   | No   | No              | No   | Non balance volumes  |
|                            | Single Lane F   | Roundabout   | No       | Yes  | No                                      | No   | No   | No              | No   | Non balance volumes  |
| tions                      | Multilane Rοι   | undabout   | No       | Yes  | No                                      | No   | No   | No              | No   | Non balance volumes  |
| ersec                      | RCUT (stop of   | control)   | No       | Yes  | No                                      | Yes  | Yes  | Yes             | Yes  | Potential Alternative  |
| ed Int                     | RIRO w/dowr   | n stream U-Turn  | No       | Yes  | No                                      | Yes  | Yes  | Yes             | No   | Potential Alternative  |
| Unsignalized Intersections | High-T (unsig   | nalized)   | No       | Yes  | No                                      | Yes  | Yes  | Yes             | Yes  | Potential Alternative  |
| Unsig                      | Offset-T Inter  | rsections  | No       | No   | No                                      | No   | No   | No              | No   | 3 Leg intersection   |
|                            | Diamond Inte  | erch (Stop Control)  | No       | No   | No                                      | No   | No   | No              | No   | No grade seperation  |
|                            | Diamond Inte  | erch (RAB Control)   | No       | No   | No                                      | No   | No   | No              | No   | No grade seperation  |
|                            | Add LT Lanes on No RT Lane Im   |  | No       | No   | No                                      | No   | No   | No              | Yes  | Potential Alternative  |
|                            | Other unsigna   | alized (provide description):  | No       | No   | No                                      | No   | No   | No              | No   |  |
|                            | Traffic Signal  |  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
|                            | Median U-Tu   | rn (Indirect Left)   | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
|                            | RCUT (signal  | lized)   | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| S                          | Displaced Le  | ft Turn (CFI)  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| ection                     | Continuous G  | Green-T  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| nterse                     | Jughandle   |  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| zed lı                     | Quadrant Roa  | adway  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| Signalized Intersections   | Diamond Inte  | erch (Signal Control)  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
| S                          | Diverging Dia   | nmond  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
|                            | Single Point I  | · ·  | No       | No   | No                                      | No   | No   | No              | No   | Signal not warranted   |
|                            | No LT Lane Im<br>No RT Lane Im  |  | No       | No   | No                                      | No   | No   | No              | No   |  |
|                            | Other Signaliz  | zed (provide description):   | No       | No   | No                                      | No   | No   | No              | No   |  |
|                            |   | = Intersection type selected for   | more d   | etailed a  | nalveie                                 | in Stage   | 2 Altern   | ativo So        | lection [  | Decision Record  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ Curtis St Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty

Area: Suburb/Transitic

GDOT PI#:

Prepared by: Atlas Technical Cons

Date: 8/1/2022

#### **Opening / Design Year Traffic Operations**

| Intersection meets signal/AWS warrants?             | No         | ne         |
|---|------------|------------|
| Traffic Analysis Measure of Effectiveness           | Intersect  | ion Delay  |
| Traffic Analysis Software Used                      | Syn        | chro       |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr |
| 2025 Opening Yr No-Build Peak Hr Intersection Delay | 43.7 sec   | 39.4 sec   |
| 2025 Opening Yr No-Build Peak Hr Intersection V/C   | 0.49       | 0.36       |
| 2045 Design Yr No-Build Peak Hr Intersection Delay  | 61.1 sec   | 53.2 sec   |
| 2045 Design Yr No-Build Peak Hr Intersection V/C    | 0.60       | 0.46       |

Complete Streets
Warrants Met?

PEDESTRIANS
BICYCLES
TRANSIT

| Crash Data: Enter most recent 5 |    | Cras | h Sev | erity |    | Years: |
|---------------------------------|----|------|-------|-------|----|--------|
| years of crash data             | K* | Α*   | В*    | C*    | 0  | 5      |
| Angle                           | 0  | 0    | 0     | 2     | 0  | 14%    |
| Head-On<br>Rear End             | 0  | 0    | 0     | 0     | 0  | 0%     |
| Rear End                        | 0  | 0    | 0     | 0     | 1  | 7%     |
| Sideswipe - same                | 0  | 0    | 0     | 0     | 4  | 29%    |
| Sideswipe - opposite            | 0  | 0    | 0     | 0     | 1  | 7%     |
| Not Collision w/Motor Veh       | 0  | 0    | 0     | 0     | 6  | 43%    |
| TOTALS:                         | 0  | 0    | 0     | 2     | 12 | 14     |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:                  | Alterna                      | ative 1                                 | Altern        | ative 2         | Altern             | ative 3                | Alterna             | ative 4                            | Alterna | ative 5    |
|---|------------------------------|---|---------------|-----------------|--------------------|------------------------|---------------------|------------------------------------|---------|------------|
| Proposed Control Type/Improvement:      | Convention<br>Sto            |   | RCUT (sto     | op control)     | High-T (un         | signalized)            | Add Left T          | urn Lanes                          | N       | /A         |
| Project Cost: (From CostEst Worksheet)  | Additional des               | • | Additional de | scription here  | Additional de      | scription here         | Additional des      | scription here                     |         |            |
| Construction Cost                       | \$0                          | )                                       | \$333         | ,000            | \$165              | ,000                   | \$127               | ,000                               |         |            |
| ROW Cost                                | \$0                          | )                                       | \$226         | ,000            | \$42,              | 000                    | \$(                 | )                                  |         |            |
| Environmental Cost                      | \$0                          | )                                       | \$            | 0               | \$                 | 0                      | \$(                 | )                                  |         |            |
| Reimbursable Utility Cost               | \$0                          | )                                       | \$4,0         | 000             | \$2,0              | 000                    | \$1,0               | 000                                |         |            |
| Design & Contingency Cost               | \$0                          | )                                       | \$            | 0               | \$                 | 0                      | \$0                 | )                                  |         |            |
| Cost Adjustment (justification req'd)   | 09                           | %                                       | 0             | %               | 0'                 | %                      | 0,                  | %                                  |         |            |
| Total Cost                              | \$0                          | )                                       | \$563         | ,000            | \$209              | ,000                   | \$128               | ,000                               |         |            |
| Traffic Operations:                     |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| Traffic Analysis Software Used          | Synd                         | chro                                    | Syn           | chro            | Syn                | chro                   | Syn                 | chro                               |         |            |
| Analysis Period                         | AM Peak Hr                   |   | AM Peak Hr    | PM Peak Hr      | AM Peak Hr         | PM Peak Hr             |                     |                                    |         |            |
| 2045 Design Yr Build Intersection Delay | 61.1 sec                     | 53.2 sec                                | 11.6 sec      | 16.3 sec        | 16.6 sec           | 26.3 sec               | 44.1 sec            | 44.1 sec                           |         |            |
| 2045 Design Yr Build Intersection V/C   | 0.60                         | 0.46                                    | 0.14          | 0.21            | 0.22               | 0.26                   | 0.36                | 0.36                               |         |            |
| Safety Analysis:                        |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| Predefined CRF: PDO                     | 09                           |   |               | 1%              |                    | 3%                     | 19                  |                                    |         |            |
| Predefined CRF: Fatal/Inj               | 09                           | -                                       | 53            | 3%              | 45                 | . , .                  | 19                  | , -                                |         |            |
| Predefined CRF Source:                  | CRF unavaila<br>user defined |   | NC/MO         | Table 4-7       | FHWA Clear<br>2753 | ringhouse #s<br>/ 2755 | FHWA Clear<br>270 / | -                                  |         |            |
| User Defined CRF: PDO                   |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| User Defined CRF: Fatal/Inj             |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| User Defined CRF Source                 |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| (write in if applicable):               |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| Environmental Impacts:1                 |                              |   |               |                 |                    |                        |                     |                                    |         |            |
| Historic District/Property              | No                           | ne                                      | No            | ne              | No                 | ne                     | No                  | ne                                 |         |            |
| Archaeology Resources                   | No                           | ne                                      | No            | ne              | No                 | ne                     | No                  | ne                                 |         |            |
| Graveyard                               | No                           | ne                                      | No            | ne              | No                 | ne                     | No                  | ne                                 |         |            |
| Stream                                  | No                           |   |               | ne              | No                 | ne                     | No                  |                                    |         |            |
| Underground Tank/Hazmat                 | No                           |   |               | ne              |                    | ne                     | No                  | _                                  |         |            |
| Park Land                               | No                           |   |               | ne              |                    | ne                     | No                  | _                                  |         |            |
| EJ Community                            | No                           |   |               | ne              |                    | ne                     | No                  | -                                  |         |            |
| Wooded Area                             | No                           |   |               | ne              |                    | ne                     | No                  | _                                  |         |            |
| Wetland                                 | No                           |   |               | ne              | No                 |                        | No                  |                                    |         |            |
| Stakeholder Posture:                    |                              |   |               |                 |                    |                        |                     | ivery using "En<br>be included wit |         | ept report |
| Local Community Support                 | Unkn                         | -                                       |               | nown            |                    | nown                   | Unkr                |                                    |         | -          |
| GDOT Support                            | Unkn                         | own                                     | Unkı          | nown            | Unkr               | nown                   | Unkr                | nown                               |         |            |
| Final ICE Stage 2 Score:                | 5.                           | 3                                       | <b>.</b>      | .2              | 7.                 | 3                      | 4.                  | 8                                  |         |            |
| Rank of Control Type Alternatives:      | 3.                           |   | -             | . <u>.</u><br>2 | ,                  |                        | 4.                  |                                    |         |            |
| Final Intersection Control Selection:   | )                            |   |               |                 |                    |                        |                     |                                    |         |            |
| i indi intersection control delection.  |                              | (a.ioigiiani                            | /             |                 |                    |                        |                     |                                    |         |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles Pkwy at Deal St COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

MAJOR STREET: Main Street EG Miles Pkwy # 0F APPROACH LANES: 2
MINOR STREET: Cross Street Deal St # 0F APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

Y

|                      |            |          | WARRA  | ANT 1, Cond | lition A | WARRA  | ANT 1, Cond | dition B |        | WARR      | ANT 1, Co | mbination V | /arrant    |      |               |               |
|----------------------|------------|----------|--------|-------------|----------|--------|-------------|----------|--------|-----------|-----------|-------------|------------|------|---------------|---------------|
|                      | MAJOR ST   | MINOR ST |        |             |          |        |             |          | С      | ONDITION  | ۹.        | С           | ONDITION   | 3    | WARRANT 2     | WARRANT 3     |
|                      | вотн       | HIGHEST  | MAJOR  | MINOR       | вотн     | MAJOR  | MINOR       | вотн     | MAJOR  | MINOR     | вотн      | MAJOR       | MINOR      | вотн |               |               |
|                      | APPROACHES | APPROACH | STREET | STREET      | MET      | STREET | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET     | MET  |               |               |
| THRESHOLD VALUES -   |            | <u> </u> | 420    | 105         |          | 630    | 53          |          | 480    | 120       |           | 720         | 60         |      |               |               |
| 06:00 AM TO 07:00 AM | 696        | 7        | Y      |             |          | Y      |             |          | Υ      |           |           |             |            |      |               |               |
| 07:00 AM TO 08:00 AM | 1 885      | 11       | Y      |             |          | Y      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 AM TO 09:00 AM | 1,380      | 11       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 09:00 AM TO 10:00 AM | 1,355      | 16       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 10:00 AM TO 11:00 AM | 797        | 19       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 11:00 AM TO 12:00 PM | 969        | 20       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 12:00 PM TO 01:00 PM | 1,289      | 24       | Y      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 01:00 PM TO 02:00 PM | 1,316      | 25       | Y      |             |          | Y      |             |          | Y      |           |           | Υ           |            |      |               |               |
| 02:00 PM TO 03:00 PM | 1,395      | 22       | Y      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 03:00 PM TO 04:00 PM | 1,439      | 26       | Y      |             |          | Y      |             |          | Y      |           |           | Υ           |            |      |               |               |
| 04:00 PM TO 05:00 PM | 1 1,537    | 41       | Y      |             |          | Y      |             |          | Y      |           |           | Υ           |            |      |               |               |
| 05:00 PM TO 06:00 PM | 1 1,566    | 34       | Y      |             |          | Y      |             |          | Y      |           |           | Y           |            |      |               |               |
| 06:00 PM TO 07:00 PM | 1 1,416    | 34       | Y      |             |          | Y      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 07:00 PM TO 08:00 PM | 1 1,044    | 15       | Y      |             |          | Υ      |             |          | Υ      |           |           | Υ           |            |      |               |               |
| 08:00 PM TO 09:00 PM | 1 680      | 13       | Y      |             |          | Y      |             |          | Υ      |           |           |             |            |      |               |               |
| 09:00 PM TO 10:00 PM | 1 558      | 7        | Υ      |             |          |        |             |          | Υ      |           |           |             |            |      |               |               |
|                      | 18,322     | 325      |        |             | 0        |        |             | 0        |        |           | 0         |             |            | 0    | 0             | 0             |
|                      |            | •        | 1      |             |          |        |             |          |        |           |           |             |            |      |               |               |
|                      |            |          | 8 HC   | OURS NEED   | ED       | 8 HC   | OURS NEED   | DED      | 8 HOI  | JRS OF BO | TH COND   | . A AND CO  | OND. B NEE | DED  | 4 HRS NEEDED  | 1 HR NEEDED   |
|                      |            |          | NO     | T SATISFII  | ED       | NO     | T SATISFII  | ED       |        |           | NOT SA    | TISFIED     |            |      | NOT SATISFIED | NOT SATISFIED |

#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**



| GDOT PI#  |   | Request By:  |                                   |  |   |                                    |                 | 1                                       |                  |                   |                               |                       | 2022                    | EXIST                                | ING YI  | EAR V  | OLUM                               | ES                  | 1                    |                                    |
|---|---|--|-----------------------------------|--|---|------------------------------------|-----------------|---|------------------|-------------------|-------------------------------|-----------------------|-------------------------|--------------------------------------|---|--|------------------------------------|---------------------|----------------------|------------------------------------|
| Carratin  | l ile aut.  |  |                                   | -1-i-1. F                                |   |                                    |                 |   | APPRO            |                   |                               |                       |                         | 27 (9                                | [400]   |  |                                    |                     |                      |                                    |
| County:   | Liberty   |  | GDOT Dis                          | Strict. 5                                | - Jesup   |                                    |                 | _                                       | EG Mile          | S Pkwy<br>Deal St |                               | *                     | (0)                     | (7)                                  | (0)   | (2)  |                                    |                     | •                    | •                                  |
| Major Road  | EG Miles Pkw  | y Road<br>Class:                                     | Minor Ar                          | rterial                                  |   | Speed 3<br>Limit:                  | 5 mph           |   |                  |                   |                               | SB Deal St            | 0                       | 20                                   | 3   | 4  |                                    | WB E                | G Miles              | Pkwy                               |
| Crossing Road   | : Deal St   | Road   | Minor Ar                          | rterial                                  |   | Speed 4                            | 0 mph           | 1                                       |                  | _                 | _                             | 1                     | Peds↓                   | Ġ.                                   | Û   | ₩  | Peds                               | 0                   | (0)                  | 7400]                              |
|   |   | Class:   |                                   |  |   | Limit:                             |                 |   |                  | 973 (             | (3)                           | 4                     | ∌ ·                     |                                      | ntersection   |  | €                                  | 7                   | (3)                  | 432 (1078) [17400]                 |
| Major Rd Direction  | East/West   | Area Type:   | Suburb/                           | I ransıtı                                | ion   |                                    |                 |   |                  | 664) [            | (625)                         | 943                   | ₽₩                      |                                      | 18,300  | ` '  | 4                                  | 414<br>11           | (1041)               | 32 (10                             |
| Intersection Control  | Conventional (  | (Minor Stop)   |                                   |  | Project   | t ID:                              |                 |   |                  | 973 (664) [17400] | (36)                          | 0                     | Peds                    | <b>∳</b>                             | ⇧   | के   | Peds                               |                     | (34)                 | 4                                  |
| Prepared By   | : Atlas Technica  | al Consultant  | s                                 |  | D   | ate:                               |                 | 1                                       |                  |                   | EG Miles                      |                       | $\longleftrightarrow$   | 10                                   | 0   | 30   | 0                                  | NB Deal St          |                      |                                    |
|   |   |  |                                   |  |   |                                    |                 | 1<br>1 <u>!</u>                         | PEAK H           | R % TR            | UCKS:                         |                       |                         | (30)                                 | (1)   | (39)   | (0)                                | R                   |                      |                                    |
| Project Purpose   | :   |  |                                   |  |   |                                    |                 | Ī                                       | EB W             | /B NB             | SB                            |                       |                         |                                      | 40 (70)   | [1400]   | . ,                                |                     |                      |                                    |
| Existing Data Year  | 2022  |  |                                   |  |   |                                    |                 | ֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֡֓֓֡֓֓֡ | 2% 29            | % 0%              | 0%                            |                       |                         |                                      |   |  |                                    |                     |                      |                                    |
|   |   |  |                                   |  |   |                                    |                 |   |                  |                   |                               |                       |                         |                                      |   |  |                                    |                     |                      |                                    |
| Project Opening Year  | 2022  |  | 2022 O                            | PENIN                                    | NG YEA  | R VOLU                             | IMES            |   |                  |                   |                               |                       | 202                     | 2 DES                                | IGN Y   | EAR V  | OLUM                               | IES                 |                      |                                    |
| Project Opening Year Project Design Year  |   |  |                                   | 27 (9) [                                 | [400]   |                                    | IMES            |   |                  |                   |                               |                       | 202                     |                                      | (400)   |  | OLUM                               | IES                 |                      |                                    |
| Project Opening Year Project Design Year Annual Growth Rate   | 2022  | 55   | (0)                               | 27 (9) [<br>(7)                          | (0)   | (2)                                | IMES            |   |                  |                   |                               | Ş.                    | (0)                     | 27 (9                                | (0)   | (2)  | OLUM                               | IES                 |                      |                                    |
| Project Design Year   | 2022  | Deal St  | (0)                               | 27 (9) [<br>(7)<br>20                    | (400)<br>(0) (  | (2)                                | WBI             | EG Miles F                              |                  |                   |                               | Deal St               | (0)                     | 27 (9<br>(7)<br>20                   | (0)   | (2)  |                                    | WB E                | G Miles              |                                    |
| Project Design Year Annual Growth Rate K Factor*  | 2022<br>: 1.0%  | SB Deal St   | (0)<br>0<br>Peds                  | 27 (9) [<br>(7) 20                       | (400]<br>(0) (<br>3                                     | (2)<br>4                           | <b>WB</b> I     | (0)                                     | [1780            |                   | T (2)                         | SB Deal St            | (0)<br>0                | 27 (9)<br>(7)<br>20                  | (0)<br>3<br>T   | (2)  | Peds                               | <b>WB E</b>         | (0)                  |                                    |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport average annual dai   | 2022<br>: 1.0%<br>: 10%<br>dion of ly traffic   | (3) 4  | (0)<br>0<br>Peds                  | 27 (9) [<br>(7) 20 20 2022 Into          | (400)<br>(0) (  | (2)<br>4<br>Ped                    | <b>WB</b> I s 0 | (0)                                     | [1780            | 1000              | (3)                           | 4                     | (0)<br>0<br>Peds        | 27 (9)<br>(7)<br>20<br>2022          | (0)   | (2)<br>4<br>\$\square\$  | Peds                               | <b>WB E</b> 0 7     | (0)                  |                                    |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport  | 2022<br>1.0%<br>10%<br>ion of ly traffic hest one   | (3) 4<br>(638) 962                                   | (0)<br>0<br>Peds ↓<br>♪           | 27 (9) [<br>(7) 20 2022 Intentioning     | (400] (0) ( 3  Utersection Da                           | (2) 4 Ped aily ett):               | WB I 0 7 422    | (0)<br>(3)<br>(1062)                    | 5 (1099.5) [1780 | [19500            | (700)                         | 4 1,056               | (0)<br>0<br>Peds ↓      | 27 (9)<br>(7)<br>20<br>2022 Enteri   | (0)<br>3<br>1,<br>Intersection                        | (2) 4  This is a second of the control of the contr | Peds 🕹 🗗                           | <b>WB E</b> 0 7 464 | (0)<br>(3)<br>(1166) |                                    |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport average annual dai occurring in the hig                                      | 2022<br>: 1.0%  | (3) 4  | (0)<br>0<br>Peds \$\frac{1}{2}\$  | 27 (9) [<br>(7) 20 202 Intering          | (400]<br>(0) (<br>3<br>1) tersection Da<br>g Volume (es | (2) 4 Ped aily stt):               | WB I 0 7 422 11 | (0)<br>(3)<br>(1062)                    | [1780            | [19500]           | (700)<br>(40)                 | 4                     | (0)<br>0<br>Peds ↓<br>⇒ | 27 (9<br>(7)<br>20<br>2022 Enterior  | (0) (3) (Intersection on Volume                       | (2) 4  The property of the pro | Peds                               | WB E 0 7 464 12     | (0)                  | <b>Pkwy</b> [19500] (1207) [19500] |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport average annual dai occurring in the hig                                      | 2022<br>1.0%<br>10%<br>ion of ly traffic hest one 92.38<br>8001<br>17.22  | (3)     4       (638)     962       (37)     27      | (0)<br>0<br>Peds ↓<br>♪           | 27 (9) [<br>(7) 20 2022 Intentioning     | (400] (0) ( 3   | (2) 4 Ped aily stt):               | WB I 0 7 422 11 | (0)<br>(3)<br>(1062)                    | 5 (1099.5) [1780 | 500]              | (700)                         | 4<br>1,056<br>29<br>0 | (0)<br>0<br>Peds ↓      | 27 (9)<br>(7)<br>20<br>2022 Enteri   | (0)<br>3<br>1.<br>Intersection<br>ng Volume<br>20,500 | (2) 4  This is a second of the control of the contr | Peds & 4                           | WB E 0 7 464 12     | (0)<br>(3)<br>(1166) |                                    |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport average annual dai occurring in the hig hour of the day  LEGEND:             | 2022<br>1.0%<br>10%<br>ion of ly traffic hest one 92.38<br>8001<br>17.22  | (3) 4<br>(638) 962<br>(37) 27<br>(0) 0<br>Miles Pkwy | (0)<br>0<br>Peds ↓<br>⇒<br>Peds ↓ | 27 (9) [ (7) 20 2022 Intentering 1       | (400] (0) ( 3   | (2) 4 Ped Still Still From Ped     | WB I            | (0)<br>(3)<br>(1062)                    | 5 (1099.5) [1780 | 500]              | (700)<br>(700)<br>(40)<br>(0) | 4<br>1,056<br>29<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 27 (9<br>(7)<br>20<br>2022 Enterio   | (0)<br>3<br>Unintersection<br>ng Volume<br>20,500     | (2) 4  The property of the pro | Peds  4  4  Peds  Peds             | <b>WB E</b> 0 7 464 | (0)<br>(3)<br>(1166) |                                    |
| Project Design Year  Annual Growth Rate  K Factor*  * K Factor = Proport average annual dai occurring in the hig hour of the day  LEGEND:  000 = AM F | 2022<br>1.0%<br>10%<br>10%<br>100 of by traffic hest one 17,7800<br>17,7800<br>17,7800<br>17,7800<br>17,7800<br>18,080 of control of cont | (3) 4<br>(638) 962<br>(37) 27<br>(0) 0<br>Miles Pkwy | (0)<br>0<br>Peds ↓<br>⇒<br>Peds ↓ | 27 (9) [ (7) 20 2022 Intering 1  10 (31) | (400] (0) ( 3   | (2) 4 Ped saily sti): Ped 31 0 (0) | WB I            | (0)<br>(3)<br>(1062)                    | 5 (1099.5) [1780 | 500]              | (700)<br>(700)<br>(40)<br>(0) | 4<br>1,056<br>29<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 27 (9)<br>(7)<br>20<br>2022 Enterion | (0) (0) 3 Unitersection g Volume 20,500 (1)           | (2) 4 The property of the prop | Peds  The peds  Peds  Peds  O  (0) | WB E 0 7 464 12     | (0)<br>(3)<br>(1166) |                                    |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| Georgia i                  | Department of Transportation    |  |          |                    |               |  |  |                 |  | ICE Version 2.21   Revised 2/4/2022  |
|----------------------------|---------------------------------|--|----------|--------------------|---------------|--|--|-----------------|--|--|
| GDOT                       | PI#                             |  | Note: U  | p to 5 alte        | rnatives      |  |  |                 |  |  |
|                            | ct Location:                    | EG Miles Pkwy @ Deal St  | may be   | selected a         | and           | <b>%</b> о   | · (n   | (C)             | 2  | /.0  |
|                            | ng Control:                     | Conventional (Minor Stop)  | Stage 1  | to screen          | s ICE<br>5 or | ed tolet   | Tance !  | The Life Chiles | Hather?  | the site.  |
| Prepa<br>Date:             | red by:                         | Atlas Technical Consultants  | fewer al | ternatives         | to            | Tille S. Val.  | otti.  | odlor pro ser   | SHIP SHIP  | or could with stylight   |
|                            | var "Vas" or "N                 | o" to each policy question for each                                      | evaluate | e in Stage         | 2 the de      | All salety to  | of sales   | 10 do 19        | Mar Joseph Co  | Contract Con |
|                            |                                 | ntify which alternatives should be                                       |          | 8                  | iless in sco  | ONE CLAR   | 10 destru  | One 98182       | Sal Salles of The  | of the legal Character Cha |
| eı                         |                                 | Stage 2 Decision Record; enter   |          | ding               | Sall Allowed  | Son diversity  | A STAN WAY   | SHO, WING OF    | Sept Sino of   | ighe disting.  |
|                            | <u>-</u>                        | n in the rightmost column  | G        | affertire triality | Hellio dirci. | aller Cesibility   | atternis con   | allerricatios,  | allering office.   | Legs of the  |
|                            |                                 | rnative (see "Intersections" tab for n of intersection/interchange type) | 1000     | Hally Does         | 120, JOS.     | THE STATE OF THE S | A CONTROL OF THE CONT | 918C1 083       | TO THE STATE OF TH | The light of the l |
| 4011                       | Conventional                    |  | No       | No                 | No            | No   | No   | No              | Yes  | <b>3</b>   |
|                            |                                 | · · · · · · · · · · · · · · · · · · ·                                    |          |                    |               |  |  |                 |  |  |
|                            | Conventional                    | (All-Way Stop)   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Mini Roundab                    | out  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Single Lane R                   | Roundabout   | No       | No                 | No            | No   | No   | No              | No   |  |
| Unsignalized Intersections | Multilane Rou                   | ndabout  | No       | No                 | No            | No   | No   | No              | Yes  |  |
| terse                      | RCUT (stop c                    | ontrol)  | No       | No                 | No            | No   | No   | No              | Yes  |  |
| ed In                      | RIRO w/down                     | stream U-Turn  | No       | No                 | No            | No   | No   | No              | No   |  |
| gnaliz                     | High-T (unsig                   | nalized)   | No       | No                 | No            | No   | No   | No              | No   |  |
| Unsig                      | Offset-T Inters                 | sections   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Diamond Inter                   | rch (Stop Control)   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            |                                 | rch (RAB Control)  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Add LT Lanes on No RT Lane Im   |  | No       | No                 | No            | No   | No   | No              | Yes  |  |
|                            | Other unsigna                   | alized (provide description):  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Traffic Signal                  |  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Median U-Tur                    | n (Indirect Left)  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | RCUT (signal                    | ized)  | No       | No                 | No            | No   | No   | No              | No   |  |
| SI                         | Displaced Lef                   | t Turn (CFI)   | No       | No                 | No            | No   | No   | No              | No   |  |
| ectior                     | Continuous G                    | reen-T   | No       | No                 | No            | No   | No   | No              | No   |  |
| Signalized Intersections   | Jughandle                       |  | No       | No                 | No            | No   | No   | No              | No   |  |
| ized                       | Quadrant Roa                    | adway  | No       | No                 | No            | No   | No   | No              | No   |  |
| ignal                      | Diamond Inter                   | rch (Signal Control)   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Diverging Dia                   | mond   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Single Point Ir                 | •  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | No LT Lane Imp<br>No RT Lane Im |  | No       | No                 | No            | No   | No   | No              | No   |  |
|                            | Other Signaliz                  | zed (provide description):   | No       | No                 | No            | No   | No   | No              | No   |  |
|                            |                                 | - Intersection type selected for   |          |                    |               |  |  |                 |  |  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



