

## EXECUTIVE SUMMARY

**Recommendation to approve the East of CR951 Bridge Reevaluation Study, direct staff to design and construct the five (5) recommended bridges and continue public engagement with the impacted residents through the design and construction process.**

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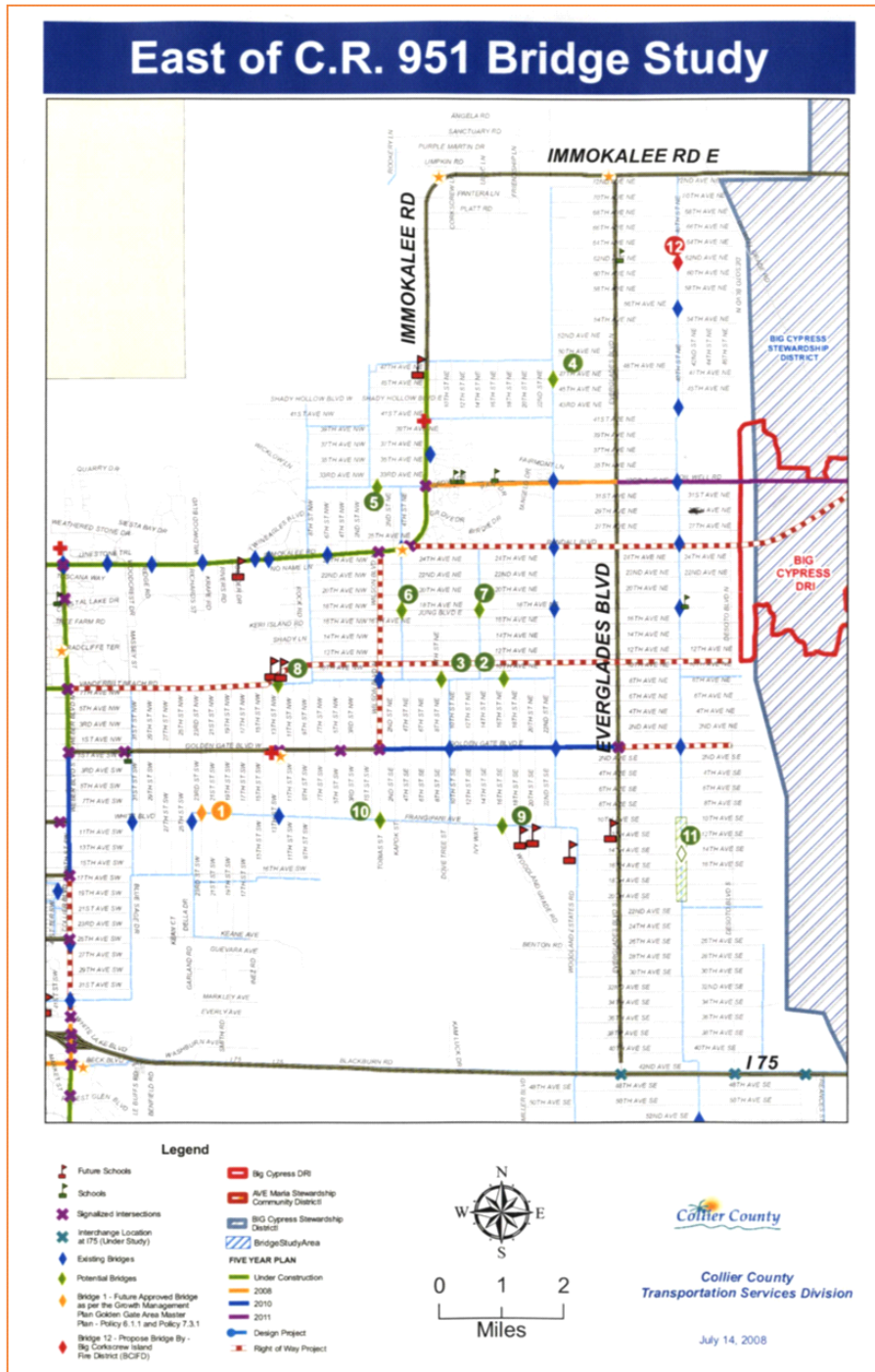
**OBJECTIVE:** To confirm the importance of the missing bridge connections in the network of Golden Gate Estates roadways based on system-wide infrastructure needs and recommend the construction of five (5) priority locations.

