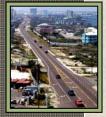
### Florida Department of Transportation, District 3 Alternative Corridor Evaluation Process September 28, 2017







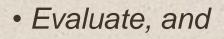




**Efficient Transportation Decision Making** 

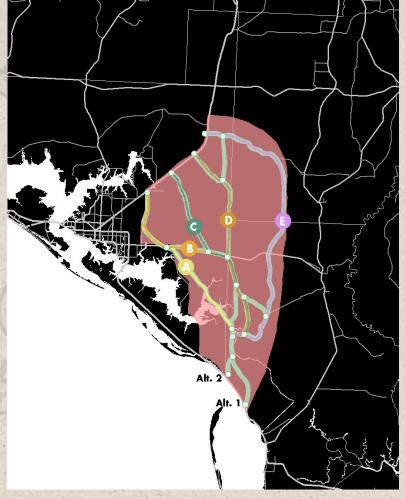
FDOT uses on qualifying projects prior to the PD&E phase to:

• Identify,





• Eliminate alternative corridors





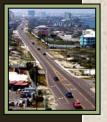
The decisions made in ACE can be used to :

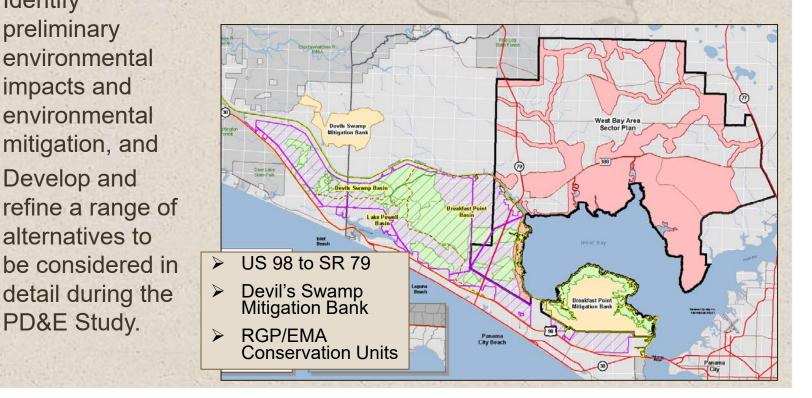
- Refine the purpose and need for a project,
- Determine the project area,

PD&E Study.

- Define general travel modes or corridors,
- Describe general environmental setting for a project,
- Identify preliminary environmental impacts and environmental **Develop** and





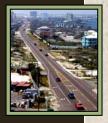


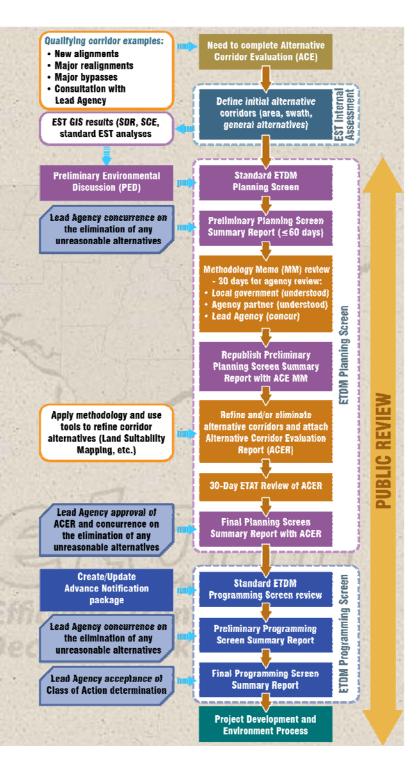
 The District uses the ACE process for EIS, EA, and sometimes SEIR



# Projects that qualify for the ACE process include:

- New alignments
- Major realignments
- Major bypasses
- Other alignments based on consultation with OEM











leed to complete Alternative Corridor Evaluation (ACE)

