

**Citizens Advisory Committee (CAC)  
Meeting Minutes  
February 17, 2015**

**CAC Members Present:**

Charles Gardner  
Donald Smart, Vice Chairman  
Janet Deyette  
Richard Belhumeur  
Gilles Blais, Chairman  
Nora Jane Gillespie  
Bob Storke  
Susan Elliott  
Dan D'Antonio  
Elizabeth Alicia Lendian  
Rickey Mack  
Gene Ferguson (non-voting advisor)  
Melissa Winsett (non-voting)

**CAC Members Absent:**

Richard Gailey  
Bliss Jamison  
Bobby Ball (excused)  
Joy Krom (excused)  
Judy Craig  
Don Parkinson (excused)  
Bob Owens (excused)  
Faith Alkhatib

**Others Present:**

Pamela Blankenship, Recording Secretary  
Darien Vaught  
Carole Hinkley  
Robert Keeth  
Stephan Harris  
Jean Parlow  
Lois Bollenback  
Martha Moore  
Amy Blaida  
Ginger Hoke

**Representing:**

Bunnell  
Daytona Beach  
Deltona  
Flagler Beach  
Holly Hill  
New Smyrna Beach  
Orange City  
Pierson  
Volusia County  
Volusia County  
Votran  
FDOT District 5  
Volusia County Traffic Engineering

**Representing:**

DeBary  
Edgewater  
Port Orange  
South Daytona  
Volusia County  
Volusia County  
Flagler County Transit  
Flagler County Traffic Engineering

**Representing:**

TPO Staff  
TPO Staff  
TPO Staff  
TPO Staff  
TPO Staff  
TPO Staff  
TPO Staff  
Ghyabi & Associates  
RS&H  
Hoke Design

**I. Call to Order / Roll Call / Determination of Quorum**

Chairman Gilles Blais called the meeting of the River to Sea Transportation Planning Organization (TPO) Citizens Advisory Committee (CAC) to order at 1:33 p.m. The roll was called and it was determined that a quorum was present.

Chairman Blais introduced Ms. Nora Jane Gillespie to the committee.

Chairman Blais requested the committee raise their nametags or announce their names when posing a question. He additionally requested committee members state their names when voting on a motion.

II. Press/Citizen Comments

There were no press or citizen comments.

III. Consent Agenda

A. Approval of January 20, 2015 CAC Meeting Minutes

**MOTION:** *A motion was made by Mr. Smart to approve the January 20, 2015 CAC meeting minutes. The motion was seconded by Ms. Elliott and carried unanimously.*

B. Review and Recommend Approval of the Belle Terre Parkway Intersections Study Task Order

Mr. Keeth stated that studies have been added to the work task load. The Belle Terre Parkway was requested by Palm Coast through the Priority Process. The UPWP and TIP have been amended to accommodate the changes. A draft of the Scope of Work and cost proposal has been prepared. The TPO Purchasing Manual requires this action be taken prior to seeking task approval on any project of more than \$25,000. The Belle Terre Parkway Intersections Study Task Order will receive \$84,000 including \$75,000 of federal funds and matching funds from Palm Coast.

**MOTION:** *A motion was made by Mr. Storke to recommend approval of the Belle Terre Parkway intersections study task order. The motion was seconded by Ms. Deyette and carried unanimously.*

IV. Action Items

A. Review and Recommend Approval of Resolution 2015-## Adjusting Local Agency Program (LAP) Agreement Amounts when the Difference between the LAP Agreement Amounts and Local Agency Contract Award Amounts are less than \$250,000

Mr. Keeth indicated Federal Highway Administration (FHWA) has informed the state that they must have a policy to adjust the amount of federal funds programmed for projects when the difference between the estimated amount and actual project cost is more than \$250,000. Mr. Keeth noted the State of Florida has worked with the Federal Highway Administration in developing a policy. The state has looked to the River to Sea TPO for a decision on the use of SU funds. That policy is included and it reflects the discussion from the last meeting. When the difference between a local government contract award and federal obligation is less than \$250,000 and 10%, then the TPO must consult with the local agency on a case-by-case basis to determine whether to adjust the LAP agreement amount and by what amount. The second circumstance, located on page two of the resolution, indicates when the difference between the amount is less than \$250,000 and more than 10%, the TPO in consultation with the local agency will determine how much below 10% of the contract award amount the LAP amount will be adjusted. The TPO is obligated to reduce the amount to within 10% of the local agency contract award amount. Consultation with local agencies would take place to determine their preference in handling.