**CONSIDERATIONS:** In August 2008, Collier County completed the East of 951 Horizon Study for Bridges (2008 Study) in order to evaluate the opportunities to construct the missing bridge connections in the network of Golden Gate Estates roadways based on system-wide infrastructure needs. The study's stakeholders identified 12 preferred canal-crossing locations and ranked the bridges based on criteria related to emergency response, service efficiency and mobility (**Table 1 & Figure 1**).

**TABLE 1: 2008 Bridge Locations**

<b>2008 Study Bridge Ref. #</b>	<b>Bridge Locations</b>
1	23rd St. SW (south of Golden Gate Blvd.)
2	16th St. NE (north of Golden Gate Blvd.)
3	8th St. NE (north of Golden Gate Blvd.)
4	47th Ave. NE (between Immokalee Rd. & Everglades Blvd.)
5	Wilson Blvd. N (south of 33 <sup>rd</sup> Ave. NE)
6	18th Ave. NE (between Wilson Ave. & 8th St. NE)
7	18th Ave. NE (between 8th St. NE & 16th St. NE)
8	North End of 13th St. NW (north of Golden Gate Blvd.)
9	16th St. SE (south of Golden Gate Blvd.)
10	Wilson Blvd. S (south of Golden Gate Blvd.)
11	10th Ave. SE (between Everglades Blvd. & Desoto Blvd.)
12	62nd Ave. NE (between Everglades Blvd. and 40 <sup>th</sup> St. NE)

**FIGURE 1: 2008 Bridge Locations**



Based on funding allocations in the County’s work program at the time of the 2008 Study, Bridge #1 was to be constructed as part of the White Blvd. Bridge replacement project (ultimately, Bridge #1 was not included in the project and never constructed). Following Bridge #1, the 2008 Study prioritized Bridges #2 (16th St. NE) and #3 (8th St. NE) as the next highest unfunded priorities in the first tier. The next tier

of priorities included Bridges #4, #5, #6 and #7. The last tier included bridges #8, #9, #10, #11 and #12, with a recommendation to consider constructing them as funding became available. Bridge # 3 (8<sup>th</sup> Street NE) was constructed in 2019 by the Florida Department of Transportation (FDOT).

In 2018, the Board, voted to place a one-cent infrastructure sales surtax referendum on the General Election ballot. The referendum was approved by voters and collection began January 1, 2019. The remaining 11 bridges were identified in the referendum to receive proceeds from the sales surtax. On December 2, 2020, Bridge # 2 (16<sup>th</sup> St. NE) was validated by the Infrastructure Sales Surtax committee for expenditure of Surtax proceeds. It is anticipated that Bridge # 2 (16<sup>th</sup> St. NE) will be constructed with a combination of FDOT funding and Surtax proceeds.

The remaining 10 bridges are the subject of this follow-up 2020 Reevaluation Study (**Table 2**).

**TABLE 2: 10 Remaining Bridge Locations**

<b>Bridge#</b>	<b>Bridge Locations</b>
<b>1</b>	23rd St. SW (south of Golden Gate Blvd.)
<b>4</b>	47th Ave. NE (between Immokalee Rd. & Everglades Blvd.)
<b>5</b>	Wilson Blvd. N (south of 33rd Ave. NE)
<b>6</b>	18th Ave. NE (between Wilson Ave. & 8th St. NE)
<b>7</b>	18th Ave. NE (between 8th St. NE & 16th St. NE)
<b>8</b>	North End of 13th St. NW (north of Golden Gate Blvd.)
<b>9</b>	16th St. SE (south of Golden Gate Blvd.)
<b>10</b>	Wilson Blvd. S (south of Golden Gate Blvd.)
<b>11</b>	10th Ave. SE (between Everglades Blvd. & Desoto Blvd.)
<b>12</b>	62nd Ave. NE (between Everglades Blvd. and 40th St. NE)

In 2019, Collier County’s Transportation Planning Team began a review of the 2008 Study to confirm the validity of the remaining 10 recommended bridge locations.

Stantec Consulting Services Inc. was hired to assist with the Reevaluation Study. They were directed to focus on the same criteria in the original study, e.g., reducing travel/response times, improving connectivity, and establishing more evacuation routes in the Golden Gate Estates Area.

Recent interviews with the public service agencies reconfirm the continued validity of the specific bridge locations originally identified, studied, and vetted in 2008. To quantify the expected benefits, a geographic information system (GIS) application was used to identify and measure travel distances along typical travel routes with and without the new bridges. Additionally, the existing and proposed residential parcels within areas that could be reasonably expected to benefit from the new bridges for each trip purpose were identified and quantified. Following the GIS-based data and analysis, a public outreach effort was initiated to engage directly with the residents/landowners that would be directly affected by the new bridges.