| GDQT  | GDOT IC       | CE STAGE           | 2: ALTE       | RNATIVI        | E SELECTI           | ON DECI         | SION      | REC       | COR        | D         |          |        |             |
|---|---------------|--------------------|---------------|----------------|---------------------|-----------------|-----------|-----------|------------|-----------|----------|--------|-------------|
| Georgia Department of Transportation                |               |                    |               |                |                     |                 |           |           | ICE        | Versio    | n 2.21   | Revis  | ed 2/4/2022 |
| Project Location:                                   |               | •                  |               |                |                     | 5 - Jesup       |           | _         |            | PI #:     |          |        |             |
| Existing Intersection Control:                      |               |                    |               |                | County:             | •               |           | Pre       | •          | •         | Atlas    | Tech   | inical Cor  |
| Type of Analysis:                                   | Safety Fun    | ded Projec         | t             |                | Area:               | Suburb/Tra      | ansitic   |           |            | Date:     |          |        |             |
| Opening / Design Year Traffic Operation             | s             |                    | _             |                | Crash Data:         | Enter most rec  | ent 5     |           | Cras       | h Sev     | erity    |        | Years:      |
| Intersection meets signal/AWS warrants?             | No            | ne                 | Complete      |                | years               | of crash data   |           | K*        | Α*         | В*        | C*       | 0      | 5           |
| Traffic Analysis Measure of Effectiveness           | Intersect     | ion Delay          | Warrants      |                | Angle               |                 |           | 0         | 0          | 3         | 5        | 14     | 37%         |
| Traffic Analysis Software Used                      | Syn           | chro               | PEDEST        | RIANS g        | Head-On<br>Rear End |                 |           | 0         | 0          | 1         | 0        | 0      | 2%          |
| Analysis Time Period                                | AM Peak Hr    | PM Peak Hr         | BICYCLE       | S P            | Rear End            |                 |           | 0         | 0          | 3         | 8        | 13     | 41%         |
| 2022 Opening Yr No-Build Peak Hr Intersection Delay | 27.9 sec      | 43.3 sec           | TRANSI        | T S            | Sideswipe - sa      | me              |           | 0         | 0          | 0         | 0        | 6      | 10%         |
| 2022 Opening Yr No-Build Peak Hr Intersection V/C   | 0.26          | 0.53               |               | Č              | Sideswipe - op      | posite          |           | 0         | 0          | 1         | 0        | 2      | 5%          |
| 2022 Design Yr No-Build Peak Hr Intersection Delay  | 36.1 sec      | 71.9 sec           |               |                | Not Collision v     | /Motor Veh      |           | 0         | 0          | 1         | 0        | 2      | 5%          |
| 2022 Design Yr No-Build Peak Hr Intersection V/C    | 0.34          | 0.71               |               |                | TOTALS:             |                 |           | 0         | 0          | 9         | 13       | 37     | 59          |
|   | •             |                    | •             |                | * Nun               | nber of crashes | resulting | j in inju | uries / fa | atalities | , not nu | mber o | fpersons    |
| Alternatives Analysis:                              | Altern        | ***                | Altern        | ative 2        | Altern              | ative 3         | Al        | tern      | ative      | 4         | Α        | lterna | ative 5     |
| Proposed Control Type/Improvement:                  |               | onal (Minor<br>op) | Multilane R   | Roundabout     | RCUT (st            | op control)     | Add I     | Left T    | urn La     | anes      |          | N      | 'A          |
| Project Cost: (From CostEst Worksheet)              | Additional de | scription here     | Additional de | scription here | Additional de       | scription here  | Additio   | nal de    | scriptio   | n here    |          |        |             |
| Construction Cost                                   | \$            | 0                  | \$1,56        | 9,000          | \$642               | ,000            | ,         | \$127     | ,000       |           |          |        |             |
| ROW Cost  | \$            | 0                  | \$468         | ,000           | \$506               | ,000            |           | \$(       | 0          |           |          |        |             |
| Environmental Cost                                  | \$            | 0                  | \$            | 0              | \$                  | 0               |           | \$(       | 0          |           |          |        |             |
| Reimbursable Utility Cost                           | \$            | 0                  | \$18,         | 000            | \$8,0               | 000             |           | \$1,0     | 000        |           |          |        |             |
| Design & Contingency Cost                           | \$            | 0                  | \$            | 0              | \$                  | 0               |           | \$(       | 0          |           |          |        |             |
| Cost Adjustment (justification req'd)               | 0             | %                  | +20           | 00%            | +10                 | 00%             |           | 0         | %          |           |          |        |             |
| Total Cost  | \$            | 0                  | \$2,05        | 5,000          | \$1,15              | 6,000           | ,         | \$128     | ,000       |           |          |        |             |
| Traffic Operations:                                 |               |                    | User Cos      | t Override     | User Cos            | t Override      |           |           |            |           |          |        |             |
| Traffic Analysis Software Used                      | Syn           | chro               | GDOT F        | RAB Tool       | Syn                 | chro            |           | Syn       | chro       |           |          |        |             |
| Analysis Period                                     |               | PM Peak Hr         | AM Peak Hr    | PM Peak H      | AM Peak Hr          | PM Peak Hr      |           |           |            |           |          |        |             |
| 2022 Design Yr Build Intersection Delay             | 36.1 sec      | 71.9 sec           | 7.9 sec       | 8.7 sec        | 15.4 sec            | 14.2 sec        | 77.6      |           |            | 1 sec     |          |        |             |
| 2022 Design Yr Build Intersection V/C               | 0.34          | 0.71               | 0.57          | 0.59           | 0.15                | 0.18            | 0.2       | 23        | 0.         | 62        |          |        |             |
| Safety Analysis:                                    |               |                    |               |                | _                   |                 |           |           |            |           |          |        |             |
| Predefined CRF: PDO                                 |               | %                  |               | 2%             |                     | 1%              |           |           | %          |           |          |        |             |
| Predefined CRF: Fatal/Inj                           |               | %                  |               | 1%             | 53                  | 3%              |           |           | %          |           |          |        |             |
| Dradefined CDE Courses                              | CRF unavail   | able; provide      | FHWA Clear    | ringhouse #s   | NC/MO               | Table 17        | FHWA      | A Clear   | ringhou    | se #s     |          |        |             |

(write in if applicable): Environmental Impacts:1

Predefined CRF Source:

User Defined CRF: PDO User Defined CRF: Fatal/Inj User Defined CRF Source

None None Historic District/Property None None Archaeology Resources None None None None Graveyard None None None None None None None None Stream Underground Tank/Hazmat None None None None None None None None Park Land None **EJ Community** None None None None None Wooded Area None None Wetland None None None None

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Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet Stakeholder Posture: Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report Unknown Unknown Unknown Unknown

user defined CRF below

Local Community Support **GDOT Support** Unknown Unknown Unknown Unknown Final ICE Stage 2 Score: 4.0 6.4 7.2 4.2

Rank of Control Type Alternatives: Final Intersection Control Selection: 1 - RCUT (stop control)

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

NC/MO Table 4-7

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Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):