**MOTION:** *A motion was made by Ms. Deyette to recommend approval of Resolution 2015-## adjusting local agency program (LAP) agreement amounts when the difference between the LAP agreement amounts and local agency contract award amounts are less than \$250,000. The motion was seconded by Mr. Belhumeur and carried unanimously.*

B. Review and Recommend Approval of Procedure and Criteria for Prioritizing Planning Studies

Mr. Keeth indicated that as discussed previously the Florida Department of Transportation (FDOT) has suggested the adoption of a priority list of planning studies be undertaken through the TPO. The general procedures, as discussed at the last meeting, are to have a written policy and criteria, as well as the project application. The criteria would include eight (8) terms and planning factors as prescribed by federal law. Three

additional factors would be included and they are: 1) is it necessary to identify a solution, 2) is the study best undertaken now, and 3) does it provide needed guidance for decision makers regarding future projects. The applications would be reviewed on a case-by-case basis when approaching the line between feasibility studies and comprehensive studies.

Mr. Belhumeur complimented staff on doing a very good job.

**MOTION:** *A motion was made by Mr. Belhumeur to recommend approval of the procedure and criteria for prioritizing planning studies. The motion was seconded by Mr. Smart and carried unanimously.*

**C. Appointment of Transportation Improvement Program (TIP) Subcommittee Members**

Mr. Keeth noted the role of the TIP Subcommittee and indicated they are to review applications for Priority Projects and evaluate and rank them using the adopted criteria. They are to also review the Call for Projects process and selection criteria used to develop the TPO's Project Priority lists. The current members for the committee are: Chairman Gilles Blais, Richard Belhumeur, Judy Craig, Bobby Ball and Melissa Winsett.

Mr. Belhumer indicated he would like to remain a member.

Ms. Lendian indicated she would like to volunteer as a member.

Ms. Winsett requested removal as a member due to staffing concerns.

Ms. Gillespie indicated she would like to volunteer as a member.

Mr. Storke requested the removal of Ms. Nicoulin as a member and the addition of himself as a member in her place.

Chairman Blais indicated he would like to volunteer as a member.

Ms. Elliott indicated Ms. Craig will want to remain on the committee.

**MOTION:** *A motion was made by Mr. Smart to recommend approval of the Appointment and Reappointment of the following Transportation Improvement Program (TIP) Subcommittee members: Chairman Gilles Blais, Richard Belhumeur, Elizabeth Lendian, Nora Jean Gillespie, Bob Storke, Judy Craig, and the removal of members Melissa Winsett and Colleen Nicoulin. The motion was seconded by Mr. Belhumeur and carried unanimously.*

**V. Presentations, Status Reports, and Discussion Items**

**A. Presentation on the Draft Regional Trails Corridor Assessment (RTCA)**

Ms. Ginger Hoke, Hoke Design, subconsultant to RS&H gave a PowerPoint presentation on the Regional Trails Corridor Assessment.

Ms. Elliott inquired into the US 17 trail project and the use of CR 3 as the connector.

Ms. Hoke indicated they could discuss it after the meeting.

Chairman Blais inquired about the wildlife signage at the animal crossings.

Ms. Hoke indicated the focus is not on looking at the design guidelines but the regional trail system.

Ms. Gillespie inquired into the Edgewater and New Smyrna Beach trails. She indicated New Smyrna Beach has concerns with using South Myrtle to connect to 10<sup>th</sup> Street. The rail crossing is waiting on approval. She noted

the area does not fit into rails and trails. She further noted that several New Smyrna Beach trails that are underway are not noted in the list of trails.

Ms. Hoke indicated if the trail alignment is set, the study did not cover it.