Efficient Transportation

Decision Makine

# Alternative Corridor Evaluation (ACE) Process



### Need to complete Alternative Corridor Evaluation (ACE)





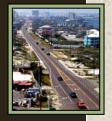
Define initial alternative corridors (area, swath, general alternatives)

Efficient Transportati

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Define initial alternative corridors (area, swath, general alternatives)



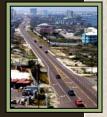
Standard ETDM Planning Screen Standard ETDM Planning Screer

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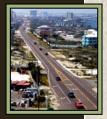
ining Sera











Methodology Memo (MM) review
- 30 days for agency review:
Local government (understood)
Agency partner (understood)
Lead Agency (concur)

ethodology memo (MM) review - 30 days for agency review: Local government (understood) Agency partner (understood) Lead Agency (concur)

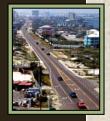
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Refine and/or eliminate alternative corridors and attach Alternative Corridor Evaluation Report (ACER)

Refine and/or eliminate Iternative corridors and attach Iternative Corridor Evaluation Report (ACER)

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Need to complete Alternative Corridor Evaluation (ACE)

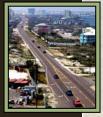
# Identify Need to Complete ACE

 MPO/TPO LRTPs, Rural County Master Plans, and FDOT SIS Plan identify corridor improvement needs





Considering project characteristics and potential public controversy, a determination is made if corridor evaluation would support decisions about advancing a project to a CF Plan or adopted Priority List



ACE process or non-ACE process Planning Screen reviews

# Define Initial Alternative Corridors

- Reasonable range of alternative corridors
- Can range from:
  - swaths
  - broad corridors
  - narrow alignments
  - Consistent naming from ACE to PD&E phase
- Consider any initial corridor alternatives from previously completed planning activities
  - Can add corridors after consideration of known environmental issues, ETAT comments, and ability of the corridor to meet purpose and need
  - Consideration of alternative transportation modes, particularly in urban areas





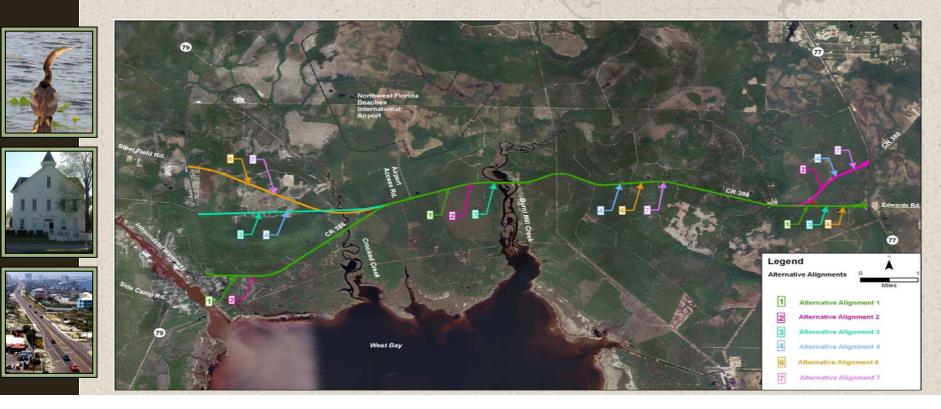


Define initial alternative corridors (area, swath, general alternatives)