| GDOT PI#:  | Requ   | est By:                                |  |  |                              | 1           |                    |                                  |                                       | 2022                          | EXISTING Y   | EAR V                                       | OLUM                      | ES   | 1                   |                                 |
|--|--|--|--|--|------------------------------|-------------|--------------------|----------------------------------|---------------------------------------|-------------------------------|--|---|---------------------------|--|---------------------|---------------------------------|
| County:  | Liherty  | I GDOT I                               | District: 5 - Jesu   | ın   |                              | _           |                    | CH SPLITS<br>Pkwy: 95%           | <u>§:</u> ≥                           |                               | 12 (21) [500]  |   |                           |  |                     | 1                               |
| -  |  |  | 31011101. 0 0001   | · _  |                              |             |                    | I MC: 5%                         | Regional MC                           | (0)                           | (11) (2)   | (8)   |                           |  |                     |                                 |
| Major Road:  | EG Miles Pkwy  | Road Function                          | onal Class   | Speed<br>Limit:                            | 40 mph                       |             | ŭ                  |                                  |                                       | 0                             | 3 1  | 8   |                           | WB E   | G Miles             | Pkwy                            |
| Crossing Road:   | L Regional MC  | Road Function                          | onal Class   | Speed                                      | < 35 mph                     | 1           |                    |                                  | SBL                                   | PedsŢ                         | \$ ₽   | ₩   | Peds                      | 0  | (0)                 | 300]                            |
|  |  | Class:                                 |  | Limit: L                                   |                              |             |                    | 977 (6                           |                                       | <b>∌</b>                      | 2022 Intersection<br>Entering Volume   | ,   | <b>€</b>                  | 17   | (8)                 | 463 (761) [14300]               |
| Major Rd Direction:  | East/West Area   | a Type: Suburt                         | o/Transition   |  |                              |             |                    | (655) [14300]                    |                                       | <i>p</i>                      | 15,050   | ` '   | <b>4</b>                  | 440  | (735)               | 33 (76                          |
| Intersection Control:  | Conventional (Minor  | r Stop)                                | Proje  | ect ID:                                    |                              |             |                    | [14300                           | <u> </u>                              | Pads                          |  |   | <b>₽</b>                  | 6<br>၁   | (18)                | 4                               |
| Draward Dr.  | Atlan Tanksiani Cas  | aultanta                               |  | ا مدد                                      | 8/1/2022                     | _<br>]      |                    | EB EG Mi                         | ,                                     | Peds                          | 8 3  | 18  | Peds                      | L Regional MC  |                     |                                 |
| Prepared By:   | Atlas Technical Con  | isuitants                              |  | Date:                                      | 6/1/2022                     |             | VK ND              | % TRUCK                          | •                                     |                               |  |   | 0 (0)                     | Regio  |                     |                                 |
| Project Purpose:   |  |  |  |  |                              |             | B WB               | NB SE                            | _                                     |                               | ` ' \ ` '  | (24)  | (0)                       | NBLF   |                     |                                 |
|  |  |  |  |  |                              | _           | % 2%               | 0% 0%                            | _                                     | ļ                             | 23 (02   | .) [1000]                                   |                           | 2  |                     |                                 |
|  |  |  |  |  |                              |             |                    |                                  |                                       |                               |  |   |                           |  |                     |                                 |
| Existing Data Year:  | 2022   | 2022                                   | OPENING YE   | AR VO                                      | DLUMES                       | <u> </u>    |                    |                                  |                                       | 202                           | 2 DESIGN Y   | EAR V                                       | OLUN                      | IES  |                     |                                 |
| Existing Data Year:<br>Project Opening Year:   |  |  |  | AR VO                                      | DLUMES                       | _           |                    | <u> </u>                         | _                                     | 202                           |  | EAR V                                       | OLUN                      | IES  |                     |                                 |
| J  |  |  | 12 (21) [500]  |  | DLUMES                       |             |                    | 1 1                              | _                                     |                               | 12 (21) [500]  |   | OLUN                      | IES  |                     |                                 |
| Project Opening Year:  | 2022   |  |  | (8)  |                              | EG Milos Dk |                    | <u> </u>                         | _                                     | (0)<br>0                      |  | (8)<br>8                                    | OLUM                      |  | 3 Milos             | Dhuar                           |
| Project Opening Year: Project Design Year:   | 2022   | Regional MC                            | 12 (21) [500]<br>(11) (2)  |  | WB                           | EG Miles Pk | wy_                |                                  | L<br>Regional MC                      | (0)                           | 12 (21) [500]<br>(11) (2)  | (8)   |                           |  | G Miles             |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportion   | 2022<br>2022<br>1.0%<br>10%  | L Regional MC                          | 12 (21) [500]<br>(11) (2)<br>3 1<br>4 J                                | (8)  | WB                           |             | wy_                |                                  | SB L Regional MC                      | (0)                           | 12 (21) [500]<br>(11) (2)<br>3 1<br>\$\mathref{y}\$ \$\mathref{I}\$                    | (8)   | Peds                      | WB E   | G Miles (0) (8)     |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  | 2022<br>2022<br>1.0%<br>10%  | SB L Regional MC 0)                    | 12 (21) [500]<br>(11) (2)<br>3 1                                       | (8)<br>8                                   | WB<br>Peds 0                 | (0) § (8) f | wy poot 1 (v.c.v.) | 8 -                              | SB L Regional MC                      | (0)<br>0                      | 12 (21) [500]<br>(11) (2)<br>3 1   | (8)<br>8<br>\$\square\$\square\$            | Peds                      | <b>WB E</b>  | (0)                 |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportic average annual daily   | 2022<br>2022<br>1.0%<br>10%  | SB L Regional MC (0)  13 Peds  13 Peds | 12 (21) [500] (11) (2) 3 1   | (8)<br>8                                   | WB Peds 0  ◆ 17              | (8) (8)     | wy poot 1 (v.c.v.) | 8 -                              | 38 L Regional MC                      | (0)<br>0<br>Peds              | 12 (21) [500] (11) (2) 3 1  2022 Intersection  | (8)<br>8<br>on Daily<br>se (est):           | Peds                      | <b>WB E</b> 0 17   | (0)                 | 515.8 (849.2) [15900 <b>384</b> |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportic average annual daily occurring in the high   | 2022<br>2022<br>1.0%<br>10%<br>on of v traffic (648)<br>est one  | (0)  RS Peds  13  946  ⇒               | 12 (21) [500] (11) (2) 3 1  2022 Intersection Entering Volume          | (8)<br>8                                   | WB  Peds 0  ♣ 17  ♣ 449  ♣ 6 | (0) § (8) f | wy poot 1 (v.c.v.) | 088.24                           | ) 13<br>1) 1,038<br>4) 37             | (0)<br>0<br>Peds ↓            | 12 (21) [500] (11) (2) 3 1  2022 Intersectic Entering Volume                           | (8)<br>8<br>on Daily<br>se (est):           | Peds 🕹 🗗                  | <b>WB E</b> 0 17 493 6   | (0)<br>(8)<br>(823) |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportic average annual daily occurring in the high   | 2022<br>2022<br>1.0%<br>10%<br>on of variffic set one (648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(648) | (0) 0 13                               | 12 (21) [500] (11) (2) 3 1   2022 Intersection Entering Volume 15,350  | (8)<br>8<br>\$\frac{1}{4}\$ a Daily (est): | WB  Peds 0  ♣ 17  ♣ 449  ♣ 6 | (0) § (8) f | wy poot 1 (v.c.v.) | (71<br>088.24 (731.2<br>[16000]  | SB   S7   S7   S7   S7   S7   S7   S7 | (0)<br>0<br>Peds \$\display\$ | 12 (21) [500] (11) (2) 3 1  2022 Intersectic Entering Volum 16,700                     | (8)<br>8<br>on Daily<br>le (est):           | Peds & 4 4 4              | <b>WB E</b> 0 17 493 6   | (0)<br>(8)<br>(823) |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportic average annual daily occurring in the high hour of the day  **LEGEND:**  | 2022<br>2022<br>1.0%<br>10%<br>on of y traffic lest one (648)<br>(648)<br>(648)<br>(648)<br>(648)<br>(744)<br>(744)<br>(744)<br>(744)        | (0) 0 13                               | 12 (21) [500] (11) (2) 3 1  2022 Intersection Entering Volume 15,350   | (8) 8 Uh                                   | WB  Peds 0  ♣ 17  ♣ 449  ♣ 6 | (0) § (8) f | wy poot 1 (v.c.v.) | (71<br>088.24 (731.2)<br>[16000] | SB   S7   S7   S7   S7   S7   S7   S7 | (0)<br>0<br>Peds \$\display\$ | 12 (21) [500] (11) (2) 3 1   | (8) 8 on Daily le (est):                    | Peds  4  4  Peds  Peds    | C Regional MC 0 17 6 493 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | (0)<br>(8)<br>(823) |                                 |
| Project Opening Year: Project Design Year: Annual Growth Rate: K Factor*:  * K Factor = Proportic average annual daily occurring in the high hour of the day  LEGEND:  000 = AM Perolumber (000) = PM Perolumber (000) | 2022 2022 1.0% 10% on of variffic sest one (648) (648) (648) (744) (744) (744) (744) (744) (744) (744) (744) (744) (744) (744) (744) (744)   | (0) 0 13                               | 12 (21) [500] (11) (2) 3 1    2022 Intersection Entering Volume 15,350 | (8)<br>8<br>4 Daily (est):                 | WB  Peds 0                   | (0) § (8) f | wy poot 1 (v.c.v.) | (71<br>088.24 (731.2)<br>[16000] | SB   S7   S7   S7   S7   S7   S7   S7 | (0)<br>0<br>Peds \$\display\$ | 12 (21) [500] (11) (2) 3 1  J 2022 Intersectic Entering Volum 16,700  1 1 8 3 (32) (6) | (8)<br>8<br>8<br>on Daily<br>le (est):<br>0 | Peds  ↓  ↓  Peds  Peds  O | <b>WB E</b> 0 17 493 6   | (0)<br>(8)<br>(823) | _                               |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| GD01                       | PI#  |   | Nata II  | - t- E -lt-  |   |  |  |               |  | ICE Version 2.21   Revised 2/4/2022  |
|----------------------------|--|---|----------|--|---|--|--|---------------|--|--|
| _                          | ct Location:   | EG Miles Pkwy @ L Regional MC   | may be   | p to 5 alte<br>selected a  | matives<br>ind  |  | /  | /0            |  |  |
|                            | ng Control:  | Conventional (Minor Stop)   | evaluate | ed; Use thi  | s ICE   | 3500   | i Coin   | dence         | 3, 400 -2  |  |
|                            | red by:  | Atlas Technical Consultants   | Stage 1  | to screen  | 5 or  | Leg doll   | Mane   | COLMO, DICACL | S. Haylige.  | or the state of th |
| Date:                      |  | 8/1/2022  | evaluate | ternatives<br>in Stage   | 10 2 10 5   | 141 1410 14 Sel  | aten!  | andlor reserv | Split Ne di  | ide of him het all   |
| cor<br>e                   | trol type to ide<br>valuated in the<br>justification<br>ersection Alte | No" to each policy question for each lentify which alternatives should be to Stage 2 Decision Record; enter on in the rightmost column ernative (see "Intersections" tab for on of intersection/interchange type) | 0,000    | Melding of the state of the sta | SO TO | THE POLICE OF TH | THE STATE OF THE S | No            | THE STATE OF THE PARTY OF THE P | Screening Decision Justification:  |
|                            | Conventiona  | I (Minor Stop)  | No       | No   | No  | No   | No   | No            | Yes  | Current Control  |
|                            | Conventiona  | l (All-Way Stop)  | No       | No   | No  | No   | No   | No            | No   | Too many lanes on mainline   |
|                            | Mini Rounda  | bout  | No       | No   | No  | No   | No   | No            | No   | More than 90% of volume on Mainline  |
|                            | Single Lane  | Roundabout  | No       | No   | No  | No   | No   | No            | No   | More than 90% of volume on Mainline  |
| tions                      | Multilane Ro   | undabout  | No       | No   | No  | No   | No   | No            | No   | More than 90% of volume on Mainline  |
| Unsignalized Intersections | RCUT (stop   | control)  | Yes      | Yes  | No  | Yes  | Yes  | Yes           | Yes  | Potential Alternative  |
| ed Int                     | RIRO w/dow   | n stream U-Turn   | No       | No   | No  | No   | No   | No            | No   | U Turn restriction   |
| ınaliz                     | High-T (unsi   | gnalized)   | No       | No   | No  | No   | No   | No            | No   | U Turn restriction   |
| Unsig                      | Offset-T Inte  | rsections   | No       | No   | No  | No   | No   | No            | No   | 3 Leg Intersection   |
|                            | Diamond Inte   | erch (Stop Control)   | No       | No   | No  | No   | No   | No            | No   | No grade seperation  |
|                            | Diamond Inte   | erch (RAB Control)  | No       | No   | No  | No   | No   | No            | No   | No grade seperation  |
|                            | Add one LT La<br>No RT Lane In   | ane on L Regional MC nprovements  | Yes      | Yes  | No  | No   | Yes  | Yes           | Yes  | Potential Alternative  |
|                            | Other unsign   | nalized (provide description):  | No       | No   | No  | No   | No   | No            | No   |  |
|                            | Traffic Signa  | 1   | No       | No   | No  | No   | No   | No            | Yes  | Potential Alternative  |
|                            | Median U-Tu  | ırn (Indirect Left)   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
|                            | RCUT (signa  | alized)   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| ဟ                          | Displaced Le   | eft Turn (CFI)  | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| ction                      | Continuous (   | Green-T   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| nterse                     | Jughandle  |   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| zed lı                     | Quadrant Ro  | padway  | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| Signalized Intersections   | Diamond Inte   | erch (Signal Control)   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
| S                          | Diverging Dia  | amond   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
|                            | Single Point   | J   | No       | No   | No  | No   | No   | No            | No   | No signal warranted  |
|                            | No LT Lane In<br>No RT Lane In   |   | No       | No   | No  | No   | No   | No            | No   |  |
|                            | Other Signal   | ized (provide description):   | No       | No   | No  | No   | No   | No            | No   |  |
|                            |  | = Intersection type selected for  | more d   | etailed a  | nalvsis   | in Stage   | 2 Altern   | ative Se      | lection [  | Decision Record  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ L Regional MC Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty

Area: Suburb/Transitic

GDOT PI#:

Prepared by: Atlas Technical Cons

Date: 8/1/2022

#### **Opening / Design Year Traffic Operations**

| Intersection meets signal/AWS warrants?             | No         | ne         |
|---|------------|------------|
| Traffic Analysis Measure of Effectiveness           | Intersect  | ion Delay  |
| Traffic Analysis Software Used                      | Syn        | chro       |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr |
| 2022 Opening Yr No-Build Peak Hr Intersection Delay | 24.3 sec   | 31.1 sec   |
| 2022 Opening Yr No-Build Peak Hr Intersection V/C   | 0.11       | 0.31       |
| 2022 Design Yr No-Build Peak Hr Intersection Delay  | 29.7 sec   | 38.8 sec   |
| 2022 Design Yr No-Build Peak Hr Intersection V/C    | 0.14       | 0.38       |

Complete Streets
Warrants Met?

PEDESTRIANS
BICYCLES
TRANSIT

|       | Crash Data: Enter most recent 5 |    | Cras       | h Sev | erity |    | Years: |
|-------|---------------------------------|----|------------|-------|-------|----|--------|
|       | years of crash data             | K* | <b>A</b> * | В*    | C*    | 0  | 5      |
|       | Angle                           | 0  | 0          | 0     | 2     | 3  | 26%    |
| l ype | Head-On                         | 0  | 0          | 0     | 0     | 0  | 0%     |
|       | Rear End                        | 0  | 0          | 0     | 3     | 5  | 42%    |
| Crash | Sideswipe - same                | 0  | 0          | 0     | 0     | 2  | 11%    |
| ゔ     | Sideswipe - opposite            | 0  | 0          | 0     | 0     | 1  | 5%     |
|       | Not Collision w/Motor Veh       | 1  | 0          | 0     | 0     | 2  | 16%    |
|       | TOTALS:                         | 1  | 0          | 0     | 5     | 13 | 19     |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:  | Alterna   | ative 1                                 | Altern        | ative 2        | Altern        | ative 3               | Alterna              | ative 4                              | Alterna | ative 5    |
|---|---|---|---------------|----------------|---------------|-----------------------|----------------------|--------------------------------------|---------|------------|
| Proposed Control Type/Improvement:  | Conventional (Minor Stop)   |   | RCUT (sto     | op control)    | Add Left T    | urn Lanes             | Traffic              | Signal                               | N       | ′A         |
| Project Cost: (From CostEst Worksheet)                                      | Additional des  | • | Additional de | scription here | Additional de | scription here        | Add LT bays a        | all approaches                       |         |            |
| Construction Cost   | \$0   | )                                       | \$321         | ,000           | \$70,         | 000                   | \$201                | ,000                                 |         |            |
| ROW Cost  | \$0   | )                                       | \$253         | ,000           | \$            | 0                     | \$(                  | 0                                    |         |            |
| Environmental Cost  | \$0   | )                                       | \$0           |                | \$0           |                       | \$0                  |                                      |         |            |
| Reimbursable Utility Cost   | \$0   | \$0                                     |               | \$4,000        |               | \$1,000               |                      | 000                                  |         |            |
| Design & Contingency Cost   | \$0   |   | \$            | 0              | \$            | 0                     | \$0                  | 0                                    |         |            |
| Cost Adjustment (justification req'd)                                       | 09  | %                                       | 0'            | %              | 0'            | %                     | 0,                   | %                                    |         |            |
| Total Cost  | \$0   | )                                       | \$578         | ,000           | \$71,         | 000                   | \$205                | ,000                                 |         |            |
| Traffic Operations:   |   |   |               |                |               |                       |                      |                                      |         |            |
| Traffic Analysis Software Used  | Synd  | chro                                    | Syn           | chro           | Syn           | chro                  | Syn                  | chro                                 |         |            |
| Analysis Period   | AM Peak Hr  |   |               | PM Peak Hr     |               | PM Peak Hr            |                      |                                      |         |            |
| 2022 Design Yr Build Intersection Delay                                     | 29.7 sec  | 38.8 sec                                | 13.2 sec      | 11.7 sec       | 51.5 sec      | 50.8 sec              | 0.0 sec              | 0.0 sec                              |         |            |
| 2022 Design Yr Build Intersection V/C                                       | 0.14  | 0.38                                    | 0.07          | 0.23           | 0.10          | 0.77                  | 0.00                 | 0.00                                 |         |            |
| Safety Analysis:  |   |   |               |                |               |                       |                      |                                      |         |            |
| Predefined CRF: PDO   | 09  |   |               | 1%             |               | %                     | 39                   |                                      |         |            |
| Predefined CRF: Fatal/Inj   | 09  | -                                       | 53            | 3%             |               | %                     | 40                   | , -                                  |         |            |
| Predefined CRF Source:  | CRF unavaila<br>user defined                                      |   | NC/MO         | Table 4-7      |               | ringhouse #s<br>/ 274 | FHWA Clear<br>7982 / | •                                    |         |            |
| User Defined CRF: PDO   |   |   |               |                |               |                       |                      |                                      |         |            |
| User Defined CRF: Fatal/Inj   |   |   |               |                |               |                       |                      |                                      |         |            |
| User Defined CRF Source   |   |   |               |                |               |                       |                      |                                      |         |            |
| (write in if applicable):   |   |   |               |                |               |                       |                      |                                      |         |            |
| Environmental Impacts:1   |   |   |               |                |               |                       |                      |                                      |         |            |
| Historic District/Property  | No  | ne                                      | No            | ne             | No            | ne                    | No                   | ne                                   |         |            |
| Archaeology Resources   | No  | ne                                      | No            | ne             | No            | ne                    | No                   | ne                                   |         |            |
| Graveyard   | No  | ne                                      | No            | ne             | No            | ne                    | No                   | ne                                   |         |            |
| Stream  | No  |   |               | ne             | No            | ne                    | No                   |                                      |         |            |
| Underground Tank/Hazmat   | No  |   |               | ne             |               | ne                    | No                   | _                                    |         |            |
| Park Land   | No  |   | _             | ne             |               | ne                    | No                   |                                      |         |            |
| EJ Community  | No  |   |               | ne             |               | ne                    | No                   | -                                    |         |            |
| Wooded Area   | No  |   |               | ne             |               | ne                    | No                   |                                      |         |            |
| Wetland   | No  |   | _             | ne             |               | ne                    | No                   |                                      | , , .   |            |
| Stakeholder Posture:  |   |   |               |                |               |                       |                      | livery using "En<br>be included witi |         | ept report |
| Local Community Support   | <sup>1</sup> Environmental impacts are of Unknown                 |   |               | nown           |               | nown                  | Unkr                 |                                      | •       |            |
| GDOT Support  | Unkr  | own                                     | Unkr          | nown           | Unkr          | nown                  | Unkr                 | nown                                 |         |            |
| Final ICE Stans 2 Course  | _4  | F -                                     | 5             | 1 -            | _4            | 2                     |                      |                                      |         |            |
| _   | Final ICE Stage 2 Score: 4.5 Rank of Control Type Alternatives: 2 |   |               |                | 4             | .2                    |                      |                                      |         |            |
| Rank of Control Type Alternatives:<br>Final Intersection Control Selection: |   |   |               |                | ,             |                       |                      |                                      |         |            |
| rinai intersection Control Selection:                                       | 1 - KCUI (  | stop contr                              | ol)           |                |               |                       |                      |                                      |         |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):





| GDOT PI#: Request By: HAMP                                       | 0  | ]  | 2022               | EXISTING YEAR V   | OLUMES   | <b>A</b>          |
|--|--|--|--------------------|---|--|-------------------|
| County Liberty CDOT 5  | Noteint E Janua  | APPROACH SPLITS: EG Miles Pkwy: 95%                      | urch               | 125 (85) [1900]   | ]  | N                 |
| County: Liberty GDOT I   | District: 5 - Jesup  | Live Oak Church: 5%                                      | Oak Church         | (51) (0) (34)   |  | 13                |
| Major Road: EG Miles Pkwy Road Class:                            | Arterial Speed 45 mph  | 2.70 0 0.00 0.10 0.70                                    | SB Live O          | 43 0 82   |  | B EG Miles Pkwy   |
| Crossing Road: Live Oak Church Road Local                        | Speed 35 mph   | 1  |                    | <b>♣ ₽</b> <i>♠</i>   | <b>←→</b>  | (0) 0             |
| Class:   | Limit:   | 76   | 40 🖈               | 2022 Intersection Daily<br>Entering Volume (est):   | <b>1</b> 2   | <del>`</del> ′ (© |
| Major Rd Direction: East/West Area Type: Suburt                  | o/Transition   | (728) 1  | 136 ⇒              | 19,400  |  | 90 (1022)         |
| Intersection Control: Conventional (Minor Stop)                  | Project ID:  | (787) [18800] (70) (10) (10) (10) (10) (10) (10) (10) (1 | 0 Peds             | \$\frac{1}{2} \frac{1}{2} \frac |  | 0) 2              |
| Prepared By: Atlas Technical Consultants                         | Date:  | EB EG Miles Pk   |                    | 0 0 0   | (0) Peds O Ped |                   |
| repared by. Atlas reclinical Consultants                         | Date.  | PEAK HR % TRUCKS:  | ,                  | (0) (0) (0)   | (0) ×  |                   |
| Project Purpose:   |  | EB WB NB SB  |                    | 0 (0) [0]   | Live   |                   |
|  |  | 0% 0% 0% 0%  |                    | ( / 1 ]   | J  |                   |
|  | OPENING YEAR VOLUMES   |  | 204                | 45 DESIGN YEAR \  | OLUMES   | 3                 |
| Project Opening Year: 2025 Project Design Year: 2045             | 125 (85) [1900]  |  | urch               | 125 (85) [1900]   | ]  |                   |
| Project Design Year: 2045 Annual Growth Rate: 0.5%               | (51) (0) (34)  |  | SB Live Oak Church | (51) (0) (34)   | 1  |                   |
| Annual Growth Rate: 0.5% 0 0 Peds                                | 43 0 82 <b>WB</b> E  | G Miles Pkwy   | ) ive              | 43 0 82   | w  | B EG Miles Pkwy   |
|  | ₽ ↓ Peds O   | (0) [0]  | <b>B</b> Peds ↓    | <b>♠</b> 1  | Peds (   | 0) (0)            |
| * K Factor = Proportion of average annual daily traffic (59) 40  | 2025 Intersection Daily Entering Volume (est):   |  | 40 🖈               | 2045 Intersection Daily<br>Entering Volume (est):   | <b>♦</b> 2   | ( )               |
| occurring in the highest one hour of the day (743) 1,159         | 602  | (1043) 90 (581) 1  | 280 ⇒              | 21,350  | <b>←</b> 66  | 65 (1152)         |
| [190]  | ,  | (1043) 90.<br>(0) 879 (640) (781) 1<br>(0) (0) (0)       | 0 Pode             |   | <i>₽</i> (   | 0 (0) 8           |
| EB EG Miles Pkwy   | ♠         Û         ♠         Peds           0         0         0         0           (0)         (0)         (0)         (0) | _ <u>S</u>   | 0 Peds             | \$\tau\$\tau\$\tau\$  | (0) (D) (P) (P) (P) (P) (P) (P) (P) (P) (P) (P     |                   |
| LEGEND:  | 0 0 0 0 0 0 0 0 X  | LD LO WIIIes Fr  | wy                 | 0 0 0   | 0 ak C   |                   |
| 000 = AM Peak Approach Volume<br>(000) = PM Peak Approach Volume | (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)  |  |                    | 0 (0) (0) (0)   | (0) o  |                   |
| [000] = ADT Volume (Estimate)                                    | <b>9</b>   |  |                    | 0 (0) [0]   | 9  |                   |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| GDOT                       | PI#  |   | M-4: 11  | - t- F "   |                     |  |  |                 |                                       | ICE Version 2.21   Revised 2/4/2022             |  |  |  |  |
|----------------------------|--|---|----------|--|---------------------|--|--|-----------------|---------------------------------------|---|--|--|--|--|
|                            | GDOT PI # Project Location: EG Miles Pkwy @ Live Oak Church Existing Control: Conventional (Minor Stop) Prepared by: Atlas Technical Consultants |   |          | Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2  ach be r  for pe)  No No No No No No No No No Yes Existing Conditions |                     |  |  |                 |                                       |   |  |  |  |  |
|                            |  |   | evaluate | ed; Use thi  | s ICE               | 110 4  | COM  | rience d        | 3, 100-0                              | Sign / July                                     |  |  |  |  |
|                            |  | Atlas Technical Consultants   | Stage 1  | to screen  | 5 or                | Used Holes   | Striatio   | council picychi | Stan go,                              | of the test.                                    |  |  |  |  |
| Date:                      | <u> </u>   |   | tewer al | ternatives<br>in Stage   | το <sub>κίσ</sub> ς | HILL MOS   | S Stepl  | andlor reserv   | adilly, we di                         | ion 198 mills 1985 of                           |  |  |  |  |
| con<br>ev                  | trol type to ide<br>valuated in the<br>justification<br>ersection Alte   | No" to each policy question for each lentify which alternatives should be a Stage 2 Decision Record; enter on in the rightmost column lenative (see "Intersections" tab for | OS.      | Hending die  | ES LISTED SE        | Service Co. Servic | TOTO STATE OF STATE O |                 | S S S S S S S S S S S S S S S S S S S | A Conditions  Screening Decision Justification: |  |  |  |  |
| deta                       |  | on of intersection/interchange type) I (Minor Stop)   | No       | ✓ V 🥸<br>No  | No                  | No No  | No No  | No No           | Yes                                   | Existing Conidtions                             |  |  |  |  |
|                            |  | · · · · · · · · · · · · · · · · · · ·   |          |  |                     |  |  |                 |                                       |   |  |  |  |  |
|                            |  | l (All-Way Stop)  | No       | Yes  | Yes                 | No   | Yes  | No              | No                                    | Volume too high on the major street             |  |  |  |  |
|                            | Mini Rounda  |   | No       | Yes  | No                  | No   | No   | No              | No                                    | Non balance volumes                             |  |  |  |  |
| S                          | Single Lane  |   | No       | Yes  | No                  | No   | No   | No              | No                                    | Non balance volumes                             |  |  |  |  |
| ction                      | Multilane Ro   | undabout  | No       | Yes  | No                  | No   | No   | No              | No                                    | Non balance volumes                             |  |  |  |  |
| terse                      | RCUT (stop   | control)  | No       | Yes  | No                  | Yes  | Yes  | Yes             | Yes                                   | Potential Alternative                           |  |  |  |  |
| iul pe                     | RIRO w/dow   | n stream U-Turn   | No       | Yes  | No                  | Yes  | Yes  | Yes             | No                                    | Potential Alternative                           |  |  |  |  |
| Unsignalized Intersections | High-T (unsi   | gnalized)   | No       | Yes  | No                  | Yes  | Yes  | Yes             | Yes                                   | Potential Alternative                           |  |  |  |  |
| Jnsig                      | Offset-T Inte  | rsections   | No       | No   | No                  | No   | No   | No              | No                                    | 3 Leg intersection                              |  |  |  |  |
|                            | Diamond Inte   | erch (Stop Control)   | No       | No   | No                  | No   | No   | No              | No                                    | No grade seperation                             |  |  |  |  |
|                            | Diamond Inte   | erch (RAB Control)  | No       | No   | No                  | No   | No   | No              | No                                    | No grade seperation                             |  |  |  |  |
|                            | Add LT Lanes<br>No RT Lane In  | on Live Oak Church<br>nprovements   | No       | No   | No                  | No   | No   | No              | Yes                                   | Potential Alternative                           |  |  |  |  |
|                            | Other unsign   | nalized (provide description):  | No       | No   | No                  | No   | No   | No              | No                                    |   |  |  |  |  |
|                            | Traffic Signa  |   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
|                            | Median U-Tu  | ırn (Indirect Left)   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
|                            | RCUT (signa  | alized)   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| S                          | Displaced Le   | eft Turn (CFI)  | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| ction                      | Continuous (   | Green-T   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| Signalized Intersections   | Jughandle  |   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| zed Ir                     | Quadrant Ro  | padway  | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| ignali                     | Diamond Inte   | erch (Signal Control)   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
| S                          | Diverging Dia  | amond   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
|                            | Single Point   | Interchange   | No       | No   | No                  | No   | No   | No              | No                                    | Signal not warranted                            |  |  |  |  |
|                            | No LT Lane Im<br>No RT Lane In   |   | No       | No   | No                  | No   | No   | No              | No                                    |   |  |  |  |  |
|                            |  | ized (provide description):   | No       | No   | No                  | No   | No   | No              | No                                    |   |  |  |  |  |
|                            |  | = Intersection type selected for  | moro d   | otailed a  | nolycic i           | in Stone   | 2 Altorn   | otivo Co        | lootion I                             | Designary Report                                |  |  |  |  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ Live Oak Church Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty

Area: Suburb/Transitic

GDOT PI#:

Prepared by: Atlas Technical Cons

Date:

| _ | :      | / Dagian | Vacu | Troffic | Operations |
|---|--------|----------|------|---------|------------|
| U | benina | / Design | rear | Tranic  | Operations |

| Intersection meets signal/AWS warrants?             | No         | ne         |
|---|------------|------------|
| Traffic Analysis Measure of Effectiveness           | Intersect  | on Delay   |
| Traffic Analysis Software Used                      | Syn        | chro       |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr |
| 2025 Opening Yr No-Build Peak Hr Intersection Delay | 89.6 sec   | 62.0 sec   |
| 2025 Opening Yr No-Build Peak Hr Intersection V/C   | 0.87       | 0.66       |
| 2045 Design Yr No-Build Peak Hr Intersection Delay  | 140.0 sec  | 100.8 sec  |
| 2045 Design Yr No-Build Peak Hr Intersection V/C    | 1.02       | 0.82       |

Complete Streets
Warrants Met?

PEDESTRIANS
BICYCLES
TRANSIT

| Crash Data: Enter most recent 5 |    | Cras | h Sev | erity |    | Years: |
|---------------------------------|----|------|-------|-------|----|--------|
| years of crash data             | K* | Α*   | В*    | C*    | 0  | 5      |
| Angle                           | 0  | 0    | 0     | 0     | 4  | 15%    |
| Head-On<br>Rear End             | 0  | 0    | 0     | 0     | 0  | 0%     |
|                                 | 0  | 0    | 2     | 4     | 4  | 37%    |
| Sideswipe - same                | 0  | 0    | 0     | 0     | 6  | 22%    |
| Sideswipe - opposite            | 0  | 0    | 0     | 0     | 1  | 4%     |
| Not Collision w/Motor Veh       | 0  | 0    | 0     | 2     | 4  | 22%    |
| TOTALS:                         | 0  | 0    | 2     | 6     | 19 | 27     |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:                  | Alterna   | ative 1   | Altern        | ative 2        | Altern         | ative 3                | Alterna           | ative 4         | Alterna | itive 5    |
|---|---|-----------|---------------|----------------|----------------|------------------------|-------------------|-----------------|---------|------------|
| Proposed Control Type/Improvement:      | Convention<br>Sto   |           | RCUT (sto     | op control)    | High-T (un     | signalized)            | Add Left T        | urn Lanes       | N/A     | 4          |
| Project Cost: (From CostEst Worksheet)  | Additional des  | . /       | Additional de | scription here | Additional de  | scription here         | Additional de     | scription here  |         |            |
| Construction Cost                       | \$0   | )         | \$330         | ,000           | \$164          | ,000                   | \$127             | ,000            |         |            |
| ROW Cost                                | \$0   | )         | \$226         | ,000           | \$             | 0                      | \$(               |                 |         |            |
| Environmental Cost                      | \$0   | )         | \$            | 0              | \$             | 0                      | \$(               | 0               |         |            |
| Reimbursable Utility Cost               | \$0   | )         | \$4,000       |                | \$2,000        |                        | \$1,0             | 000             |         |            |
| Design & Contingency Cost               | \$0   | )         | \$            | 0              | \$             | 0                      | \$(               | 0               |         |            |
| Cost Adjustment (justification req'd)   | 09  | %         | 0             | %              | 0'             | %                      | 0'                | %               |         |            |
| Total Cost                              | \$0   | )         | \$560         | ,000           | \$166          | ,000                   | \$128             | ,000            |         |            |
| Traffic Operations:                     |   |           |               |                |                |                        |                   |                 |         |            |
| Traffic Analysis Software Used          | Synd  | chro      | Syn           | chro           | Syn            | chro                   | Syn               | chro            |         |            |
| Analysis Period                         |   |           | AM Peak Hr    | PM Peak Hr     |                | PM Peak Hr             |                   |                 |         |            |
| 2045 Design Yr Build Intersection Delay | 140.0 sec   | 100.8 sec | 12.4 sec      | 16.0 sec       | 21.1 sec       | 36.9 sec               |                   | 143.7 sec       |         |            |
| 2045 Design Yr Build Intersection V/C   | 1.02  | 0.82      | 0.24          | 0.25           | 0.41           | 0.50                   | 0.47              | 1.04            |         |            |
| Safety Analysis:                        |   |           |               |                |                |                        |                   |                 |         |            |
| Predefined CRF: PDO                     | 09  |           | 31            | %              | 23             | 3%                     | 2'                |                 |         |            |
| Predefined CRF: Fatal/Inj               | 09  | -         | 53            | 3%             |                | 5%                     | _                 | %               |         |            |
| Predefined CRF Source:                  | CRF unavaila<br>user defined  | · ·       | NC/MO         | Table 4-7      |                | ringhouse #s<br>/ 2755 | FHWA Clear<br>270 | ~               |         |            |
| User Defined CRF: PDO                   |   |           |               |                |                |                        |                   |                 |         |            |
| User Defined CRF: Fatal/Inj             |   |           |               |                |                |                        |                   |                 |         |            |
| User Defined CRF Source                 |   |           |               |                |                |                        |                   |                 |         |            |
| (write in if applicable):               |   |           |               |                |                |                        |                   |                 |         |            |
| Environmental Impacts:1                 |   |           |               |                |                |                        |                   |                 |         |            |
| Historic District/Property              | No  | ne        | No            | ne             | No             | ne                     | No                | ne              |         |            |
| Archaeology Resources                   | No  | ne        | No            | ne             | No             | ne                     | No                | ne              |         |            |
| Graveyard                               | No  |           | No            | ne             |                | ne                     | No                |                 |         |            |
| Stream                                  | No  |           |               | ne             |                | ne                     | No                |                 |         |            |
| Underground Tank/Hazmat                 | No  |           |               | ne             |                | ne                     | No                |                 |         |            |
| Park Land                               | No  | -         |               | ne             |                | ne                     | No                | -               |         |            |
| EJ Community                            | No  |           |               | ne             |                | ne                     | No                |                 |         |            |
| Wooded Area                             | No  |           |               | ne             |                | ne                     | No                |                 |         |            |
| Wetland                                 | No  |           |               | ne             |                | ne                     | No                |                 |         |            |
| Stakeholder Posture:                    | Note: If environmental impact<br><sup>1</sup> Environmental impacts are o                     |           |               |                | iled environme | ntal impact doc        | umentation will   | be included wit |         | ept report |
| Local Community Support                 | Unknown   |           |               | nown           |                | nown                   | _                 | nown            |         |            |
| GDOT Support                            | Unknown   |           | Unkı          | nown           | Unkr           | nown                   | Unkr              | nown            |         |            |
| Final ICE Stage 2 Secret                | Final ICE Stage 2 Seeves 4 6  |           |               | .1             | 7              | .2                     | 3.                | 3               |         |            |
| _                                       | Final ICE Stage 2 Score: 4.6  |           |               |                |                | 1                      | J 3               |                 |         |            |
|   | Rank of Control Type Alternatives: 3 Final Intersection Control Selection: 1 - High-T (unsign |           |               | 2              |                |                        |                   |                 |         |            |
|   | Otana Casana i  |           |               |                |                |                        |                   |                 |         |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles Pkwy ar Live Oak Chruch Rd COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

MAJOR STREET: Main Street EG Miles Pkwy # OF APPROACH LANES: 2
MINOR STREET: Cross Street Live Oak Church Rd # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|          |        |          |            |          | WARRANT 1, Condition A |            |      | WARR   | ANT 1, Cond | dition B |        | WARR      | ANT 1, Co | mbination W | /arrant   |      |               |             |
|----------|--------|----------|------------|----------|------------------------|------------|------|--------|-------------|----------|--------|-----------|-----------|-------------|-----------|------|---------------|-------------|
|          |        |          | MAJOR ST   | MINOR ST |                        |            |      |        |             |          | С      | ONDITION  | A         | С           | ONDITION  | В    | WARRANT 2     | WARRANT 3   |
|          |        |          | вотн       | HIGHEST  | MAJOR                  | MINOR      | вотн | MAJOR  | MINOR       | BOTH     | MAJOR  | MINOR     | BOTH      | MAJOR       | MINOR     | BOTH |               |             |
|          |        |          | APPROACHES | APPROACH | STREET                 | STREET     | MET  | STREET | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET    | MET  |               |             |
| THRESHOL | D VALU | ES —     |            | <b></b>  | 420                    | 105        |      | 630    | 53          |          | 480    | 120       |           | 720         | 60        |      |               |             |
| 06:00 AM | TO     | 07:00 AM | 902        | 37       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 07:00 AM | TO     | 08:00 AM | 1,787      | 82       | Υ                      |            |      | Υ      | Υ           | Υ        | Υ      |           |           | Υ           | Υ         | Υ    | Υ             | Y           |
| 08:00 AM | TO     | 09:00 AM | 1,340      | 56       | Υ                      |            |      | Υ      | Υ           | Υ        | Υ      |           |           | Υ           |           |      |               |             |
| 09:00 AM | TO     | 10:00 AM | 1,098      | 48       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 10:00 AM | TO     | 11:00 AM | 1,019      | 37       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 11:00 AM | TO     | 12:00 PM | 1,152      | 31       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 12:00 PM | TO     | 01:00 PM | 1,218      | 39       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 01:00 PM | TO     | 02:00 PM | 1,262      | 34       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 02:00 PM | TO     | 03:00 PM | 1,538      | 47       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 03:00 PM | TO     | 04:00 PM | 1,537      | 35       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 04:00 PM | TO     | 05:00 PM | 1,728      | 32       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 05:00 PM | TO     | 06:00 PM | 1,897      | 35       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 06:00 PM | TO     | 07:00 PM | 1,283      | 22       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 07:00 PM | TO     | 08:00 PM | 948        | 23       | Υ                      |            |      | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |             |
| 08:00 PM | TO     | 09:00 PM | 606        | 14       | Υ                      |            |      |        |             |          | Υ      |           |           |             |           |      |               |             |
| 09:00 PM | TO     | 10:00 PM | 499        | 12       | Υ                      |            |      |        |             |          | Υ      |           |           |             |           |      |               | •           |
|          |        |          | 19,814     | 584      |                        |            | 0    |        |             | 2        |        |           | 0         |             |           | 1    | 1             | 1           |
|          |        |          |            |          |                        |            |      |        |             |          |        |           |           |             |           |      |               |             |
|          |        |          |            |          | 8 HC                   | OURS NEED  | ED   | 8 H0   | OURS NEED   | DED      | 8 HOI  | URS OF BO | TH COND   | . A AND CO  | ND. B NEE | DED  | 4 HRS NEEDED  | 1 HR NEEDED |
|          |        |          |            |          | NO.                    | T SATISFII | ED   | NO     | T SATISFI   | ED       |        |           | NOT SA    | TISFIED     |           |      | NOT SATISFIED | SATISFIED   |