#### **B. Presentation on the SR 417 to I-95 Connector Study**

Ms. Bollenback stated committee members have information in the agenda packet regarding the study completed in 2002/03 which looked at the connection of I-95 to SR 417. The connection is from I-95 to SR 417 and is called the SR 417 Connector Extension Study. The study is returning for discussion because once the study was completed Congressman Mica set aside funding for follow up activity in the amount of \$800,000; the amount is now \$719,000. The original study determined if there was adequate demand, if the building methods were environmentally sensitive, the cost vs. revenue and if it was needed and supported. The findings of that study indicated there was support to move forward, the alignment could be developed and was environmentally sound. The study also showed there was enough traffic demand but it was not financially feasible.

Ms. Bollenback indicated the study was done through the Turnpike Enterprise and there was a huge gap between the estimated cost and estimated revenues. It was a short fall of between \$600 and \$780 million. The Turnpike would not move forward unless someone funded it; no one came forward. Congressman Mica set aside funds to update the study, yet many changes have occurred since the study was done including the widening of SR 417, the widening of I-4 and Restoration in Edgewater. An update of the study would produce different results than the previous one. Congressman Mica indicated the funds may go away as they are tied to the current transportation bill. It is uncertain if the funds would be rescinded, although Congressman Mica does think they will, and the funds would go into the larger general pot. The question now is this enough reason to warrant moving forward with a new study. The interest and support are present. She noted that the study is not an extension of SR 442 across the county to I-4. The last time it was taken up by the Volusia County Council was in 2006 where the vote supported moving forward. The council reversed its position weeks later and the last motion on record is not to move forward. The TPO is looking to the Volusia County Council to discuss and provide a determination of support. The TPO was asked by Deltona, as well as Congressman Mica's office, to discuss this.

Mr. Ferguson, Florida Department of Transportation (FDOT), reported he has asked FDOT to look at funding scenarios. This category of funds is High Priority Projects (HPP) and the funding has a tendency to survive from one bill to the next. This is a good case to do something as the money is available for use without objection from FDOT.

Ms. Bollenback indicated projects that span southeast Volusia County can be very expensive and the allocated \$719,000 doesn't go very far in transportation engineering. If a full preliminary design and environment (PD&E) study was done, \$5 million is more in line with the project breadth. A minimum feasibility study would probably cost twice as much. Ms. Bollenback noted there might be some kind of update that can be done but there might not be meaningful results. It is unknown if other entities would want to supplement the funding.

Ms. Gillespie indicated she is interested in the results of this study.

M. Belhumeur stated the only way across the area would be an expensive toll road.

Ms. Bollenback indicated that much like the expansion of I-4, tolled roads are becoming popular. South Brevard County, Deseret Ranch, on the level of Farmton, has no east/west corridor. There have been alignments like those that connect Jacksonville to Tampa starting with a wide arch; this is not like that. People from Edgewater and Deltona are interested in pursuing this study. Major capital projects that are part of the Strategic Intermodal System (SIS) will be tolled facilities now.

**C. Presentation on the 2040 Long Range Transportation Plan (LRTP)**

Ms. Martha Moore, Ghyabi & Associates, gave a PowerPoint presentation on the Alternative Land Use Scenario Framework.

Mr. D'Antonio asked if the map included the socioeconomic data or population from the Census.

Ms. Parlow indicated that it was the population data.

Ms. Moore noted the Make Your Mark series starts February 17 at the Conklin Center at 5:30 p.m. She stated information was provided in the agenda packets. All are welcome to attend any listed events.

**D. FDOT Report**

Mr. Ferguson gave the FDOT report.

Mr. Storke inquired if the I-4 project is expected to swap to the west bound lane.

Mr. Ferguson indicated crossovers have been started; the project has been delayed and is weather dependent.

Ms. Gillespie inquired into the turn lane project from US 1 on West Canal Street in New Smyrna Beach. There are three accesses coming in from I-95. One is a railroad alignment on 10<sup>th</sup> Street. The second is the turn lane on West Canal Street which only leaves the SR 44 overpass for beach access. Ms. Gillespie wanted assurances that work would not be done simultaneously on more than one of these accesses.

Mr. Ferguson indicated FDOT pays attention to that type of situation and would never close two interchanges adjacent to each other.

Mr. Ferguson noted FDOT is looking at opportunities for new Intelligent Transportation Systems (ITS) projects and there is an increased effort to make "more bang for the buck" traffic improvements. He reviewed some of the options for low-cost traffic improvements. The SR 40 corridor might be a good fit for low-cost improvements. The FDOT is looking for one project from each MPO for a total of five to be submitted. SR 40 may be a good one to submit. Mr. Ferguson noted that FDOT is seeking feedback.