The study findings generally support the original expectations concerning savings related to emergency vehicle response time and residents route choice options. While the general benefits are easily understood, the Study did consider that there are negative impacts to existing/future residents. The Technical Memorandum attached describes the methodology and analysis used to evaluate each bridge location. In summary, the benefits in trip length reduction accruing in the “primary” category of trip purposes (i.e., fire,

Emergency Medical Services, law enforcement) parcels that directly benefit from a new bridge were differentiated from the benefits that accrue in the “secondary” categories (e.g., access to the network, schools, parks, etc.) that are perceived as being less important based on feedback from those attending the neighborhood meetings.

Comparing the relative positive and negative values resulted in either a recommended “build” or “defer - no build at this time” recommendation.

Following the public information meetings and subsequent analysis, the team discussed the merits of each bridge with the first responding agencies. In a letter dated November 12, 2020 Collier County EMS Chief Tabatha Butcher stated that she was in support of the bridges located at 10<sup>th</sup> Ave. SE; 13<sup>th</sup> St. NW; 47<sup>th</sup> Ave. NE; 62<sup>nd</sup> Ave. NE; and Wilson Blvd. S. In a memorandum dated December 7, 2020, the Greater Naples Fire and Rescue District indicated that the bridge located at 10<sup>th</sup> Ave. SE was an important bridge location; the bridge at Wilson Blvd. S. was a good location and so was the bridge at 13<sup>th</sup> Ave. NW, as long as there was no restricted access to VBR Ext. which could reduce response times. Correspondence from the North Collier Fire Control and Rescue District indicated that the Bridges at 47<sup>th</sup> Ave. NE and 62<sup>nd</sup> Ave. NE were important for response times. All agency comments related to support for each recommended bridge is also included in the report.

Based on this evaluation of benefits and negative impacts, staff recommends the Board approve the East of CR 951 Bridge Re-Evaluation Study and direct staff to proceed with design and construction including public engagement with the impacted residents, of the following five bridges: 10<sup>th</sup> Ave. SE; 13<sup>th</sup> St. NW; 47<sup>th</sup> Ave. NE; 62<sup>nd</sup> Ave. NE; and Wilson Blvd. S.

This item was presented to the Board on February 9, 2021 and was continued to allow for additional data collection. The Board requested a traffic analysis be performed to estimate the amount of traffic that would likely use the streets improved with new bridge/canal crossings. A traffic analysis was performed for the five (5) recommended bridges. The analysis used existing traffic volumes and analyzed the geographic limits of the areas surrounding the proposed bridges. This analysis determined potential new bridge route usage. Then, an estimate of the potential new traffic impacts to existing and future residents along the corridors leading to the proposed bridges were developed.

A complete analysis of the current traffic conditions at the five (5) recommended bridge locations as well as the impacts at build-out (B/O) are included in the Traffic Analysis Technical Memorandum attached. A summary of the existing and estimated traffic volumes is included in the **Table 3** below. The table summarizes the average daily trips (ADT) as well as the peak hour peak direction (PkJr PkDir) volume.

**TABLE 3: Existing and Estimated Traffic Volume With and Without Bridges**

		A		B		C		D		E		
		Existing Conditions		Build-out / No Bridge		Existing Dwelling Units / With Bridge		Build-out / With Bridge		First Responder Response Reductions		
Crossing #	Crossing Location	Existing ADT	Existing PM PkHr PkDir	ADT	PM PkHr PkDir	ADT	PM PkHr PkDir	ADT	PM PkHr PkDir	Trip Purpose	% Reduced	Minutes Saved
11	10th Ave. SE	294	20	483	33	840	58	2,254	156	Fire	16%	3.0
										CCSO	64%	4.4
										EMS	16%	2.5
8	13th St. NW	404	25	487	30	404	25	2,432	120	Fire	75%	7.1
										CCSO	59%	4.8
										EMS	75%	6.1
4	47th Ave. NE	2,397	157	4,508	246	4,105	283	8,400	533	Fire	4%	0.4
										CCSO	41%	5.6
										EMS	40%	3.0
12	62nd Ave. NE	140	10	434	32	756	56	2,800	206	Fire	54%	6.3
										CCSO	20%	2.3
										EMS	54%	5.4
10	Wilson Blvd. S	297	23	441	39	458	36	945	76	Fire	25%	2.4
										CCSO	39%	1.6
										EMS	25%	2.0

The Existing Conditions (column A) include the current traffic volumes on the corridor. The Build-Out (B/O)/No Bridge (column B) are estimates of what the traffic volumes would be if a residential unit were built on every vacant parcel and no bridge were constructed. Existing Dwelling Unit (DU) with Bridge (column C) looks at the existing traffic and anticipates what additional traffic will choose to redirect their trip to use the new bridge and improved streets. This is the anticipated traffic for the bridge locations after construction. The estimation is based on the current (existing) dwelling units likely to change travel routes and current traffic. The next set of columns includes the estimated B/O with the Bridge construction. Column (D) anticipates that increase in trips based on construction of a residential unit on every vacant parcel and taking into consideration the likely change to travel routes following the construction of the bridges.