#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**



| GDOT PI#:  | Requ   | est By: HAMP            | 0  |  |                       |                        | ]                         |                    |                    |                      |                       | 2022                    | EXIST                                 | ING Y   | EAR V                            | OLUM          | ES                  | /                    |                    |
|--|--|-------------------------|--|--|-----------------------|------------------------|---------------------------|--------------------|--------------------|----------------------|-----------------------|-------------------------|---------------------------------------|---|----------------------------------|---------------|---------------------|----------------------|--------------------|
| Cauchu Lihanh  |  | 1 cpot                  | District. F  | la a un  |                       |                        |                           | PROA               |                    |                      |                       |                         | 0 (0                                  | ) [0]   |                                  |               |                     |                      |                    |
| County: Liberty  | /  | GDOTT                   | District: 5 - J  | Jesup  |                       |                        |                           | Miles F<br>Live Oa | ,                  |                      | Oak Dr                | (0)                     | (0)                                   | (0)   | (0)                              |               |                     | '                    | <b>u</b>           |
| Major Road: EG Mi  | les Pkwy   | Road Minor              | Arterial   | Speed<br>Limit:  | 45 n                  | nph                    |                           |                    |                    | 0,0                  | SB Live O             | 0                       | 0                                     | 0   | 0                                |               | WB E                | G Miles              | Pkwy               |
| Crossing Road: Live O  | ak Dr  | Road Local              |  | Speed  | 35 r                  | nph                    | 1                         |                    |                    |                      |                       | Peds↓                   | ŶĄ.                                   | û   | ₩                                | Peds          | 0                   | (0)                  | 8800]              |
| -  |  | Class:                  |  | Limit:   |                       | •                      | 1                         |                    | 1176               | (0)                  | 0                     | <b>₽</b>                |                                       | ntersectior<br>ng Volume                          |                                  | <b>€</b>      | 0                   | (0)                  | 611 (1110) [18800] |
| Major Rd Direction: East/V   | Vest Area  | a Type: Subur           | b/ I ransition   | l  |                       |                        |                           |                    | (787)              | (740)                | 1,128<br>48           | 中命                      |                                       | 19,800  | , ,                              | ₽             | 585<br>26           | (1040)               | 11 (11             |
| Intersection Control: Conve  | entional (Mino   | r Stop)                 | F  | Project ID:  |                       |                        |                           |                    | (787) [18800]      | (47)                 | 0                     | Peds                    | <b>₹</b>                              | Û   | क्रे                             | Peds          |                     | (70)                 | 9                  |
| Prepared By: Atlas 1   | Technical Cor  | nsultants               |  | Date:  |                       |                        | ]                         |                    |                    | 6 Miles              |                       | $\leftrightarrow$       | ¹д<br>37                              | 0   | 69                               | 0             | NB Live Oak Dr      |                      |                    |
|  |  | Tourium To              |  |  |                       |                        | 1<br>1 <u>PE</u> A        | AK HR              | % TRU              | CKS:                 |                       |                         | (50)                                  | (0)   | (33)                             | (0)           | 3 Live              |                      |                    |
| Project Purpose:   |  |                         |  |  |                       |                        | EB                        | B WB               | NB                 | SB                   |                       |                         |                                       |   | 3) [2000]                        |               | Ž                   |                      |                    |
| Existing Data Year: 20   | )22  |                         |  |  |                       |                        | 0%                        | 0%                 | 0%                 | 0%                   |                       | ı                       |                                       |   |                                  |               |                     |                      |                    |
| Existino Data Tear. 20   |  |                         |  |  |                       |                        |                           |                    |                    |                      |                       |                         |                                       |   |                                  |               |                     |                      |                    |
| 3  |  | 2025                    | OPENING  | YEAR V   | OLUM                  | ES                     | <u> </u>                  |                    |                    |                      |                       | 204                     | 5 DES                                 | IGN Y   | EAR V                            | /OLUN         | IES                 |                      |                    |
| Project Opening Year: 20   | )25  |                         | 0 (0) [0]  |  | OLUM                  | ES                     |                           | •                  |                    |                      | <u>-</u>              | 204                     | 5 DES<br>0 (0                         |   | EAR V                            | OLUN          | IES                 |                      |                    |
| 3  | 025  |                         | 0 (0) [0]  | 0) (0)   | OLUM                  | ES                     |                           | •                  |                    |                      | Oak Dr                | (0)                     | 0 (0                                  | (0)   | (0)                              | OLUN          | IES                 |                      |                    |
| Project Opening Year: 20 Project Design Year: 20   | 025<br>045<br>5%   |                         | 0 (0) [0] (0) (0   | 0) (0)   |                       | WB E                   | G Miles Pkw               | <b>–</b>           |                    |                      | Live Oak Dr           | (0)                     | 0 (0                                  | (0)<br>0  | (0)                              |               | WB E                | G Miles              |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: 0.5 K Factor*: 10   | 025<br>045<br>5%   | SB Live Oak Dr          | (0) (0) [0]  | 0) (0)   | Peds 👈                | <b>WB E</b>            |                           | <b>–</b>           |                    | (10)                 | SB Live Oak Dr        | (0)<br>0<br>Peds        | 0 (0                                  | 0 (0)   | 0 (0)                            | Peds<br>◆     | <b>WB E</b>         | (0)                  |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: 0.5 K Factor*: 10  * K Factor = Proportion of average annual daily traffic  | 125<br>145<br>15%<br>10%   | (0)<br>0<br>Peds \<br>7 | 0 (0) [0] (0) (0   | 0) (0)<br>0 0<br>1 \$\frac{1}{2}\$                             | Peds<br>→             | <b>WB E</b> 0 0        |                           | <b>–</b>           | 1352 (9            | (10)                 | 7                     | (0)<br>0<br>Peds        | 0 (0<br>(0)<br>0<br>2045 I            | (0)<br>0  | (0)<br>0                         | Peds<br>◆→    | <b>WB E</b> 0 0     | (0)                  |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: 0.5 K Factor*: 10 * K Factor = Proportion of  | 125<br>145<br>15%<br>10%   | SB Live Oak Dr          | 0 (0) [0]<br>(0) (0<br>0 0<br>49 1<br>2025 Interse                     | 0) (0)<br>0 0<br>1 \$\frac{1}{2}\$ section Daily solume (est): | Peds 👈                | <b>WB E</b>            | (0) (1061) (1148) [19400] |                    | 1352 (908) [2      | (851)                |                       | (0)<br>0<br>Peds ↓      | 0 (0)<br>(0)<br>0                     | (0)<br>0<br>0                                     | (0)<br>0<br>the Daily e (est):   | Peds<br>◆     | <b>WB E</b>         | (0)<br>(0)<br>(1196) |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: 0.5 K Factor*: 10  * K Factor = Proportion of average annual daily traffic occurring in the highest one                         | 125<br>145<br>15%<br>10%   | 10 (0) (0) 0 Peds ↑ 7   | 0 (0) [0] (0) (0 0 0 2025 Interse Entering Vol                         | 0) (0)<br>0 0<br>1 the<br>ection Daily<br>olume (est):         | Peds 🕹                | <b>WB E</b> 0 0 597 39 |                           |                    | 1352 (908) [21500] |                      | 7<br>1,297            | (0)<br>0<br>Peds ↓<br>⇒ | 0 (0)<br>(0)<br>0                     | (0)  (0)  the intersection of Volume              | (0)<br>0<br>the n Daily e (est): | Peds          | WB E 0 0 673 39     | (0)                  | 3) [21700]         |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: 0.5 K Factor*: 10  * K Factor = Proportion of average annual daily traffic occurring in the highest one                         | 125<br>145<br>15%<br>10%   | 7                       | 0 (0) [0] (0) (0 0 0 2025 Interse Entering Vol 200,4                   | 0) (0)<br>0 0<br>1   | Peds 🕁 🕹              | <b>WB E</b> 0 0 597 39 | (0) (1061) (1148) [19400] |                    | (908) [21500]      | (851)<br>(47)        | 7<br>1,297<br>48<br>0 | (0)<br>0<br>Peds ↓      | 0 (0<br>(0)<br>0<br>2045 I<br>Enteri  | (0)<br>0<br>0<br>theresection ing Volume 22,700   | (0)<br>0<br>the n Daily e (est): | Peds<br>◆     | WB E 0 0 673 39     | (0)<br>(0)<br>(1196) |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: K Factor*: 10  * K Factor = Proportion of average annual daily traffic occurring in the highest one hour of the day             | 125<br>145<br>15%<br>16%<br>172<br>182<br>183<br>183<br>183<br>183<br>183<br>183<br>183<br>183 | 7                       | 0 (0) [0] (0) (0 0 0 2025 Interse Entering Vol 20,4                    | 0) (0) 0 1   | Peds  t Peds          | <b>WB E</b> 0 0 597 39 | (0) (1061) (1148) [19400] |                    | (908) [21500]      | (851)<br>(47)<br>(0) | 7<br>1,297<br>48<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 0 (0<br>(0)<br>0<br>2045 I<br>Enterio | (0)<br>(0)<br>0<br>Unitersection ng Volume 22,700 | (0) 0 Daily e (est):             | Peds  table 1 | WB E 0 0 673 39     | (0)<br>(0)<br>(1196) |                    |
| Project Opening Year: 20 Project Design Year: 20 Annual Growth Rate: K Factor*: 10  * K Factor = Proportion of average annual daily traffic occurring in the highest one hour of the day  **LEGEND:* | 125<br>145<br>166<br>178<br>178<br>178<br>178<br>178<br>178<br>178<br>178                      | 7                       | 0 (0) [0]  (0) (0  0 0  2025 Interse Entering Vol  20,4  37 0  (50) (0 | 0) (0) 0 1   | Peds  Peds  Peds  (a) | <b>WB E</b> 0 0 597    | (0) (1061) (1148) [19400] |                    | (908) [21500]      | (851)<br>(47)<br>(0) | 7<br>1,297<br>48<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 0 (0<br>(0)<br>0<br>2045 I<br>Enterio | (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)           | (0)<br>0<br>n Daily<br>e (est):  | Peds          | <b>WB E</b> 0 0 673 | (0)<br>(0)<br>(1196) |                    |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| Georgia i                  | Department of Transportatio    | "   |          |                           |               |               |   |                |               | ICE Version 2.21   Revised 2/4/2022               |
|----------------------------|--------------------------------|---|----------|---------------------------|---------------|---------------|---|----------------|---------------|---|
| GDOT                       | PI#                            |   |          | p to 5 alte               | rnatives      |               |   |                |               |   |
|                            | t Location:                    | EG Miles Pkwy @ Live Oak Dr                               | may be   | selected a<br>ed; Use thi | and<br>is ICE | . ው .         | (in   | onco v         | 3. /          | /x® / /a  |
|                            | ng Control:<br>red by:         | Conventional (Minor Stop)  Atlas Technical Consultants    | Stage 1  | to screen                 | 5 or          | reed Holes    | Mance   | Musicyclist    | Hather?       | The start.  |
| Date:                      | ica by.                        | Audo recinical consultants                                | fewer al | ternatives<br>in Stage    | to            | 11110 1 Oct   | on west   | indlor by care | Splith, 16 di | of on his state                                   |
| Ansv                       | ver "Yes" or "N                | lo" to each policy question for each                      | evaluate | in Stage                  | 2 He cyle     | n salety of   | ordie sidns   | 0 00           | Tog grad      | Maria Company                                     |
| con                        | trol type to ide               | entify which alternatives should be                       |          | di                        | log in sulf   | Chele C. LCQ  | 10 dest   | "OL"   "OL     | Sal one of    | So tage Making Stor                               |
| eı                         |                                | Stage 2 Decision Record; enter on in the rightmost column |          | TIGHTO THE                | Latino LO     | So divility   | of Talino Log   | Maine C        | rajuo 1       | Apply Signatur                                    |
| Inte                       | -                              | rnative (see "Intersections" tab for                      | S        | aller dille               | Med legr /    | Aller Gestler | ations of   | atter istu     | aller on le   | William S. C. |
|                            |                                | on of intersection/interchange type)                      | 700      | No. 100 Pet               | 12 3.0 00     |               | THE REPORT OF THE PARTY OF THE | 940 6. O. O.   | 26 1 0 16     | A Screening Decision Justification:               |
|                            | Conventional                   | (Minor Stop)  | No       | No                        | No            | No            | No  | No             | Yes           | Existing Conidtions                               |
|                            | Conventional                   | (All-Way Stop)  | No       | Yes                       | Yes           | No            | Yes   | No             | No            | Volume too high on the major street               |
|                            | Mini Roundat                   | pout  | No       | Yes                       | No            | No            | No  | No             | No            | Non balance volumes                               |
|                            | Single Lane F                  | Roundabout  | No       | Yes                       | No            | No            | No  | No             | No            | Non balance volumes                               |
| tions                      | Multilane Rou                  | undabout  | No       | Yes                       | No            | No            | No  | No             | No            | Non balance volumes                               |
| Unsignalized Intersections | RCUT (stop of                  | control)  | No       | Yes                       | No            | Yes           | Yes   | Yes            | Yes           | Potential Alternative                             |
| ed Int                     | RIRO w/dowr                    | n stream U-Turn   | No       | Yes                       | No            | Yes           | Yes   | Yes            | No            | Potential Alternative                             |
| gnaliz                     | High-T (unsig                  | nalized)  | No       | Yes                       | No            | Yes           | Yes   | Yes            | No            | U-Turn Limitation                                 |
| Unsig                      | Offset-T Inter                 | rsections   | No       | No                        | No            | No            | No  | No             | No            | 3 Leg intersection                                |
|                            | Diamond Inte                   | erch (Stop Control)                                       | No       | No                        | No            | No            | No  | No             | No            | No grade seperation                               |
|                            |                                | erch (RAB Control)  | No       | No                        | No            | No            | No  | No             | No            | No grade seperation                               |
|                            | Add LT Lanes on RT Lane Im     |   | No       | No                        | No            | No            | No  | No             | Yes           | Potential Alternative                             |
|                            | Other unsigna                  | alized (provide description):                             | No       | No                        | No            | No            | No  | No             | No            |   |
|                            | Traffic Signal                 |   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
|                            | Median U-Tu                    | rn (Indirect Left)  | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
|                            | RCUT (signal                   | lized)  | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
| SI                         | Displaced Le                   | ft Turn (CFI)   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
| ectior                     | Continuous G                   | Green-T   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
| Signalized Intersections   | Jughandle                      |   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
| ized                       | Quadrant Roa                   | adway   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
| Signal                     | Diamond Inte                   | erch (Signal Control)                                     | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
|                            | Diverging Dia                  | mond  | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
|                            | Single Point I                 | •   | No       | No                        | No            | No            | No  | No             | No            | Signal not warranted                              |
|                            | No LT Lane Im<br>No RT Lane Im |   | No       | No                        | No            | No            | No  | No             | No            |   |
|                            | Other Signalia                 | zed (provide description):                                | No       | No                        | No            | No            | No  | No             | No            |   |
|                            |                                | - Intersection type selected for                          |          |                           |               |               |   |                |               |   |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ Live Oak Dr Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty GDOT PI#:

Prepared by: Atlas Technical Cons

Area: Suburb/Transitic Date:

| Opening / Design Year Traffic Operation             | s          |            |                  | Crash Data: Enter most recent 5 |            | Cras       | h Se      | erity    |         | Years:  |
|---|------------|------------|------------------|---------------------------------|------------|------------|-----------|----------|---------|---------|
| Intersection meets signal/AWS warrants?             | No         | ne         | Complete Streets | years of crash data             | K*         | Α*         | В*        | C*       | 0       | 5       |
| Traffic Analysis Measure of Effectiveness           | Intersecti | ion Delay  | Warrants Met?    | Angle                           |            | 0          | 1         | 5        | 13      | 40%     |
| Traffic Analysis Software Used                      | Syn        | chro       | ☐ PEDESTRIANS &  | Head-On                         |            | 0          | 0         | 2        | 2       | 8%      |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr | ☐ BICYCLES 🖹     | Rear End                        |            | 1          | 0         | 2        | 8       | 23%     |
| 2025 Opening Yr No-Build Peak Hr Intersection Delay | 120.9 sec  | 125.8 sec  | ☐ TRANSIT (2)    | Sideswipe - same                |            | 0          | 0         | 0        | 9       | 19%     |
| 2025 Opening Yr No-Build Peak Hr Intersection V/C   | 0.96       | 0.91       | Ö                | Sideswipe - opposite            |            | 0          | 0         | 1        | 2       | 6%      |
| 2045 Design Yr No-Build Peak Hr Intersection Delay  | 221.4 sec  | 205.9 sec  |                  | Not Collision w/Motor Veh       |            | 0          | 0         | 0        | 2       | 4%      |
| 2045 Design Yr No-Build Peak Hr Intersection V/C    | 1.21       | 1.12       |                  | TOTALS:                         | 0          | 1          | 1         | 10       | 36      | 48      |
|   |            |            |                  | * Number of crashes resulting   | ng in inju | uries / fa | atalities | , not nu | mber of | persons |

| Alternatives Analysis:                  | Alternative   | 1            | Alterna        | ative 2        | Altern        | ative 3               | Altern         | ative 4         | Altern | ative 5    |
|---|---|--------------|----------------|----------------|---------------|-----------------------|----------------|-----------------|--------|------------|
| Proposed Control Type/Improvement:      | Conventional (N<br>Stop)                              | /linor       | RCUT (sto      | p control)     | Add Left T    | urn Lanes             | Ν              | I/A             | N.     | /A         |
| Project Cost: (From CostEst Worksheet)  | Additional description                                | n here       | Additional des | scription here | Additional de | scription here        |                |                 |        |            |
| Construction Cost                       | \$0   |              | \$330          | ,000           | \$127         | ,000                  |                |                 |        |            |
| ROW Cost                                | \$0   |              | \$226          | ,000           | \$            | 0                     |                |                 |        |            |
| Environmental Cost                      | \$0   |              | \$(            | )              | \$            | 0                     |                |                 |        |            |
| Reimbursable Utility Cost               | \$0   |              | \$4,0          | 000            | \$1,0         | 000                   |                |                 |        |            |
| Design & Contingency Cost               | \$0   |              | \$(            | )              | \$            | 0                     |                |                 |        |            |
| Cost Adjustment (justification req'd)   | 0%  |              | 00             | %              | 0             | %                     |                |                 |        |            |
| Total Cost                              | \$0   |              | \$560          | ,000           | \$128         | 3,000                 |                |                 |        |            |
| Traffic Operations:                     |   |              |                |                |               |                       |                |                 |        |            |
| Traffic Analysis Software Used          | Synchro   |              | Syn            | chro           | Syn           | chro                  |                |                 |        |            |
| Analysis Period                         | AM Peak Hr PM F                                       |              |                | PM Peak Hr     | AM Peak Hr    | PM Peak Hr            |                |                 |        |            |
| 2045 Design Yr Build Intersection Delay |   | .9 sec       | 21.1 sec       | 13.3 sec       | 95.2 sec      | 143.7 sec             |                |                 |        |            |
| 2045 Design Yr Build Intersection V/C   | 1.21 1  | .12          | 0.39           | 0.21           | 0.47          | 1.04                  |                |                 |        |            |
| Safety Analysis:                        |   |              |                |                |               |                       |                |                 |        |            |
| Predefined CRF: PDO                     | 0%  |              | 31             | %              | 2             | %                     |                |                 |        |            |
| Predefined CRF: Fatal/Inj               | 0%  |              | 53             | %              |               | %                     |                |                 |        |            |
| Predefined CRF Source:                  | CRF unavailable; p<br>user defined CRF                |              | NC/MO 1        | able 4-7       |               | ringhouse #s<br>/ 274 |                |                 |        |            |
| User Defined CRF: PDO                   |   |              |                |                |               |                       |                |                 |        |            |
| User Defined CRF: Fatal/Inj             |   |              |                |                |               |                       |                |                 |        |            |
| User Defined CRF Source                 |   |              |                |                |               |                       |                |                 |        |            |
| (write in if applicable):               |   |              |                |                |               |                       |                |                 |        |            |
| Environmental Impacts:1                 |   |              |                |                |               |                       |                |                 |        |            |
| Historic District/Property              | None  |              | No             | ne             | No            | one                   |                |                 |        |            |
| Archaeology Resources                   | None  |              | No             |                |               | one                   |                |                 |        |            |
| Graveyard                               | None  |              | No             |                |               | one                   |                |                 |        |            |
| Stream                                  | None  |              | No             |                |               | one                   |                |                 |        |            |
| Underground Tank/Hazmat                 | None  |              | No             |                |               | one                   |                |                 |        |            |
| Park Land                               | None  |              | No             |                |               | one                   |                |                 |        |            |
| EJ Community                            | None  |              | No             |                |               | one                   |                |                 |        |            |
| Wooded Area                             | None  |              | No             |                |               | one                   |                |                 |        |            |
| Wetland                                 | None  | l imam a - 1 | No             |                |               | one                   | dimo munical d | di com cuoin "F |        |            |
| Stakeholder Posture:                    | Note: If environmenta <sup>1</sup> Environmental impa |              |                |                |               |                       |                |                 |        | ept report |
| Local Community Support                 | Unknown   |              | Unkr           |                |               | nown                  |                |                 |        |            |
| GDOT Support                            | Unknown   |              | Unkr           | nown           | Unkı          | nown                  |                |                 |        |            |
|   |   |              |                |                |               |                       |                | 1               |        |            |
| Final ICE Stage 2 Score:                | 4.3   | 6.           |                |                | .9            |                       |                |                 |        |            |
| Rank of Control Type Alternatives:      | 3   |              |                | 1 2            |               |                       |                |                 |        |            |
| Final Intersection Control Selection:   | 1 - RCUT (stop  |              |                |                |               |                       |                |                 |        |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles Pkwy at Live Oak Dr COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

MAJOR STREET: Main Street EG Miles Pkwy # OF APPROACH LANES: 2
MINOR STREET: Cross Street Live Oak Dr # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|          |        |          |            |          | WARRA  | NT 1, Cond | lition A | WARRA  | ANT 1, Cond | lition B |        | WARR      | ANT 1, Co | mbination W | /arrant   |      |               |               |
|----------|--------|----------|------------|----------|--------|------------|----------|--------|-------------|----------|--------|-----------|-----------|-------------|-----------|------|---------------|---------------|
|          |        |          | MAJOR ST   | MINOR ST |        |            |          |        |             |          | С      | ONDITION  | A         | С           | ONDITION  | В    | WARRANT 2     | WARRANT 3     |
|          |        |          | вотн       | HIGHEST  | MAJOR  | MINOR      | вотн     | MAJOR  | MINOR       | вотн     | MAJOR  | MINOR     | BOTH      | MAJOR       | MINOR     | вотн | •             |               |
|          |        |          | APPROACHES | APPROACH | STREET | STREET     | MET      | STREET | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET    | MET  |               |               |
| THRESHOL | D VALU | es —     |            | <b></b>  | 420    | 105        |          | 630    | 53          |          | 480    | 120       |           | 720         | 60        |      |               |               |
| 06:00 AM | TO     | 07:00 AM | 902        | 18       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 07:00 AM | TO     | 08:00 AM | 1,787      | 36       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 08:00 AM | TO     | 09:00 AM | 1,340      | 37       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 09:00 AM | TO     | 10:00 AM | 1,098      | 36       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 10:00 AM | TO     | 11:00 AM | 1,019      | 32       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 11:00 AM | TO     | 12:00 PM | 1,152      | 26       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 12:00 PM | TO     | 01:00 PM | 1,218      | 44       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 01:00 PM | TO     | 02:00 PM | 1,262      | 45       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 02:00 PM | TO     | 03:00 PM | 1,538      | 43       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 03:00 PM | TO     | 04:00 PM | 1,537      | 46       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 04:00 PM | TO     | 05:00 PM | 1,728      | 58       | Υ      |            |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           |           |      |               |               |
| 05:00 PM | TO     | 06:00 PM | 1,897      | 49       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 06:00 PM | TO     | 07:00 PM | 1,283      | 45       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 07:00 PM | TO     | 08:00 PM | 948        | 34       | Υ      |            |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |               |               |
| 08:00 PM | TO     | 09:00 PM | 606        | 23       | Υ      |            |          |        |             |          | Υ      |           |           |             |           |      |               |               |
| 09:00 PM | TO     | 10:00 PM | 499        | 16       | Υ      |            |          |        |             |          | Υ      |           |           |             |           |      |               |               |
|          |        |          | 19,814     | 588      |        |            | 0        |        |             | 1        |        |           | 0         |             |           | 0    | 0             | 0             |
|          |        |          |            |          |        |            |          |        |             |          |        |           |           |             |           |      |               |               |
|          |        |          |            |          | 8 HC   | OURS NEED  | ED       | 8 HC   | DURS NEED   | ED       | 8 HO   | URS OF BO | TH COND   | . A AND CO  | ND. B NEE | DED  | 4 HRS NEEDED  | 1 HR NEEDED   |
|          |        |          |            |          | NO     | T SATISFII | ED       | NO.    | T SATISFI   | ED       |        |           | NOT SA    | TISFIED     |           |      | NOT SATISFIED | NOT SATISFIED |