Mr. Keeth stated this is on the priority list as two separate projects.

Chairman Blais inquired if the traffic lights will be reprogrammed for special activity events in Daytona Beach.

Mr. Ferguson indicated the FDOT always plans well in advance of events and intends to make access in and out as smooth as possible for all involved.

Chairman Blais inquired if the traffic patterns could be published in the newspaper.

Mr. Ferguson indicated he is not certain of the best way to communicate best routes. Extra staffing from the FDOT will be on hand to minimize crashes due to the influx of traffic from special event (Race Week). Mr. Ferguson announced he would share the recommendations with FDOT.

Ms. Deyette indicated when she commuted to Daytona Beach Community College (DBCC) sometimes motor home traffic was be bad; and, motorhomes would stay in intersections and at times block the route to the airport.

**E. Volusia and Flagler County Construction Reports**

Ms. Winsett gave the construction report for Volusia County. Ms. Winsett announced the East Central Florida Regional Rail Trail bridges over SR 415 and SR 442 are completed. The Veterans Memorial Bridge construction has been pushed back to 2015/16.

Chairman Blais indicated environmentalists are often seen at Veteran's Memorial Bridge on Orange Avenue counting wildlife.

Ms. Winsett indicated there has not been anything heard from the environmental groups as they worked with them to meet the needs for the federal project.

The Flagler County report was included in the agenda packet.

Mr. Gardner stated the Bunnell project, Flagler Central Commerce Parkway, is on the design list.

Mr. Storke indicated the Flagler County list is only for the county, not the city, but the project is moving forward. Mr. Tiblier, Bunnell, was spoken to and the contract for design has been issued with the project to begin shortly.

**VI. Staff Comments**

→ **SunRail Update**

Mr. Keeth indicated there is a concern that funding for SunRail Phase II was not in the President's budget; although it is there in a category termed Non-Rated Projects. The reports in the paper state the project might have to prove self before moving forward. Mr. Keeth noted they are optimistic the project will move forward. The county has made all the commitments to keep it on track.

→ **Annual TPO Retreat Summary**

Mr. Keeth indicated the TPO had their annual retreat and it went very well. The focus was on the development of a strategic plan recognizing there is a two year UPWP and LRTP for the long-term plans but there is a need for a mid-term plan. This idea was well-received by board members and others in attendance, and will be brought back for review and further development. Good feedback and direction was provided.

→ **Other Items**

Mr. Keeth noted in the Daytona Beach News-Journal there was an article dated February 15 that indicated the traffic fatalities in Volusia County are at an all-time low with four less than in 2013. Flagler County traffic fatalities have seen a substantial increase that went from 16 to 28 in one year. Mr. Keeth encouraged Flagler County members to look at potential projects that can help reduce fatalities and can be submitted through the TPO's priority process.

Mr. D'Antonio inquired what the interstate vs. surface street differentiation is.

Mr. Keeth indicated Florida Highway Patrol (FHP) mapped them and stated there are no obvious trends.

Mr. D'Antonio stated he thought there were more fatalities on the interstate.

Mr. Keeth indicated the numbers were from all over the county and included two bicyclists.

Ms. Lendian inquired if there were children involved.

Mr. Keeth stated he did not have that information.

**VII. CAC Member Comments**

Ms. Deyette inquired about the timing of the annual TPO retreat during tax season.

Ms. Lendian indicated the painting of the Saxon Boulevard median gives the road a nice appearance.

**VIII. Information Items**

- **River to Sea TPO Board Meeting Summary**
- **2040 Long Range Transportation Plan and Land Use Working Group Summary**
- **Executive Order 5520 – Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events**
- **Letter of Support for SunRail Phase II North**
- **Make Your Mark Session Flyer**

**IX. Adjournment**

There being no further business, the CAC meeting adjourned at 2:43 p.m.

RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION



GILLES BLAIS, CHAIRMAN  
CITIZENS' ADVISORY COMMITTEE (CAC)

**CERTIFICATE:**

The undersigned duly qualified and acting Recording Secretary of the River to Sea TPO certified that the foregoing is a true and correct copy of the minutes of the February 17, 2015 regular meeting of the Citizens' Advisory Committee (CAC), approved and duly signed this 21<sup>st</sup> day of April 2015.