It should be noted the bridges do not increase total trips on the network, rather the bridges permit an expanded route choice and therefore while routes along the new bridge locations may see an increase in traffic, other routes currently traveled will see less traffic. This has been demonstrated for bridges locations on 10<sup>th</sup> Ave. SE, 47<sup>th</sup> Ave. NE, and 62<sup>nd</sup> Ave. NE where new “bridge routes” offer clear route choice advantages for motorists and first responders.

The last column in the table above, includes a summary of the first responder response reductions. The original considerations of the study were to reduce response times for first responders, improve connectivity and improve evacuation routes. The primary consideration of this reevaluation study is the reduced response times as well as the overall health, safety and welfare of the residents.

Based on the additional traffic analysis regarding the bridge locations, the East of CR 951 Bridge Reevaluation Study which included analysis of benefits and impacts to the bridge locations and the reduced response times, staff is continuing to recommend that the Board approve the study and proceed with the five (5) bridge locations for design and construction and continued public engagement. The five (5) bridges

are listed in Table 4 below and are as follows: 10<sup>th</sup> Ave. SE; 13<sup>th</sup> St. NW; 47<sup>th</sup> Ave. NE; 62<sup>nd</sup> Ave. NE; and Wilson Blvd. S.

**TABLE 4: 5 Recommended Bridge Locations in Alpha/Numeric Order**

Bridge#	Bridge Locations
11	10th Ave. SE (between Everglades Blvd. & Desoto Blvd.)
8	North End of 13th St. NW (north of Golden Gate Blvd.)
4	47th Ave. NE (between Immokalee Rd. & Everglades Blvd.)
12	62nd Ave. NE (between Everglades Blvd. and 40 <sup>th</sup> St. NE)
10	Wilson Blvd. S (south of Golden Gate Blvd.)

The additional analysis of project timing and scheduling was reviewed with the understanding that as projects are completed in the Golden Gate Estates area, additional travel options are created. Table 5 below depicts the planned project timing of the 5 recommended bridge crossing locations.

**TABLE 5: Planned Project Timing of Bridge Crossing Locations**

Crossing #	Crossing Location	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
#11	10th Ave. SE		Design		Construction		
#8	13th St. NW		Design		Construction		
#4	*47th Ave. NE			Design	ROW		Construction
#12	62nd Ave. NE			Design	ROW		Construction
#10	Wilson Blvd. S			Design	ROW		Construction

\* 47th Ave. NE construction will not begin until VBR Ext. 16th to Everglades Blvd. construction is completed.  
 Note - FY listed is the anticipated year for phase to begin.

**FISCAL IMPACT:** Estimates for the project range from \$21.7 Million to \$37.8 Million depending on final project limits, intersection improvements and right-of-way acquisition costs. The Board will have the opportunity to approve funding allocations as the project progresses. The anticipated source of funding for these bridges is: Infrastructure Sales Surtax (\$29.9 Million with validation from the Infrastructure Sales Surtax Oversight Committee), Florida Department of Transportation funding and/or gas tax.

**GROWTH MANAGEMENT IMPACT:** These transportation infrastructure improvements are consistent with Objective 5.2 of the Rural Golden Gate Estates Sub-Element of the Growth Management Plan to increase linkages within the local road system for the purposes of limiting traffic on arterials and major collectors within Rural Golden Gate Estates, shortening vehicular trips, and increasing overall road system capacity.

**LEGAL CONSIDERATIONS:** This item is approved as to form and legality and requires majority vote for approval. - CMG

**RECOMMENDATION:** To approve the East of CR 951 Bridge Re-evaluation Study and direct staff to proceed with design and construction including public engagement of the impacted residents of the following 5 bridges: 10<sup>th</sup> Ave. SE; 13<sup>th</sup> St. NW; 47<sup>th</sup> Ave. NE; 62<sup>nd</sup> Ave. NE; and Wilson Boulevard S.

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