#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**



| GDOT PI#:   |   | Request I  | By: HAMP   | 0  |  |                                  |               |                  | 1                    |                |                  |                    |                     |                        | 2022                    | EXIST  | ING Y   | EAR V   | OLUM                   | ES                      | 1                     |                                |
|---|---|--|--|--|--|----------------------------------|---------------|------------------|----------------------|----------------|------------------|--------------------|---------------------|------------------------|-------------------------|--|---|---|------------------------|-------------------------|-----------------------|--------------------------------|
|   |   |  |  |  |  |                                  |               |                  | 1                    |                | ROA              |                    |                     |                        |                         | 195 (11  | 8) [3200  | ]   |                        |                         |                       |                                |
| County: Lik   | berty   |  | GDOT [   | District: (                                  | 5 - Jesu   | ıp                               |               |                  |                      |                | Miles F<br>Miles | ,                  |                     | (ing                   | (0)                     | (71)   | (0)   | (47)  |                        |                         | ľ                     | V                              |
| Major Road: EC  | G Miles Pkw   | /y R   | Minor Minor  | Arterial                                     |  | Speed<br>Limit:                  | 45 n          | nph              |                      |                | IVIIICS .        | Allig.             | 10 /0               | SB Miles Xing          | 0                       | 68   | 0   | 127   |                        | WB E                    | G Miles               | Pkwy                           |
| Crossing Road: Mi   | iles Xina   |  | Dad Local  |  |  | Speed                            | 35 n          | nnh              | Ī                    |                |                  |                    |                     | SBN                    | Peds                    | 4  | Û   | æ   | Peds                   | 0                       | (0)                   | 300]                           |
| _   |   | Cla  | iss:   |  |  | Limit:                           | 001           | ПРП              | J                    |                |                  | 1197               | (117)               | 101                    | Ð                       |  | ntersectio  | ,   | <b>€</b>               | 24                      | (50)                  | 1) [188                        |
| Major Rd Direction: Ea  | ast/West  | Area Ty  | oe: Suburt   | o/Transit                                    | tion   |                                  |               |                  |                      |                |                  | (814) [18300]      | (697)               | 1,096                  | ₽                       |  | ng Volume   | , ,   | 4                      | 569                     | (544)                 | 658 (654) [18800]              |
| Intersection Control: Co  | onventional   | (Minor Sto   | p)   |  | Proje  | ect ID:                          |               |                  | 1                    |                |                  | ) [183             | (0)                 | 0                      | ₽                       |  | 20,500  |   | <b>₽</b>               | 65                      | (60)                  | 65                             |
|   |   | `  |  |  |  |                                  |               |                  | ]<br>]               |                |                  |                    | (0)                 | 0                      | Peds                    | <del>G</del> A                                   | ①   | 命   | Ţ Peds                 | NB Miles Xing           |                       |                                |
| Prepared By: Atl  | las Technica  | al Consult   | ants   |  |  | Date:                            |               |                  | ]                    |                |                  |                    | 3 Miles             | Pkwy                   |                         | 0  | 0   | 0   | 0                      | Mile                    |                       |                                |
| Project Purpose:  |   |  |  |  |  |                                  |               |                  | 1                    | PEAK           |                  |                    | =                   |                        |                         | (0)  | (0)   | (0)   | (0)                    | æ                       |                       |                                |
|   |   |  |  |  |  |                                  |               |                  |                      | EB             | WB               | NB                 | SB                  |                        |                         |  | 0 (0)   | [700]   |                        |                         |                       |                                |
| Existing Data Year:   | 2022  |  |  | 00E.   |  |                                  |               |                  |                      | 0%             | 0%               | 0%                 | 0%                  |                        |                         |  |   |   |                        |                         |                       |                                |
|   |   |  | 2025   | OPENII                                       | NG YF  | AR V                             | OI UM         | FS               |                      |                |                  |                    |                     |                        | 204                     | 5 ロト5  | ii(in Y   | FAR V   | OLUM                   | IFS                     |                       |                                |
| Project Opening Year:   | 2025  |  |  |  | NG YE  | AR V                             | OLUM<br>I     | ES               |                      |                |                  |                    |                     |                        |                         |  |   |   | OLUN                   | IES                     |                       |                                |
| Project Opening Year:  Project Design Year:   | 2025<br>2045  |  |  | 195 (118                                     | 3) [3200]  |                                  | OLUM          | ES               |                      |                |                  |                    |                     | 50                     |                         | 195 (11  | 8) [3200  | ]   | OLUM                   | IES                     |                       |                                |
| , , ,   |   |  |  | 195 (118<br>(71)                             | (0)  | (47)                             | OLUM          |                  |                      |                |                  |                    |                     | s Xing                 | (0)                     | 195 (11<br>(71)                                  | 8) [3200  | (47)  | OLUM                   |                         |                       |                                |
| Project Design Year:  | 2045  |  |  | 195 (118<br>(71)<br>68                       | (0)  | (47)<br>127                      |               | WB E             | G Miles              | ΙÓ             | ı                |                    |                     | 3 Miles Xing           | (0)                     | 195 (11)<br>(71)<br>68                           | 8) [3200<br>(0)   | (47)<br>127   |                        | WB E                    | G Miles               | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:   | 2045<br>0.5%<br>10%                                     |  | (0) O Peds Peds  | 195 (118<br>(71)<br>68                       | (0)<br>0<br>T  | (47)<br>127<br>🔖                 | Peds          | <b>WB E</b>      | (0)                  | ΙÓ             |                  | 1                  | (117)               | SB Miles Xing          | (0)<br>0<br>Peds        | 195 (11)<br>(71)<br>68                           | 8) [3200<br>(0)<br>0  | (47)<br>127   | Peds                   | <b>WB E</b>             | (0)                   | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:  * K Factor = Proportion of average annual daily tra  | 2045<br>0.5%<br>10%                                     | (117) 10   | (0) O Peds   | 195 (118<br>(71)<br>68<br>2025 In            | (0)  | (47)<br>127<br>\$\times\$Daily   | Peds<br>←     | <b>WB E</b> 0 24 | (0)<br>(50)          | ΙÓ             |                  | 1336 (             | (117)               | 101                    | (0)<br>0<br>Peds        | 195 (113<br>(71)<br>68<br>49<br>2045             | 8) [3200<br>(0)   | (47)<br>127<br>\$\this\$ n Daily                        | Peds                   | <b>WB E</b> 0 24        | (0)<br>(50)           | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:   | 2045<br>0.5%<br>10%                                     | (117) 10<br>(711) 1,1                                  | (0)<br>0<br>Peds 1<br>18 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 195 (118<br>(71)<br>68<br>2025 In<br>Enterin | (0) (0) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1   | (47)<br>127<br>\$\times\$Daily   | Peds<br>→ ↓ ↓ | WB E 0 24 580    | (0)<br>(50)<br>(996) | (1106) [19100] |                  | 1336 (903) [       | (786)               | 101<br>1,235           | (0)<br>0<br>Peds ↓<br>⇒ | 195 (116<br>(71)<br>68<br>2045 (Enteri           | 8) [3200<br>(0)<br>0<br>  | (47)<br>127<br>The Daily e (est):                       | Peds ◆ ↓               | <b>WB E</b> 0 24 641    | (0)<br>(50)<br>(1110) | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:  * K Factor = Proportion of average annual daily transcending to the highest                        | 2045<br>0.5%<br>10%                                     | (117)     10       (711)     1,1       (0)     0       | (0)<br>0<br>Peds 1<br>11 \$\frac{1}{2}\$                       | 195 (118<br>(71)<br>68<br>2025 In<br>Enterin | (0) [3200]<br>(0) 0<br>1   | (47) 127 \$\times\$ Daily (est): | Peds & U      | WB E 0 24 580 65 | (0)<br>(50)          | ΙÓ             |                  | 1336 (903) [20800  | (786)               | 101<br>1,235<br>0      | (0)<br>0<br>Peds ↓<br>⇒ | 195 (11)<br>(71)<br>68<br>49<br>2045  <br>Enteri | 8) [3200<br>(0)<br>0<br><br>Intersection<br>ng Volume<br>22,450     | (47)<br>127<br>\$\times\$ n Daily e (est):              | Peds<br>◆  ↓  ↓  ↓     | <b>WB E</b> 0 24 641 65 | (0)<br>(50)           | <b>Pkwy</b> [00602] (0721) 082 |
| Project Design Year:  Annual Growth Rate:  K Factor*:  * K Factor = Proportion of average annual daily transport occurring in the highest hour of the day | 2045<br>0.5%<br>10%<br>of affic one 1219 (828) [19000]  | (117) 10<br>(711) 1,1<br>(0) 0<br>(0) 0                | (0) (0) 0 Peds ↓ 1   | 195 (118<br>(71)<br>68<br>2025 In<br>Enterin | (0) [3200]<br>(0) 0<br>Unitersection in the section in th | (47) 127 \$\times Daily (est):   | Peds & U      | WB E 0 24 580 65 | (0)<br>(50)<br>(996) | (1106) [19100] |                  | 1336 (903) [20800] | (786)               | 101<br>1,235<br>0<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 195 (11)<br>(71)<br>68<br>2045 (Entering)        | 8) [3200<br>(0)<br>0<br>Untersection<br>ng Volume<br>22,450         | (47)<br>127<br>\$\times \text{pn Daily} \text{e (est):} | Peds  4  Peds          | <b>WB E</b> 0 24 641 65 | (0)<br>(50)<br>(1110) | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:  * K Factor = Proportion of average annual daily transport of the day  LEGEND:                      | 2045<br>0.5%<br>10%<br>10%<br>129 (828) [1900]<br>EB EG | (117) 1(<br>(711) 1,1<br>(0) (<br>(0) (<br>6 Miles Pkw | (0) (0) 0 Peds ↓ 1   | 195 (118<br>(71) 68<br>2025 In<br>Enterin    | (0) [3200]<br>(0) 0<br>Unitersection by Volume (20,650)  | (47) 127  Daily (est):           | Peds & U      | WB E 0 24 580 65 | (0)<br>(50)<br>(996) | (1106) [19100] |                  |                    | (786)<br>(0)<br>(0) | 101<br>1,235<br>0<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 195 (111<br>(71)<br>68<br>2045 I<br>Enterio      | 8) [3200<br>(0)<br>0<br>Unintersection<br>ng Volume<br>22,450       | (47) 127 127 10 Daily e (est):                          | Peds  4  Peds  Peds  O | WB E 0 24 641 65        | (0)<br>(50)<br>(1110) | T T                            |
| Project Design Year:  Annual Growth Rate:  K Factor*:  * K Factor = Proportion of average annual daily transport occurring in the highest hour of the day | 2045<br>0.5%<br>10%<br>of affic one                     | (117) 10<br>(711) 1,1<br>(0) (0) (0) (0) G Miles Pkw   | (0) (0) 0 Peds ↓ 1   | 195 (118<br>(71)<br>68<br>2025 In<br>Enterin | (0) [3200]<br>(0) 0<br>Unitersection in the section in th | (47) 127  Daily (est):           | Peds & U      | WB E 0 24 580    | (0)<br>(50)<br>(996) | (1106) [19100] |                  |                    | (786)<br>(0)<br>(0) | 101<br>1,235<br>0<br>0 | (0)<br>0<br>Peds ↓<br>⇒ | 195 (11)<br>(71)<br>68<br>2045 (Entering)        | 8) [3200<br>(0)<br>0<br>Untersection g Volume<br>22,450<br>0<br>(0) | (47)<br>127<br>\$\times \text{pn Daily} \text{e (est):} | Peds  4  Peds          | <b>WB E</b> 0 24 641 65 | (0)<br>(50)<br>(1110) | T T                            |

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| GD01                       | PI#   |  | N-4 11   | t. F -lt-  | 1:  |         |  |                 |                | ICE Version 2.21   Revised 2/4/2022 |
|----------------------------|---|--|----------|--|---|---------|--|-----------------|----------------|-------------------------------------|
| _                          | t Location:   | EG Miles Pkwy @ Miles Xing   | may be   | p to 5 alte<br>selected a  | rnatives  |         | /  | /-              | /              |                                     |
| ,                          | ng Control:   | Conventional (Minor Stop)  | evaluate | ed; Use thi  | is ICE  | 108     | , Coll   | ilence          | 3. /46 -7      | ill <sup>®</sup>                    |
|                            | red by:   | Atlas Technical Consultants  | Stage 1  | to screen  | 5 or  | de dige | Minarie  | -OLINGIA PICHCH | Halligte.      | of the test.                        |
| Date:                      | ,   |  | tewer al | ternatives<br>in Stage   | to  | 1110 16 | de de la company   | udlot eser      | Spility, 16 di | ion con with lost after             |
| cor<br>e                   | trol type to ide<br>valuated in the<br>justification<br>rsection Alte | No" to each policy question for each lentify which alternatives should be a Stage 2 Decision Record; enter on in the rightmost column ernative (see "Intersections" tab for on of intersection/interchange type) | , Des    | Heriotic Residence of the second seco | and is ICE 5 or to 2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |         | THE STATE OF THE S | No              |                | Screening Decision Justification:   |
|                            | Conventiona   | l (Minor Stop)   | No       | No   | No  | No      | No   | No              | Yes            | Existing Conidtions                 |
|                            | Conventiona   | l (All-Way Stop)   | No       | Yes  | Yes   | No      | Yes  | No              | No             | Volume too high on the major street |
|                            | Mini Rounda   | bout   | No       | Yes  | No  | No      | No   | No              | No             | Non balance volumes                 |
|                            | Single Lane   | Roundabout   | No       | Yes  | No  | No      | No   | No              | No             | Non balance volumes                 |
| tions                      | Multilane Ro  | undabout   | No       | Yes  | No  | No      | No   | No              | No             | Non balance volumes                 |
| erse                       | RCUT (stop  | control)   | No       | Yes  | No  | Yes     | Yes  | Yes             | No             | Left turn Volumes too high          |
| ed Int                     | RIRO w/dow  | n stream U-Turn  | No       | Yes  | No  | Yes     | Yes  | Yes             | No             | Left turn Volumes too high          |
| Unsignalized Intersections | High-T (unsi  | gnalized)  | No       | Yes  | No  | Yes     | Yes  | Yes             | No             | U Turn Volumes                      |
| Unsic                      | Offset-T Inte   | rsections  | No       | No   | No  | No      | No   | No              | No             | 3 Leg intersection                  |
|                            | Diamond Inte  | erch (Stop Control)  | No       | No   | No  | No      | No   | No              | No             | No grade seperation                 |
|                            | Diamond Inte  | erch (RAB Control)   | No       | No   | No  | No      | No   | No              | No             | No grade seperation                 |
|                            | Add LT Lanes<br>No RT Lane In   | <u> </u>   | No       | No   | No  | No      | No   | No              | Yes            | Potential Alternative               |
|                            | Other unsign  | nalized (provide description):   | No       | No   | No  | No      | No   | No              | No             |                                     |
|                            | Traffic Signa   | 1  | No       | No   | No  | No      | No   | No              | Yes            | Potential Alternative               |
|                            | Median U-Tu   | ırn (Indirect Left)  | No       | No   | No  | No      | No   | No              | No             | Left turn Volumes too high          |
|                            | RCUT (signa   | alized)  | No       | No   | No  | No      | No   | No              | No             | Left turn Volumes too high          |
| ွှ                         | Displaced Le  | eft Turn (CFI)   | No       | No   | No  | No      | No   | No              | No             | Not feasible                        |
| ection                     | Continuous (  | Green-T  | No       | No   | No  | No      | No   | No              | No             | U Turn Volumes                      |
| nterse                     | Jughandle   |  | No       | No   | No  | No      | No   | No              | No             | 3 Leg intersection                  |
| zed li                     | Quadrant Ro   | padway   | No       | No   | No  | No      | No   | No              | No             | 4 Leg intersection                  |
| Signalized Intersections   | Diamond Inte  | erch (Signal Control)  | No       | No   | No  | No      | No   | No              | No             | No grade seperation                 |
| S                          | Diverging Dia   | amond  | No       | No   | No  | No      | No   | No              | No             | No grade seperation                 |
|                            | Single Point  | J  | No       | No   | No  | No      | No   | No              | No             | No grade seperation                 |
|                            | No LT Lane Im<br>No RT Lane In  |  | No       | No   | No  | No      | No   | No              | No             |                                     |
|                            | Other Signali   | ized (provide description):  | No       | No   | No  | No      | No   | No              | No             |                                     |
|                            |   | = Intersection type selected for   | more d   | etailed a  | nalvsis   | n Stage | 2 Altern   | ative Se        | lection [      | Decision Record                     |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



| nt of Transportation                                       |  |                  |  |    | ICE        | Versio                  | 12.21 | Revis | ed 2/4/20 | 022 |
|--|--|------------------|--|----|------------|-------------------------|-------|-------|-----------|-----|
| Existing Intersection Control:                             | EG Miles Pkwy @ Mile<br>Conventional (Minor S<br>Safety Funded Project | top)             | District: 5 - Jesup<br>County: Liberty<br>Area: Suburb/Transitic | •  | epare      | PI #:<br>d by:<br>Date: | Atlas | Tech  | nical C   | ons |
| Design Year Traffic Operation n meets signal/AWS warrants? | s<br>Meets Signal Warrants   | Complete Streets | Crash Data: Enter most recent 5<br>years of crash data           | K* | Cras<br>A* | h Sev<br>B*             | erity | 0     | Years:    |     |

| Opening / Design Year Traffic Operation             | s          |             |                 |
|---|------------|-------------|-----------------|
| Intersection meets signal/AWS warrants?             | Meets Sign | al Warrants | Complete Street |
| Traffic Analysis Measure of Effectiveness           | Intersect  | ion Delay   | Warrants Met?   |
| Traffic Analysis Software Used                      | Syn        | chro        | PEDESTRIANS     |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr  | BICYCLES        |
| 2025 Opening Yr No-Build Peak Hr Intersection Delay | 500.0 sec  | 314.0 sec   | ☐ TRANSIT       |
| 2025 Opening Yr No-Build Peak Hr Intersection V/C   | 3.35       | 1.42        |                 |
| 2045 Design Yr No-Build Peak Hr Intersection Delay  | 500.0 sec  | 500.0 sec   |                 |
| 2045 Design Yr No-Build Peak Hr Intersection V/C    | 4.28       | 1.87        |                 |

|        | Crash Data: Enter most recent 5 |    | Cras       | h Sev | erity |    | Years: |
|--------|---------------------------------|----|------------|-------|-------|----|--------|
|        | years of crash data             | K* | <b>A</b> * | В*    | C*    | 0  | 5      |
|        | Angle                           | 0  | 1          | 0     | 3     | 4  | 42%    |
| ре     | Head-On<br>Rear End             | 0  | 0          | 0     | 0     | 2  | 11%    |
| $\leq$ | Rear End                        | 0  | 0          | 0     | 1     | 4  | 26%    |
| Crash  | Sideswipe - same                | 0  | 0          | 0     | 0     | 0  | 0%     |
| S      | Sideswipe - opposite            | 0  | 0          | 0     | 0     | 0  | 0%     |
|        | Not Collision w/Motor Veh       | 0  | 0          | 0     | 0     | 4  | 21%    |
|        | TOTALS:                         | 0  | 1          | 0     | 4     | 14 | 19     |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:                  | Altern           |                              | Altern        | ative 2               | Altern       | ative 3                               | Alterna | ative 4 | Alternative 5                               |
|---|------------------|------------------------------|---------------|-----------------------|--------------|---------------------------------------|---------|---------|---|
| Proposed Control Type/Improvement:      | Conventio<br>Sto |                              | Add Left 7    | urn Lanes             | Traffic      | Signal                                | N/      | /A      | N/A   |
| Project Cost: (From CostEst Worksheet)  | Additional de    | 1 /                          | Additional de | scription here        | Add LT bay(s | e) on minor ST                        |         |         |   |
| Construction Cost                       | \$(              | 0                            | \$114         | ,000                  | \$136        | ,000                                  |         |         |   |
| ROW Cost                                | \$(              | 0                            | \$            | 0                     | \$           | 0                                     |         |         |   |
| Environmental Cost                      | \$(              | 0                            | \$            | 0                     | \$           | 0                                     |         |         |   |
| Reimbursable Utility Cost               | \$(              | 0                            | \$1,          | 000                   | \$3,0        | 000                                   |         |         |   |
| Design & Contingency Cost               | \$(              | 0                            | \$            | 0                     | \$           | 0                                     |         |         |   |
| Cost Adjustment (justification req'd)   | 0'               | %                            | 0             | %                     | 0'           | %                                     |         |         |   |
| Total Cost                              | \$(              | 0                            | \$115         | 5,000                 | \$139        | ,000                                  |         |         |   |
| Traffic Operations:                     |                  |                              |               |                       |              |                                       |         |         |   |
| Traffic Analysis Software Used          | Syn              | chro                         | Syn           | chro                  | Syn          | chro                                  |         |         |   |
| Analysis Period                         |                  | PM Peak Hr                   |               | PM Peak Hr            | AM Peak Hr   | PM Peak Hr                            |         |         |   |
| 2045 Design Yr Build Intersection Delay | 500.0 sec        | 500.0 sec                    | 500.0 sec     | 247.4 sec             | 12.7 sec     | 12.8 sec                              |         |         |   |
| 2045 Design Yr Build Intersection V/C   | 4.28             | 1.87                         | 4.12          | 1.70                  | 0.76         | 0.84                                  |         |         |   |
| Safety Analysis:                        |                  |                              |               |                       |              |                                       |         |         |   |
| Predefined CRF: PDO                     | 0'               |                              |               | %                     | 39           | 9%                                    |         |         |   |
| Predefined CRF: Fatal/Inj               | 0'               |                              | •             | %                     |              | )%                                    |         |         |   |
| Predefined CRF Source:                  | CRF unavaila     | able; provide<br>I CRF below |               | ringhouse #s<br>/ 274 |              | ringhouse #s<br>/ 7984                |         |         |   |
| User Defined CRF: PDO                   |                  |                              |               |                       |              |                                       |         |         |   |
| User Defined CRF: Fatal/Inj             |                  |                              |               |                       |              |                                       |         |         |   |
| User Defined CRF Source                 |                  |                              |               |                       |              |                                       |         |         |   |
| (write in if applicable):               |                  |                              |               |                       |              |                                       |         |         |   |
| Environmental Impacts:1                 |                  |                              |               |                       |              |                                       |         |         |   |
| Historic District/Property              | No               | ne                           | No            | one                   | No           | one                                   |         |         |   |
| Archaeology Resources                   | No               | ne                           | No            | one                   | No           | ne                                    |         |         |   |
| Graveyard                               | No               | ne                           | No            | one                   | No           | ne                                    |         |         |   |
| Stream                                  | No               | ne                           | No            | one                   | No           | one                                   |         |         |   |
| Underground Tank/Hazmat                 | No               | ne                           |               | one                   | No           | one                                   |         |         |   |
| Park Land                               | No               | ne                           |               | one                   |              | ne                                    |         |         |   |
| EJ Community                            | No               | ne                           | No            | one                   | No           | ne                                    |         |         |   |
| Wooded Area                             | No               | ne                           |               | one                   |              | ne                                    |         |         |   |
| Wetland                                 | No               |                              |               | ne                    |              | ne                                    |         |         |   |
| Stakeholder Posture:                    |                  |                              |               |                       |              | act won't jeopard<br>ntal impact docu |         |         | nv" worksheet<br>ith project concept report |
| Local Community Support                 | Unkr             | nown                         | Unk           | nown                  | Unkr         | nown                                  |         |         |   |
| GDOT Support                            | Unkr             | nown                         | Unk           | nown                  | Unkr         | nown                                  |         |         |   |
| F' 110F 04 0.0                          |                  | ^                            |               | 1 -                   |              | 0                                     |         |         |   |
| Final ICE Stage 2 Score:                | 1.               |                              |               | .1                    | 5            | .2                                    |         |         |   |
| Rank of Control Type Alternatives:      | 4 T (C-          | _                            |               | 3                     | 1            |                                       |         |         |   |
| Final Intersection Control Selection:   |                  |                              |               |                       |              |                                       |         |         |   |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles at Miles Xing COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