PAMELA C. BLANKENSHIP, RECORDING SECRETARY  
RIVER TO SEA TRANSPORTATION PLANNING ORGANIZATION

**Exhibit A**  
**DRAFT Scope of Services**  
**Project Traffic for**  
**Belle Terre Blvd/Pkwy Corridor Study**

**Work Order No.:** ---  
**Financial Project ID No.:** ---  
**Roadway ID:** ---  
**State Road No:** ---  
**Road Name:** Belle Terre Blvd/Pkwy  
**County:** Flagler  
**Project Location:** From SR 5 (US 1) to Pine Lakes Pkwy (south)  
**Begin Milepost:** ---  
**End Milepost:** ---  
**Improvement Type:** ---

**Background**

This scope of service is prepared for providing the City of Palm Coast with a corridor study for use with access management improvements of Belle Terre Blvd/Pkwy between SR 100 (US 1) and Pine Lakes Pkwy (south). The analyses to include:

**Phase One** – The development of Existing Design Traffic Volumes, design characteristics and evaluation of existing operating conditions.

**Phase Two** – This phase of the study entails the development of future traffic forecasts for the existing roadway condition. This study provides an evaluation of the characteristics and operating conditions of the corridor and local facilities during a proposed build year of 2035. Under the future year condition, roadway and intersection improvements will be evaluated to improve safety and operations.

In support of the Belle Terre Blvd/Pkwy Corridor Study, the study limits include the Belle Terre Blvd/Pkwy corridor from SR 5 (US 1) to Pine Lakes Pkwy (south), in Flagler County, Florida. For the purpose of analysis, the following intersections are included:

1. Belle Terre Blvd @ US 1 (**signal**) – four-hour (7 to 9 AM & 4 to 6 PM)
2. Belle Terre Blvd @ Kaywood Pl/Kankakee Trail (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
3. Belle Terre Blvd @ Kathleen Trail (S) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
4. Belle Terre Blvd @ Kathleen Trail (N) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
5. Belle Terre Blvd @ Karas Trail (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
6. Belle Terre Blvd @ Citation Blvd (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
7. Belle Terre Blvd @ Zonal Geranium Trail (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
8. Belle Terre Blvd @ Zonal Geranium Trail (N) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
9. Belle Terre Blvd @ Laguna Forest Trail (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
10. Belle Terre Blvd @ Zinnia Trail (S) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
11. Belle Terre Blvd @ Zinnia Trail (N) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
12. Belle Terre Blvd @ Zaun Trail (stop) - four-hour (7 to 9 AM & 4 to 6 PM)



13. Belle Terre Blvd @ Zebulah's Trail (S) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
14. Belle Terre Blvd @ Zebulah's Trail (N) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
15. Belle Terre Pkwy @ SR 100 (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
16. Belle Terre Pkwy @ Eastwood Dr (stop)- four-hour (7 to 9 AM & 4 to 6 PM)
17. Belle Terre Pkwy @ Eastwood Dr/Market Ave (stop)- four-hour (7 to 9 AM & 4 to 6 PM)
18. Belle Terre Pkwy @ Easthampton Blvd/Central Ave (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
19. Belle Terre Pkwy @ Royal Palms Pkwy (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
20. Belle Terre Pkwy @ Point Pleasant Dr (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
21. Belle Terre Pkwy @ Rymfire Dr (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
22. Belle Terre Pkwy @ Ponce Deleon Dr (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
23. Belle Terre Pkwy @ Pine Grove Dr (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
24. Belle Terre Pkwy @ Whiteview Pkwy (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
25. Belle Terre Pkwy @ Whippoorwill Dr (stop) - four hour (7 to 9 AM & 4 to 6 PM)
26. Belle Terre Pkwy @ Pritchard Dr (stop) - four hour (7 to 9 AM & 4 to 6 PM)
27. Belle Terre Pkwy @ School Entrance (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)
28. Belle Terre Pkwy @ Parkview Dr (S) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
29. Belle Terre Pkwy @ Parkview Dr (N) (stop) - four-hour (7 to 9 AM & 4 to 6 PM)
30. Belle Terre Pkwy @ Pine Lakes Pkwy (**signal**) - four-hour (7 to 9 AM & 4 to 6 PM)

For this project, the following years will be used for Analysis Purposes:

Existing Year	-	2015
Design Year	-	2035

## **Tasks**

The specific tasks for this study are as follows:

### **1. Phase One – Existing Conditions**

#### **Task 1.1: Data Collection**

This task includes the assembly and review of existing traffic count data for intersections, arterial segments and vehicle classification. Thirty (30) four-hour (7 to 9 AM & 4 to 6 PM) intersection traffic counts (to include truck and pedestrian counts) will be conducted at the locations identified above. Existing signal timing data will also be collected and incorporated into the analysis. The City will provide the following traffic counts:

#### **24-hour volume/classification counts will be provided by the City of Palm Coast at the following locations:**

1. Belle Terre Blvd between Citation Pkwy and US 1
2. Belle Terre Blvd between Zaun Trail and Citation Pkwy
3. Belle Terre Blvd between Zebulah's Trail and Zaun Trail
4. Belle Terre Blvd between SR 100 and Zebulah's Trail
5. Belle Terre Pkwy between Easthampton Blvd and SR 100
6. Belle Terre Pkwy between Royal Palms Pkwy and Easthampton Blvd
7. Belle Terre Pkwy between Rymfire Dr to Royal Palms Pkwy

8. Belle Terre Pkwy between Whiteview Pkwy to Rymfire Dr
9. Belle Terre Pkwy between Parkview Drive (S) to Whiteview Pkwy
10. Belle Terre Pkwy between Pine Lakes Pkwy (S) to Parkview Drive (S)

**The following volume/classification counts will be obtained from the latest 2013 Florida Transportation Information (FTI) DVD:**

1. US 1, north of Belle Terre Pkwy (Site: 730101)
2. Citation Blvd., east of Belle Terre Pkwy (Site: 738008)
3. SR 100, west of Belle Terre Pkwy (Site: 730054)
4. SR 100, east of Belle Terre Pkwy (Site: 730002)
5. Easthampton Blvd., west of Belle Terre Pkwy (Site: 738011)
6. Royal Palms Pkwy, west of Belle Terre Pkwy (Site: 738007)
7. Royal Palms Pkwy, east of Belle Terre Pkwy (Site: 738013)
8. Rymfire Dr, west of Belle Terre Pkwy (Site: 738014)
9. Whiteview Pkwy, west of Belle Terre Pkwy (Site: 738016)
10. Pine Lakes Pkwy, west of Belle Terre Pkwy (Site: 738025)

**Task 1.2: Design Characteristics**

Assemble and review existing travel characteristics from the FDOT Roadway Characteristics Inventory (RCI) database that include the FDOT Standard K factor, directional distribution factor (D) and truck factor ( $T_{24}/T_{peak}$ ). Existing travel characteristics ( $D$ ,  $T_{24}/T_{peak}$ ) obtained from the traffic count data collected for this study will be compared to the factors taken from the RCI database. Design characteristics for use in the development of design traffic volumes will be recommended. These design factors will also be used to prepare the operational analysis.

**Task 1.3: Travel Demand Model refinement and validation**

The most recent adopted Central Florida Regional Planning Model (CFRPM) travel demand model will be utilized to determine the projected growth in traffic that will occur under the future conditions. The CFRPM model will be refined and validated in the project subarea to include the study corridor. The validation will be conducted to reflect 2010 base conditions using the latest 2010 Socio-Economic (SE) Data and latest TAZ structure that has been developed as part of 2040 CFRPM update.

The Consultant will review the existing traffic analysis zone (TAZ) structure of the CFRPM for appropriateness in this study, and recommend and implement any changes as needed to ensure the travel demand model is sensitive to the alternatives being evaluated. The Consultant will refine the land use data within these new TAZs through coordination with the County or review of aeriels or other base maps. Local collector facilities and above will also be coded into the model.

The 2010 base model will be validated to traffic counts as available, including parameters such as volume to count ratios and origin destination data. Any changes to Area Type & Facility Type (AT/FT) coding will be coordinated with FDOT staff. If validation cannot be

reached via reasonable modifications of traditional roadway parameters, the Consultant will coordinate with the Department to recommend additional modifications or adjustment factors to be applied to future volume forecasts as appropriate.