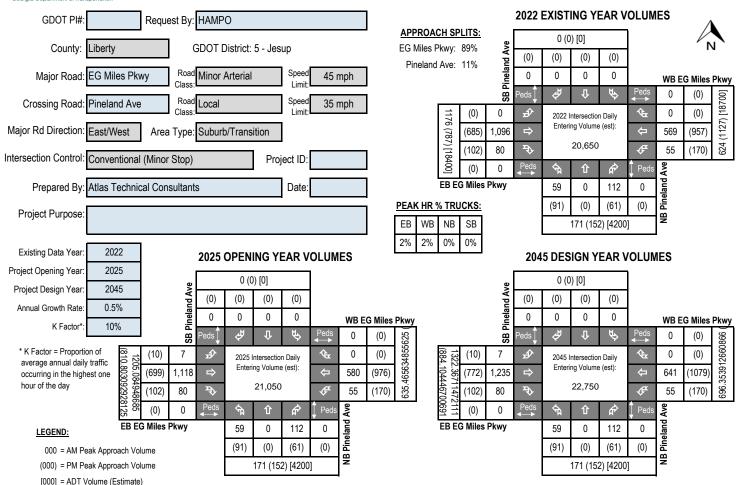
MAJOR STREET: Main Street EG Miles # OF APPROACH LANES: 2
MINOR STREET: Cross Street Miles Xing # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|           |        |          |            |          | WARRA  | ANT 1, Cond | lition A | WARR   | ANT 1, Cond | lition B |        | WARR      | ANT 1, Co | mbination W | /arrant   |      |              |             |
|-----------|--------|----------|------------|----------|--------|-------------|----------|--------|-------------|----------|--------|-----------|-----------|-------------|-----------|------|--------------|-------------|
|           |        |          | MAJOR ST   | MINOR ST |        |             |          |        |             |          | С      | ONDITION  | 4         | С           | ONDITION  | В    | WARRANT 2    | WARRANT 3   |
|           |        |          | BOTH       | HIGHEST  | MAJOR  | MINOR       | вотн     | MAJOR  | MINOR       | вотн     | MAJOR  | MINOR     | BOTH      | MAJOR       | MINOR     | вотн |              |             |
|           |        |          | APPROACHES | APPROACH | STREET | STREET      | MET      | STREET | STREET      | MET      | STREET | STREET    | MET       | STREET      | STREET    | MET  |              |             |
| THRESHOLD | O VALU | ES —     |            | <u> </u> | 420    | 105         |          | 630    | 53          |          | 480    | 120       |           | 720         | 60        |      |              |             |
| 06:00 AM  | TO     | 07:00 AM | 902        | 62       | Υ      |             |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           | Υ         | Υ    | Υ            |             |
| 07:00 AM  | TO     | 08:00 AM | 1,787      | 123      | Υ      | Υ           | Υ        | Υ      | Υ           | Υ        | Υ      | Υ         | Υ         | Υ           | Υ         | Υ    | Υ            | Υ           |
| 08:00 AM  | TO     | 09:00 AM | 1,340      | 118      | Υ      | Υ           | Υ        | Υ      | Υ           | Υ        | Υ      |           |           | Υ           | Υ         | Υ    | Υ            | Υ           |
| 09:00 AM  | TO     | 10:00 AM | 1,098      | 62       | Υ      |             |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           | Υ         | Υ    | Y            |             |
| 10:00 AM  | TO     | 11:00 AM | 1,019      | 53       | Υ      |             |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           |           |      |              |             |
| 11:00 AM  | TO     | 12:00 PM | 1,152      | 40       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 12:00 PM  | TO     | 01:00 PM | 1,218      | 63       | Υ      |             |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           | Υ         | Υ    | Y            |             |
| 01:00 PM  | TO     | 02:00 PM | 1,262      | 47       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 02:00 PM  | TO     | 03:00 PM | 1,538      | 55       | Υ      |             |          | Υ      | Υ           | Υ        | Υ      |           |           | Υ           |           |      |              |             |
| 03:00 PM  | TO     | 04:00 PM | 1,537      | 35       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 04:00 PM  | TO     | 05:00 PM | 1,728      | 44       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 05:00 PM  | TO     | 06:00 PM | 1,897      | 44       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 06:00 PM  | TO     | 07:00 PM | 1,283      | 29       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 07:00 PM  | TO     | 08:00 PM | 948        | 25       | Υ      |             |          | Υ      |             |          | Υ      |           |           | Υ           |           |      |              |             |
| 08:00 PM  | TO     | 09:00 PM | 606        | 24       | Υ      |             |          |        |             |          | Υ      |           |           |             |           |      |              |             |
| 09:00 PM  | TO     | 10:00 PM | 499        | 11       | Υ      |             |          |        |             |          | Υ      |           |           |             |           |      |              |             |
|           |        |          | 19,814     | 835      |        | •           | 2        |        | •           | 7        |        | •         | 1         |             |           | 5    | 5            | 2           |
|           |        |          |            |          |        |             |          |        |             |          |        |           |           |             |           |      |              |             |
|           |        |          |            |          | 8 HC   | OURS NEED   | ED       | 8 HC   | OURS NEED   | ED       | 8 HOI  | URS OF BO | TH COND   | . A AND CC  | ND. B NEE | DED  | 4 HRS NEEDED | 1 HR NEEDED |
|           |        |          |            |          | NO.    | T SATISFII  | ED       | NO     | T SATISFI   | ED       |        |           | NOT SA    | TISFIED     |           |      | SATISFIED    | SATISFIED   |



#### **GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL**



Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the Toward Zero Deaths vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| Georgia i                  | Department of Transportatio    |  |                 |                           |                  |  |  |                  |               | ICE Version 2.21   Revised 2/4/2022  |
|----------------------------|--------------------------------|--|-----------------|---------------------------|------------------|--|--|------------------|---------------|--|
| GDOT                       |                                |  |                 | p to 5 alte               | rnatives         |  |  |                  |               |  |
|                            | et Location:<br>ng Control:    | EG Miles Pkwy @ Pineland Ave Conventional (Minor Stop)             | may be evaluate | selected a<br>ed; Use thi | ind<br>s ICF     | ~ & £  | , in                                   | ience d          | 3.            | /ss / /.o.   |
|                            | red by:                        | Atlas Technical Consultants  | Stage 1         | to screen                 | 5 or             | deg digle  | Minanco                                | OLINGUE OLIVOIES | Hatting C. 1  | of the start.  |
| Date:                      | ,                              |  | tewer al        | ternatives<br>in Stage    | to give          | HILL THOU  | S. Estett                              | andlor Meser     | adilla, Me di | itor 198 186 7   |
|                            |                                | No" to each policy question for each                               |                 | J                         | es ine cale      | We sales classic   | orate strans                           | The Maying       | A TOREST OCY  | * 10 to  |
|                            |                                | entify which alternatives should be Stage 2 Decision Record; enter |                 | 1000                      | and in Simple    | Seneto Lico  | A Sogge Hill                           | in Sub           | estain gap    | of the light of the state of th |
|                            |                                | on in the rightmost column   |                 | Hernathy Thanne           | Hellaging divino | Hernativity  | Hellagina Couch                        | Hellights, c     | Hernaturel    | The spin of the state of the st |
|                            |                                | ernative (see "Intersections" tab for                              | 0085            | March Oost                | 15 / OE 3        | THE POST OF THE PO | Mations Oos                            | Marie Cos        | Sect to Only  | Althor   |
| deta                       |                                | on of intersection/interchange type)                               | N. 9            | / V '&                    | 2. 9.            | Le to Se le  | \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ |                  | // \\ \\      | ent chief.  And the chief of th |
|                            |                                | I (Minor Stop)   | No              | No                        | No               | No   | No                                     | No               | Yes           | Existing Conidtions  |
|                            | Conventional                   | (All-Way Stop)   | No              | Yes                       | Yes              | No   | Yes                                    | No               | No            | Volume too high on the major street  |
|                            | Mini Roundal                   | bout   | No              | Yes                       | No               | No   | No                                     | No               | No            | Non balance volumes  |
|                            | Single Lane F                  | Roundabout   | No              | Yes                       | No               | No   | No                                     | No               | No            | Non balance volumes  |
| tions                      | Multilane Rou                  | undabout   | No              | Yes                       | No               | No   | No                                     | No               | No            | Non balance volumes  |
| ersec                      | RCUT (stop of                  | control)   | No              | Yes                       | No               | Yes  | Yes                                    | Yes              | No            | Left turn Volume too high  |
| ed Int                     | RIRO w/dowi                    | n stream U-Turn  | No              | Yes                       | No               | Yes  | Yes                                    | Yes              | No            | Left turn Volume too high  |
| Unsignalized Intersections | High-T (unsig                  | gnalized)  | No              | Yes                       | No               | Yes  | Yes                                    | Yes              | Yes           | Potential Alternative  |
| Jnsig                      | Offset-T Inter                 | rsections  | No              | No                        | No               | No   | No                                     | No               | No            | 3 Leg intersection   |
|                            | Diamond Inte                   | erch (Stop Control)  | No              | No                        | No               | No   | No                                     | No               | No            | No grade seperation  |
|                            | Diamond Inte                   | erch (RAB Control)   | No              | No                        | No               | No   | No                                     | No               | No            | No grade seperation  |
|                            | Add LT Lanes<br>No RT Lane Im  | on Pineland Ave  | No              | No                        | No               | No   | No                                     | No               | Yes           | Potential Alternative  |
|                            | Other unsign                   | alized (provide description):                                      | No              | No                        | No               | No   | No                                     | No               | No            |  |
|                            | Traffic Signal                 | I  | No              | No                        | No               | No   | No                                     | No               | Yes           | Potential Alternative  |
|                            | Median U-Tu                    | rn (Indirect Left)   | No              | No                        | No               | No   | No                                     | No               | No            | Left turn Volume too high  |
|                            | RCUT (signa                    | lized)   | No              | No                        | No               | No   | No                                     | No               | No            | Left turn Volume too high  |
| ဟ                          | Displaced Le                   | ft Turn (CFI)  | No              | No                        | No               | No   | No                                     | No               | No            | Left turn Volume too high  |
| ection                     | Continuous C                   | Green-T  | No              | No                        | No               | No   | No                                     | No               | Yes           | Potential Alternative  |
| nterse                     | Jughandle                      |  | No              | No                        | No               | No   | No                                     | No               | No            | 3 Leg intersection   |
| zed lı                     | Quadrant Ro                    | adway  | No              | No                        | No               | No   | No                                     | No               | No            | 4 Leg intersection   |
| Signalized Intersections   | Diamond Inte                   | erch (Signal Control)  | No              | No                        | No               | No   | No                                     | No               | No            | No grade seperation  |
| S                          | Diverging Dia                  | amond  | No              | No                        | No               | No   | No                                     | No               | No            | No grade seperation  |
|                            | Single Point I                 | · ·  | No              | No                        | No               | No   | No                                     | No               | No            | No grade seperation  |
|                            | No LT Lane Im<br>No RT Lane Im |  | No              | No                        | No               | No   | No                                     | No               | No            |  |
|                            | Other Signali                  | zed (provide description):   | No              | No                        | No               | No   | No                                     | No               | No            |  |
|                            |                                | - Intersection type selected for                                   |                 |                           |                  | . 0  | 0.41                                   |                  |               |  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



ICE Version 2.21 | Revised 2/4/2022

Project Location: EG Miles Pkwy @ Pineland Ave Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

District: 5 - Jesup County: Liberty GDOT PI#:

Prepared by: Atlas Technical Cons

Area: Suburb/Transitic Date:

|   |               |                    |                             | <u>-</u>                    |          |              |            |           |          |             |             |
|---|---------------|--------------------|-----------------------------|-----------------------------|----------|--------------|------------|-----------|----------|-------------|-------------|
| Opening / Design Year Traffic Operation             | s             |                    |                             | Crash Data: Enter most rec  | ent 5    |              | Cras       | h Se      | erity/   |             | Years:      |
| Intersection meets signal/AWS warrants?             | Meets Sign    | al Warrants        | Complete Streets            | years of crash data         |          | K*           | <b>A</b> * | В*        | C*       | 0           | 5           |
| Traffic Analysis Measure of Effectiveness           | Intersect     | ion Delay          |                             | Angle                       |          | 0            | 0          | 2         | 11       | 29          | 59%         |
| Traffic Analysis Software Used                      | Syn           | chro               | ☐ PEDESTRIANS &             | Head-On                     |          | 0            | 0          | 0         | 0        | 1           | 1%          |
| Analysis Time Period                                | AM Peak Hr    | PM Peak Hr         |                             | Rear End                    |          | 0            | 0          | 1         | 5        | 11          | 24%         |
| 2025 Opening Yr No-Build Peak Hr Intersection Delay | 340.3 sec     | 500.0 sec          | ☐ TRANSIT 💮                 | Sideswipe - same            |          | 0            | 0          | 0         | 0        | 6           | 8%          |
| 2025 Opening Yr No-Build Peak Hr Intersection V/C   | 1.56          | 2.22               | Ö                           | Sideswipe - opposite        |          | 0            | 0          | 0         | 0        | 1           | 1%          |
| 2045 Design Yr No-Build Peak Hr Intersection Delay  | 500.0 sec     | 500.0 sec          |                             | Not Collision w/Motor Veh   |          | 0            | 0          | 0         | 0        | 4           | 6%          |
| 2045 Design Yr No-Build Peak Hr Intersection V/C    | 1.97          | 2.86               |                             | TOTALS:                     |          | 0            | 0          | 3         | 16       | 52          | 71          |
|   |               |                    | •                           | * Number of crashes         | resultin | ıg in injı   | uries / fa | atalities | , not nu | mber o      | f persons   |
| Alternatives Analysis:                              | Altern        | ative 1            | Alternative 2               | Alternative 3               | Α        | ltern        | ative      | 4         | Α        | ltern       | ative 5     |
| Proposed Control Type/Improvement:                  | _             | onal (Minor<br>op) | High-T (unsignalized)       | Add Left Turn Lanes         | ٦        | Fraffic      | Signa      | al        | Con      | tinuou      | ıs Greei    |
| Project Cost: (From CostEst Worksheet)              | Additional de | scription here     | Additional description here | Additional description here | Add L    | T bays a     | all appro  | oaches    | Additi   | onal de     | scription I |
|   | Φ.            | ^                  | M4 47 000                   | <b>C444000</b>              |          | <b>#</b> 404 | 000        |           |          | <b>Φ447</b> | 000         |

| Alternatives Analysis:                  | Altern           |                   | Aitern  | ative 2                | Aitern            | ative 3               | Altern             | ative 4                | Alterna                   | ative 5        |
|---|------------------|-------------------|---|------------------------|-------------------|-----------------------|--------------------|------------------------|---------------------------|----------------|
| Proposed Control Type/Improvement:      | Conventio<br>Sto | nal (Minor<br>op) | High-T (un                                    | signalized)            | Add Left T        | urn Lanes             | Traffic            | Signal                 | Continuou                 | s Green-T      |
| Project Cost: (From CostEst Worksheet)  | Additional de    | • /               | Additional de                                 | scription here         | Additional de     | scription here        | Add LT bays a      | all approaches         | Additional des            | scription here |
| Construction Cost                       | \$(              | )                 | \$147   | ,000                   | \$114             | ,000                  | \$181              | ,000                   | \$147                     | ,000           |
| ROW Cost                                | \$(              | )                 | \$  | 0                      | \$                | 0                     | \$                 | 0                      | \$(                       | )              |
| Environmental Cost                      | \$(              | )                 | \$  | 0                      | \$                | 0                     | \$                 | 0                      | \$(                       | )              |
| Reimbursable Utility Cost               | \$(              | )                 | \$2,0   | 000                    | \$1,0             | 000                   | \$4,0              | 000                    | \$2,0                     | 000            |
| Design & Contingency Cost               | \$(              | )                 | \$  | 0                      | \$                | 0                     | \$                 | 0                      | \$0                       | )              |
| Cost Adjustment (justification req'd)   | 0'               | %                 | 0   | %                      | 0'                | %                     | 0'                 | %                      | 09                        | %              |
| Total Cost                              | \$(              | )                 | \$149   | ,000                   | \$115             | ,000                  | \$185              | ,000                   | \$149                     | ,000           |
| Traffic Operations:                     |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| Traffic Analysis Software Used          | Syn              | chro              | ,   | chro                   | •                 | chro                  | Syn                | chro                   | Synd                      | chro           |
| Analysis Period                         | AM Peak Hr       |                   | AM Peak Hr                                    | PM Peak Hr             | AM Peak Hr        |                       | AM Peak Hr         |                        |                           |                |
| 2045 Design Yr Build Intersection Delay | 500.0 sec        |                   | 223.6 sec                                     | 146.6 sec              | 483.1 sec         |                       |                    | 6.4 sec                | 14.1 sec                  | 7.3 sec        |
| 2045 Design Yr Build Intersection V/C   | 1.97             | 2.86              | 1.30  | 1.06                   | 1.59              | 2.73                  | 0.79               | 0.46                   | 0.75                      | 0.49           |
| Safety Analysis:                        |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| Predefined CRF: PDO                     | 0'               |                   |   | 3%                     |                   | %                     |                    | 9%                     | 39                        |                |
| Predefined CRF: Fatal/Inj               | 0'               |                   |   | 5%                     |                   | %                     |                    | )%                     | 49                        |                |
| Predefined CRF Source:                  | CRF unavaila     | •                 | FHWA Clea<br>2753                             | ringhouse #s<br>/ 2755 | FHWA Clear<br>270 | ringhouse #s<br>/ 274 | FHWA Clear<br>7982 | ringhouse #s<br>/ 7984 | FHWA Clear<br>7982/8655 / | -              |
| User Defined CRF: PDO                   |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| User Defined CRF: Fatal/Inj             |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| User Defined CRF Source                 |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| (write in if applicable):               |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| Environmental Impacts:1                 |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| Historic District/Property              | No               | ne                | No  | ne                     | No                | ne                    |                    | ne                     | No                        | ne             |
| Archaeology Resources                   | No               | ne                | No  | ne                     | No                | ne                    | No                 | ne                     | No                        |                |
| Graveyard                               | No               |                   |   | ne                     | No                | ne                    |                    | ne                     | No                        | ne             |
| Stream                                  | No               |                   | No  | ne                     | No                | ne                    | No                 | ne                     | No                        | ne             |
| Underground Tank/Hazmat                 | No               | ne                | No  | ne                     | No                | ne                    | No                 | ne                     | No                        | ne             |
| Park Land                               | No               |                   |   | ne                     |                   | ne                    | _                  | ne                     | No                        |                |
| EJ Community                            | No               |                   |   | ne                     |                   | ne                    |                    | ne                     | No                        |                |
| Wooded Area                             | No               |                   |   | ne                     |                   | ne                    |                    | ne                     | No                        |                |
| Wetland                                 | No               |                   |   | ne                     | _                 | ne                    | _                  | ne                     | No                        | ne             |
| Stakeholder Posture:                    |                  |                   | is significant ( <b>F</b><br>only preliminary |                        |                   |                       |                    |                        |                           | ept report     |
| Local Community Support                 |                  | nown              |   | nown                   |                   | nown                  |                    | nown                   | Unkr                      |                |
| GDOT Support                            | Unkr             |                   |   | nown                   |                   | nown                  |                    | nown                   | Unkr                      |                |
|   |                  |                   |   |                        |                   |                       |                    |                        |                           |                |
| Final ICE Stage 2 Score:                | 2.               | .7                |   | .3                     |                   | .6                    |                    | .5                     | 6.                        | .3             |
| Rank of Control Type Alternatives:      | 4                |                   |   | 3                      |                   | 5                     |                    | 2                      | 1                         |                |
| Final Intersection Control Selection:   | 1 - Continu      | uous Gree         | n-T   |                        |                   |                       |                    |                        |                           |                |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles at Pineland Ave COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