**Task 1.4: Develop Existing Design Traffic**

The recommended Annual Average Daily Traffic (AADT) will be developed by adjustment of existing traffic counts with the most current seasonal and axle adjustment factors for the study corridor, if necessary.

**Task 1.5: Quality/Level of Service Analysis**

Existing operational analysis will be performed using the most current adopted procedures outlined in the 2010 Highway Capacity Manual (HCM). Synchro software will be used to evaluate signalized intersections (HCM 2010 procedures) and roadway segments.

**Task 1.6: Crash Data Collection and Summary**

The consultant will obtain the most recent available crash data for a minimum of three (3) years for the study corridor. This information will be provided by Flagler County and include copies of the individual crash report forms where available. The consultant will evaluate the crash information to determine the crash types, crash severities, associated time-periods, and contributing causes. The consultant shall identify pertinent safety recommendations (if needed) for the study corridor.

**2. Phase Two – Future Conditions**

**Task 2.1: Traffic Count Data and Plan Review**

Relevant traffic data from other traffic studies, historic count data, and previous traffic projections will be collected and summarized. This may include FDOT traffic counts, County/City traffic counts, and previous corridor studies, including any current or previous Traffic Studies related to this project.

In addition to the data listed above, the Consultant will collect future land use and transportation plans and the Long Range Transportation Plan (LRTP) from FDOT and the City of Palm Coast.

Based on available traffic count data, the Consultant will prepare trends forecasts for Belle Terre Pkwy/Blvd utilizing the FDOT Trends Tool. Historical growth factors will be developed based on this analysis.

**Task 2.2: Travel Demand Modeling**

The CFRPM validated for this study will be modified to support the evaluation of the future traffic condition of the design year (2035). The Consultant will utilize the latest information and data consistent with Flagler County and the City of Palm Coast to develop a model appropriate for the design year. This model data will be provided by the Department (in the

CFRPM TAZ structure and 2010/2035 horizons) and refined by the Consultant in the study area in consideration of local plans and initiatives identified in Task 2.1 above.

The future conditions model will be utilized to code the existing condition and develop model-based growth projections for the design year/scenario. These model forecasts will be prepared for regional and local facilities as appropriate based on the alternative context.

### **Task 2.3: Growth Rate Recommendations**

Demand volume and growth projections based on the trend analysis will be compared to the growth projection based on the travel demand modeling analysis and growth rate based on BEBR population estimates. A preferred growth method will be determined for each alternative, including manual methods or adjustments as appropriate, for regional and local facilities.

### **Task 2.4: Develop Design Traffic Forecasts**

Future design AADT and intersection AM and PM hourly demand volumes will be prepared for design year 2035 based on the preferred growth method determined and utilizing the approved design characteristics.

### **Task 2.5: Quality/Level of Service Analysis**

Future operational analysis for the existing (No build) and improved conditions in the design year will be prepared using Synchro software (HCM 2010 procedures).

The purpose of this task is to provide support to the City with queue length coordination, and development of operational geometries. Additionally, the study will determine the operational level of service for the design year (2035) traffic conditions.

Recommended improvements to the corridor will be based on results of this analysis. For the purposes of presenting recommended improvements, unsignalized intersections may be grouped according to common needs. Signalized intersections shall be addressed individually, and shall include consideration of need for additional turn lanes and queue lengths for all turn lanes.

## **3. Deliverables**

### **Task 3.1: Relevant Project Data**

- Traffic count data files/documentation
- Existing design AADT and intersection turning movement counts/estimates
- Future year AADTs and peak hour intersection turning movement volumes
- Priority of improvements

### **Task 3.2: Reports**

For this study, the Consultant will provide the City with an electronic draft copy of the Technical Memorandum, One (1) final signed and sealed copy of the Technical Memorandum and one (1) CD-ROM, to include separate existing conditions and future conditions reports.

Draft Report Due Date: ---- 90 days from Notice to Proceed

Final Report Due Date: ---- 3 weeks from receiving the comments on the Draft Report

## **4. QA/QC**

### **Task 4.1: QA/QC**

Throughout this project, the Consultant will ensure the accuracy of all products submitted to the Department with the Consultant's Quality Assurance/Quality Control Procedures.