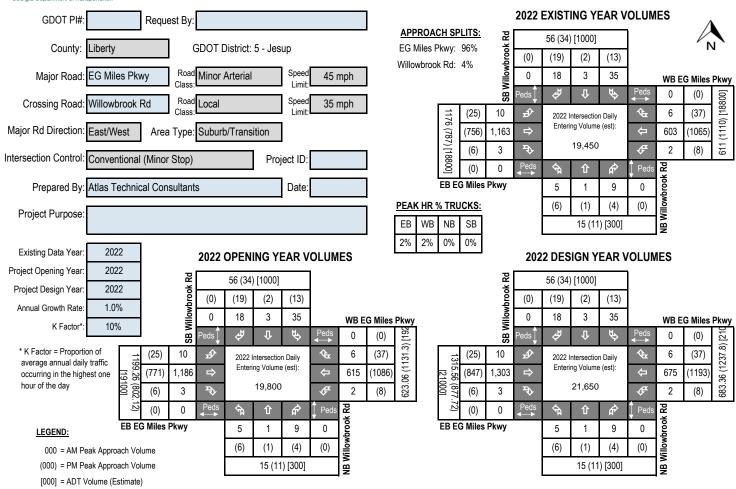
MAJOR STREET: Main Street EG Miles Pkwy # OF APPROACH LANES: 2
MINOR STREET: Cross Street Pineland Ave # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|          |        |          |                    |                     | WARRA           | NT 1, Cond      | lition A    | WARR            | ANT 1, Cond     | lition B    |                 | WARR            | ANT 1, Co   | mbination W     | /arrant         |             |              |             |
|----------|--------|----------|--------------------|---------------------|-----------------|-----------------|-------------|-----------------|-----------------|-------------|-----------------|-----------------|-------------|-----------------|-----------------|-------------|--------------|-------------|
|          |        |          | MAJOR ST           | MINOR ST            |                 |                 |             |                 |                 |             | С               | ONDITION        | 4           | С               | ONDITION I      | В           | WARRANT 2    | WARRANT 3   |
|          |        |          | BOTH<br>APPROACHES | HIGHEST<br>APPROACH | MAJOR<br>STREET | MINOR<br>STREET | BOTH<br>MET |              |             |
| THRESHOL | D VALU | ES —     |                    | <b>—</b>            | 420             | 105             |             | 630             | 53              |             | 480             | 120             |             | 720             | 60              |             |              |             |
| 06:00 AM | TO     | 07:00 AM | 902                | 25                  | Υ               |                 |             | Υ               |                 |             | Y               |                 |             | Y               |                 |             |              |             |
| 07:00 AM | TO     | 08:00 AM | 1,787              | 59                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               |                 |             |              |             |
| 08:00 AM | TO     | 09:00 AM | 1,340              | 54                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               |                 |             |              |             |
| 09:00 AM | TO     | 10:00 AM | 1,098              | 57                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               |                 |             |              |             |
| 10:00 AM | TO     | 11:00 AM | 1,019              | 45                  | Υ               |                 |             | Y               |                 |             | Υ               |                 |             | Υ               |                 |             |              |             |
| 11:00 AM | TO     | 12:00 PM | 1,152              | 45                  | Υ               |                 |             | Y               |                 |             | Υ               |                 |             | Υ               |                 |             |              |             |
| 12:00 PM | TO     | 01:00 PM | 1,218              | 62                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            |             |
| 01:00 PM | TO     | 02:00 PM | 1,262              | 56                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               |                 |             |              |             |
| 02:00 PM | TO     | 03:00 PM | 1,538              | 58                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               |                 |             |              |             |
| 03:00 PM | TO     | 04:00 PM | 1,537              | 78                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            | Y           |
| 04:00 PM | TO     | 05:00 PM | 1,728              | 84                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            | Υ           |
| 05:00 PM | TO     | 06:00 PM | 1,897              | 89                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            | Y           |
| 06:00 PM | TO     | 07:00 PM | 1,283              | 71                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            |             |
| 07:00 PM | TO     | 08:00 PM | 948                | 65                  | Υ               |                 |             | Υ               | Υ               | Υ           | Υ               |                 |             | Υ               | Υ               | Υ           | Υ            |             |
| 08:00 PM | TO     | 09:00 PM | 606                | 49                  | Υ               |                 |             |                 |                 |             | Υ               |                 |             |                 |                 |             |              |             |
| 09:00 PM | TO     | 10:00 PM | 499                | 30                  | Υ               |                 |             |                 |                 |             | Υ               |                 |             |                 |                 |             |              |             |
|          | -      |          | 19,814             | 927                 |                 |                 | 0           |                 |                 | 11          |                 |                 | 0           |                 |                 | 6           | 6            | 3           |
|          |        |          |                    |                     | 8 HC            | OURS NEED       | ED          | 8 HC            | OURS NEED       | ED          | 8 HO            | JRS OF BO       | TH COND     | . A AND CC      | ND. B NEE       | DED         | 4 HRS NEEDED | 1 HR NEEDED |
|          |        |          |                    |                     | NO.             | T SATISFII      | ED          |                 | SATISFIED       |             |                 |                 | NOT SA      | TISFIED         |                 |             | SATISFIED    | SATISFIED   |



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Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the Process: magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves Screening as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should Decision use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.



| 0001   | · DI #                         |                                      |  |       |      |       |      |         |                       | ICE Version 2.21   Revised 2/4/2022 |  |  |  |  |
|--|--------------------------------|--------------------------------------|--|-------|------|-------|------|---------|-----------------------|-------------------------------------|--|--|--|--|
| GDOT PI # Project Location: EG Miles Pkwy @ Willowbrook Rd   |                                |                                      | Note: Up to 5 alternatives   |       |      |       |      |         |                       |                                     |  |  |  |  |
| Existing Control: Conventional (Minor Stop)  |                                |                                      | may be selected and evaluated; Use this ICE  |       |      |       |      |         |                       |                                     |  |  |  |  |
| Prepared by: Atlas Technical Consultants   |                                |                                      | Stage 1 to screen 5 or Level Hand Real Hand Re |       |      |       |      |         |                       |                                     |  |  |  |  |
| Date:  | eu by.                         | Alias reciffical consultants         | fewer alternatives to gotting and the state of the state  |       |      |       |      |         |                       |                                     |  |  |  |  |
| Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column  Intersection Alternative (see "Intersections" tab for |                                |                                      | Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2 evaluate i |       |      |       |      |         |                       |                                     |  |  |  |  |
| deta   |                                | on of intersection/interchange type) |  | / V & | <br> | / W 0 | <br> | ·/ 6. 6 | 7/ 1/16               | Screening Decision Justification:   |  |  |  |  |
|  | Conventiona                    | Il (Minor Stop)                      | No   | No    | No   | No    | No   | No      | Yes                   |                                     |  |  |  |  |
|  | Conventiona                    | ıl (All-Way Stop)                    | No   | No    | No   | No    | No   | No      | No                    | Multiple lanes on mainline          |  |  |  |  |
|  | Mini Rounda                    | bout                                 | No   | No    | No   | No    | No   | No      | No                    | Over 90% on mainline                |  |  |  |  |
|  | Single Lane                    | Roundabout                           | No   | No    | No   | No    | No   | No      | No                    | Over 90% on mainline                |  |  |  |  |
| ctions   | Multilane Ro                   | undabout                             | No   | No    | No   | No    | No   | No      | No                    | Over 90% on mainline                |  |  |  |  |
| lerse  | RCUT (stop                     | Yes                                  | Yes  | Yes   | Yes  | Yes   | Yes  | Yes     | Potential Alternative |                                     |  |  |  |  |
| ed Int   | RIRO w/dow                     | No                                   | No   | No    | No   | No    | No   | No      | Limits access         |                                     |  |  |  |  |
| Unsignalized Intersections   | High-T (unsi                   | No                                   | No   | No    | No   | No    | No   | No      | 4 approaches          |                                     |  |  |  |  |
| Unsig  | Offset-T Inte                  | No                                   | No   | No    | No   | No    | No   | No      | Not feasible          |                                     |  |  |  |  |
|  | Diamond Inte                   | Diamond Interch (Stop Control)       |  |       | No   | No    | No   | No      | No                    | No grade seperation                 |  |  |  |  |
|  | Diamond Inte                   | No                                   | No   | No    | No   | No    | No   | No      | No grade seperation   |                                     |  |  |  |  |
|  | Add LT Lanes<br>No RT Lane Ir  | on Willowbrook Rd<br>mprovements     | No   | No    | No   | No    | Yes  | Yes     | Yes                   |                                     |  |  |  |  |
|  | Other unsign                   | nalized (provide description):       | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
|  | Traffic Signa                  | 1                                    | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
|  | Median U-Tı                    | Median U-Turn (Indirect Left)        |  |       | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
|  | RCUT (signa                    | alized)                              | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| S  | Displaced Le                   | eft Turn (CFI)                       | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| ction  | Continuous (                   | Green-T                              | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| Signalized Intersections   | Jughandle                      |                                      | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| zed lı   | Quadrant Ro                    | padway                               | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| ignali   | Diamond Inte                   | erch (Signal Control)                | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
| Ś  | Diverging Di                   | amond                                | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
|  | Single Point                   | Interchange                          | No   | No    | No   | No    | No   | No      | No                    | No signal warranted                 |  |  |  |  |
|  | No LT Lane In<br>No RT Lane Ir | No                                   | No   | No    | No   | No    | No   | No      |                       |                                     |  |  |  |  |
|  |                                | ized (provide description):          | No   | No    | No   | No    | No   | No      | No                    |                                     |  |  |  |  |
| = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record   |                                |                                      |  |       |      |       |      |         |                       |                                     |  |  |  |  |

<sup>=</sup> Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record



Project Location: EG Miles Pkwy @ Willowbrook Rd Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Safety Funded Project

0.34

0.71

District: 5 - Jesup County: Liberty

Area: Suburb/Transitic

GDOT PI#:

Prepared by: Atlas Technical Cons

Date:

| Opening / Design Year Traffic Operations            |            |            |  |  |  |  |  |  |  |  |
|---|------------|------------|--|--|--|--|--|--|--|--|
| Intersection meets signal/AWS warrants?             | None       |            |  |  |  |  |  |  |  |  |
| Traffic Analysis Measure of Effectiveness           | Intersect  | ion Delay  |  |  |  |  |  |  |  |  |
| Traffic Analysis Software Used                      | Syn        | chro       |  |  |  |  |  |  |  |  |
| Analysis Time Period                                | AM Peak Hr | PM Peak Hr |  |  |  |  |  |  |  |  |
| 2022 Opening Yr No-Build Peak Hr Intersection Delay | 27.9 sec   | 43.3 sec   |  |  |  |  |  |  |  |  |
| 2022 Opening Yr No-Build Peak Hr Intersection V/C   | 0.26       | 0.53       |  |  |  |  |  |  |  |  |
| 2022 Design Yr No-Build Peak Hr Intersection Delay  | 36.1 sec   | 71.9 sec   |  |  |  |  |  |  |  |  |

2022 Design Yr No-Build Peak Hr Intersection V/C

|                                |     | l |
|--------------------------------|-----|---|
| Complete Streets Warrants Met? |     | Α |
| PEDESTRIANS                    | ЭС  | ŀ |
| BICYCLES                       | Тy  | F |
| ☐ TRANSIT                      | ash | S |
|                                | C   | S |
|                                |     | _ |

| Crash Data: Enter most recent 5       |    | Crash Severity |    |    |    |     |  |  |  |  |
|---------------------------------------|----|----------------|----|----|----|-----|--|--|--|--|
| years of crash data                   | K* | Α*             | В* | C* | 0  | 5   |  |  |  |  |
| Angle                                 | 0  | 0              | 3  | 5  | 14 | 37% |  |  |  |  |
| Head-On<br>Rear End                   | 0  | 0              | 1  | 0  | 0  | 2%  |  |  |  |  |
| rtear Life                            | 0  | 0              | 3  | 8  | 13 | 41% |  |  |  |  |
| Sideswipe - same                      | 0  | 0              | 0  | 0  | 6  | 10% |  |  |  |  |
| Sideswipe - same Sideswipe - opposite | 0  | 0              | 1  | 0  | 2  | 5%  |  |  |  |  |
| Not Collision w/Motor Veh             | 0  | 0              | 1  | 0  | 2  | 5%  |  |  |  |  |
| TOTALS:                               | 0  | 0              | 9  | 13 | 37 | 59  |  |  |  |  |

<sup>\*</sup> Number of crashes resulting in injuries / fatalities, not number of persons

| Alternatives Analysis:                  | Alterna                      | tive 1   | Altern                                      | ative 2        | Altern        | ative 3                               | Altern | ative 4 | Altern | ative 5    |
|---|------------------------------|----------|---|----------------|---------------|---------------------------------------|--------|---------|--------|------------|
| Proposed Control Type/Improvement:      | Convention<br>Sto            | ,        | RCUT (sto                                   | p control)     | Add Left T    | urn Lanes                             | N      | I/A     | N/     | Ά          |
| Project Cost: (From CostEst Worksheet)  | Additional des               |          | Additional de                               | scription here | Additional de | scription here                        |        |         |        |            |
| Construction Cost                       | \$0                          | )        | \$321                                       |                | \$127         | ,000                                  |        |         |        |            |
| ROW Cost                                | \$0                          | )        | \$253                                       | ,000           | \$            | 0                                     |        |         |        |            |
| Environmental Cost                      | \$0                          | )        | \$(   | )              | \$            | 0                                     |        |         |        |            |
| Reimbursable Utility Cost               | \$0                          | )        | \$4,0                                       | 000            | \$1,0         | 000                                   |        |         |        |            |
| Design & Contingency Cost               | \$0                          | )        | \$(   | )              | \$            | 0                                     |        |         |        |            |
| Cost Adjustment (justification req'd)   | 0%                           | 6        | 0% 0%                                       |                |               |                                       |        |         |        |            |
| Total Cost                              | \$0                          | )        | \$578                                       | ,000           | \$128         | 3,000                                 |        |         |        |            |
| Traffic Operations:                     |                              |          |   |                |               |                                       |        |         |        |            |
| Traffic Analysis Software Used          | Sync                         | hro      | Syn   | chro           | Syn           | chro                                  |        |         |        |            |
| Analysis Period                         | AM Peak Hr                   |          | AM Peak Hr                                  | PM Peak Hr     | AM Peak Hr    | PM Peak Hr                            |        |         |        |            |
| 2022 Design Yr Build Intersection Delay | 36.1 sec                     | 71.9 sec | 15.4 sec                                    | 14.2 sec       | 162.5 sec     | 107.1 sec                             |        |         |        |            |
| 2022 Design Yr Build Intersection V/C   | 0.34                         | 0.71     | 0.15  | 0.04           | 0.73          | 0.71                                  |        |         |        |            |
| Safety Analysis:                        |                              |          |   |                |               |                                       |        |         |        |            |
| Predefined CRF: PDO                     | 0%                           | 6        | 31  | %              | 2'            | %                                     |        |         |        |            |
| Predefined CRF: Fatal/Inj               | 0%                           | -        | 53  | %              | 1%            |                                       |        |         |        |            |
| Predefined CRF Source:                  | CRF unavaila<br>user defined |          | NC/MO Table 4-7 FHWA Clearinghous 270 / 274 |                |               |                                       |        |         |        |            |
| User Defined CRF: PDO                   |                              |          |   |                |               |                                       |        |         |        |            |
| User Defined CRF: Fatal/Inj             |                              |          |   |                |               |                                       |        |         |        |            |
| User Defined CRF Source                 |                              |          |   |                |               |                                       |        |         |        |            |
| (write in if applicable):               |                              |          |   |                |               |                                       |        |         |        |            |
| Environmental Impacts: <sup>1</sup>     |                              |          |   |                |               |                                       |        |         |        |            |
| Historic District/Property              | Noi                          | ne       | No  | ne             | No            | one                                   |        |         |        |            |
| Archaeology Resources                   | Noi                          | -        | No  |                | None          |                                       |        |         |        |            |
| Graveyard                               | Noi                          |          | No  |                |               | one                                   |        |         |        |            |
| Stream                                  | Noi                          |          | No  |                |               | one                                   |        |         |        |            |
| Underground Tank/Hazmat                 | Noi                          |          | No  |                |               | one                                   |        |         |        |            |
| Park Land                               | Noi                          |          | No  |                |               | one                                   |        |         |        |            |
| EJ Community                            | Noi                          |          | No  |                |               | one                                   |        |         |        |            |
| Wooded Area                             | Noi                          |          | No  |                | None          |                                       |        |         |        |            |
| Wetland                                 | Noi                          |          | No  |                | None          |                                       |        |         |        |            |
| Stakeholder Posture:                    |                              |          |   |                |               | act won't jeopard<br>ntal impact docu |        |         |        | ept report |
| Local Community Support                 | Unkn                         | -        | Unkr  |                |               | nown                                  |        |         |        |            |
| GDOT Support                            | Unkn                         | own      | Unkr  | nown           | Unkr          | nown                                  |        |         |        |            |
|   |                              |          |   |                |               |                                       |        |         | 1      |            |
| Final ICE Stage 2 Score:                | 4.                           |          | 6.  | 3              | 5             |                                       |        |         |        |            |
| Rank of Control Type Alternatives:      | 3                            |          | 1   |                |               | 2                                     |        |         |        |            |
| Final Intersection Control Selection:   | 1 - RCUT (s                  |          |   |                |               |                                       |        |         |        |            |

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):

INTERSECTION NAME: EG Miles Pkwy at Willowbrook Dr/Sharon St COUNT DATE: Typical Weekday

INTERSECTION CONDITION:

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N
85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

|                    |    |          |            |          | WARRA         | WARRANT 1, Condition A WARRANT 1, Condition B |      |                |           |      |  | WARR     | ANT 1, Co |        |          |      |               |               |
|--------------------|----|----------|------------|----------|---------------|---|------|----------------|-----------|------|--|----------|-----------|--------|----------|------|---------------|---------------|
|                    | MA |          | MAJOR ST   | MINOR ST |               |   |      |                |           |      | С  | ONDITION | A         | С      | ONDITION | В    | WARRANT 2     | WARRANT 3     |
|                    |    |          | BOTH       | HIGHEST  | MAJOR         | MINOR   | вотн | MAJOR          | MINOR     | вотн | MAJOR                                      | MINOR    | BOTH      | MAJOR  | MINOR    | BOTH | •             |               |
|                    |    |          | APPROACHES | APPROACH | STREET        | STREET  | MET  | STREET         | STREET    | MET  | STREET                                     | STREET   | MET       | STREET | STREET   | MET  |               |               |
| THRESHOLD VALUES — |    |          | <u> </u>   | 420      | 105           |   | 630  | 53             |           | 480  | 120  |          | 720       | 60     |          |      |               |               |
| 06:00 AM           | TO | 07:00 AM | 616        | 11       | Υ             |   |      |                |           |      | Υ  |          |           |        |          |      |               |               |
| 07:00 AM           | TO | 08:00 AM | 1,176      | 56       | Υ             |   |      | Υ              | Υ         | Υ    | Υ  |          |           | Υ      |          |      |               |               |
| 08:00 AM           | TO | 09:00 AM | 914        | 25       | Υ             |   |      | Υ              |           |      | Υ  |          |           | Υ      |          |      |               |               |
| 09:00 AM           | TO | 10:00 AM | 674        | 35       | Υ             |   |      | Υ              |           |      | Υ  |          |           |        |          |      |               |               |
| 10:00 AM           | TO | 11:00 AM | 566        | 27       | Υ             |   |      |                |           |      | Υ  |          |           |        |          |      |               |               |
| 11:00 AM           | TO | 12:00 PM | 640        | 32       | Υ             |   |      | Υ              |           |      | Υ  |          |           |        |          |      |               |               |
| 12:00 PM           | TO | 01:00 PM | 624        | 20       | Υ             |   |      |                |           |      | Υ  |          |           |        |          |      |               |               |
| 01:00 PM           | TO | 02:00 PM | 601        | 28       | Υ             |   |      |                |           |      | Υ  |          |           |        |          |      |               |               |
| 02:00 PM           | TO | 03:00 PM | 764        | 44       | Υ             |   |      | Υ              |           |      | Υ  |          |           | Υ      |          |      |               |               |
| 03:00 PM           | TO | 04:00 PM | 715        | 27       | Υ             |   |      | Υ              |           |      | Υ  |          |           |        |          |      |               |               |
| 04:00 PM           | TO | 05:00 PM | 680        | 37       | Υ             |   |      | Υ              |           |      | Υ  |          |           |        |          |      |               |               |
| 05:00 PM           | TO | 06:00 PM | 787        | 33       | Υ             |   |      | Υ              |           |      | Υ  |          |           | Υ      |          |      |               |               |
| 06:00 PM           | TO | 07:00 PM | 523        | 18       | Υ             |   |      |                |           |      | Υ  |          |           |        |          |      |               |               |
| 07:00 PM           | TO | 08:00 PM | 360        | 20       |               |   |      |                |           |      |  |          |           |        |          |      |               |               |
| 08:00 PM           | TO | 09:00 PM | 210        | 11       |               |   |      |                |           |      |  |          |           |        |          |      |               |               |
| 09:00 PM           | TO | 10:00 PM | 211        | 9        |               |   |      |                |           |      |  |          |           |        |          |      |               |               |
|                    |    |          | 10,061     | 433      |               | <u> </u>                                      | 0    |                | <u> </u>  | 1    |  |          | 0         |        |          | 0    | 0             | 0             |
|                    |    |          |            | •        |               |   |      |                |           |      |  |          |           |        |          |      |               |               |
|                    |    |          |            |          | 8 HC          | OURS NEED                                     | ED   | 8 HOURS NEEDED |           |      | 8 HOURS OF BOTH COND. A AND COND. B NEEDED |          |           |        |          |      | 4 HRS NEEDED  | 1 HR NEEDED   |
|                    |    |          |            |          | NOT SATISFIED |   |      | NO             | T SATISFI | ED   | NOT SATISFIED                              |          |           |        |          |      | NOT SATISFIED | NOT SATISFIED |