QA/QC final review will be annotated on the Consultant's Letter of Transmittal, in the remarks section, that the final product(s) have been reviewed for quality assurance and were found to meet the Department's quality standards. The reviewer will initial their approval prior to final delivery.

## **5. COORDINATION**

### **Task 5.1: Project Coordination**

Throughout the study, key Consultant staff will be available to meet and discuss project-related issues. It is anticipated that two (w) technical meetings with the Cities project manager will be required.

Additionally, the Consultant will schedule a meeting with FDOT for the review and discussion/approval at *each* of the following task **milestones**;

- (Task 1.2) Design Characteristics
- (Task 1.3) Model Development & Validation
- (Tasks 2.4 & 2.5) Develop Design Traffic Forecasts (AADT) & Future QLOS
- (Task 3.2) Draft Report Review

**Manhour and Fee Estimate**

WPI NO.: N/A  
 FINANCIAL ID NO.: N/A  
 TYPE PROJECT: N/A  
 CONTRACT NO.: N/A  
 SUBCONSULTANT NAME: GMB ENGINEERS & PLANNERS, INC.  
 SUBCONSULTANT PHONE NO.: (407) 898-5424 x.203  
 GMB PROJECT NO.: 13-094.02

PROJECT NAME: Belle Terre Blvd Corridor Study  
 Limit - From: Pine Lakes Pkwy (S)  
 Limit - To: US 1  
 County: Flagler

Project Mgr: Babujil Ambikapathy, P.E., AICP  
 Fax No.: (407) 898 5425

Task No.	Task Description	Project Manager \$ 208.24	Project Engineer \$ 132.84	Traffic Engineer \$ 110.59	Traffic Analyst \$ 93.92	Traffic Technician \$ 58.99	Clerical \$ 58.25	Total Hours by Task	Salary Cost by Task	Average Rate per Task
<b>1 Phase One - Existing Conditions</b>										
1.2	Design Characteristics	1	0	2	16			19	\$ 1,932.14	\$ 101.69
1.3	Travel Demand Model refinement and validation	1	18	50				69	\$ 8,128.86	\$ 117.81
1.4	Develop Existing Design Traffic			8	8			16	\$ 1,636.08	\$ 102.26
1.5	Quality/Level Of Service Analysis (30 intersections)			8	30			38	\$ 3,702.32	\$ 97.43
1.6	Crash Data Collection & Summary		5	10		20		35	\$ 2,949.90	\$ 84.28
<b>2 Phase Two - Future Conditions</b>										
2.1	Traffic Count Data & Plan Review			4	10			14	\$ 1,381.56	\$ 98.68
2.2	Travel Demand Modeling (future condition)	1	4	6	20			31	\$ 3,281.54	\$ 105.86
2.3	Growth Rate Recommendations	1	4	5	4			14	\$ 1,668.23	\$ 119.16
2.4	Develop Design Traffic Forecasts (future condition)	1	2	12	12			27	\$ 2,928.04	\$ 108.45
2.5	Quality/Level of Service Analysis (future condition for 30 intersections)	0	1	24	80			105	\$ 10,300.60	\$ 98.10
3	Deliverables including Report	4	4	8	16	20	6	58	\$ 5,281.06	\$ 91.05
4	QA/QC	4	8					12	\$ 1,895.68	\$ 157.97
5	Coordination (Attending 2 meetings)	6	6					12	\$ 2,046.48	\$ 170.54
<b>TOTALS</b>		<b>19</b>	<b>52</b>	<b>137</b>	<b>196</b>	<b>40</b>	<b>6</b>	<b>450</b>	<b>\$ 47,132.49</b>	<b>\$ 104.74</b>
		4.2%	11.6%	30.4%	43.6%	8.9%	1.3%	100.0%		

1.1 Traffic Counts  
 Traffic Counts - 2 Hour (7 AM to 9 AM) TMC Ped/Bikes (30 Units) - 1 Enumerator at a unit price of \$617.95; **\$18,538.50**  
 Traffic Counts - 2 Hour (4 PM to 6 PM) TMC Ped/Bikes (30 Units) - 1 Enumerator at a unit price of \$617.95; **\$18,538.50**

<b>GRAND TOTAL</b>		<b>\$84,209.49</b>
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