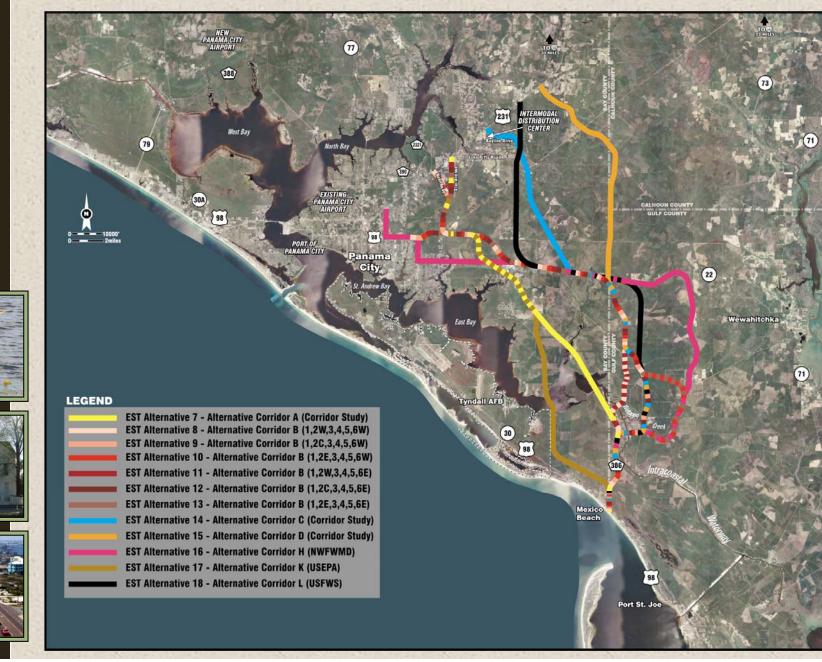
## **Define Initial Corridors**

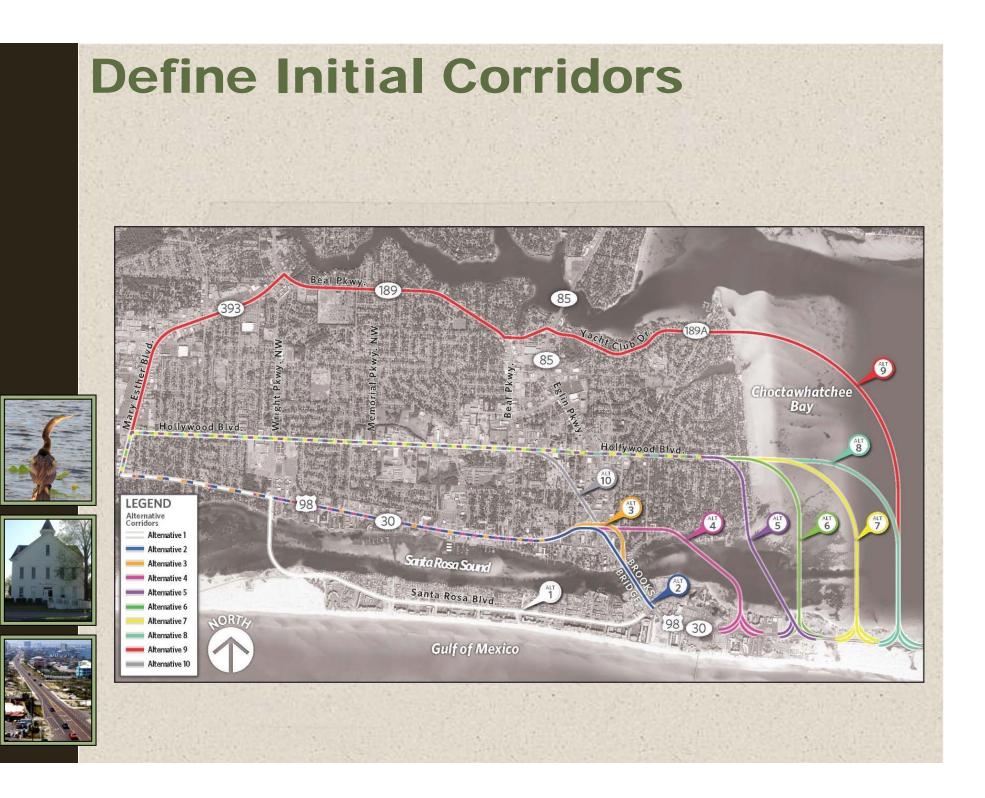
### Land Suitability Mapping process

- Can be used to help identify potential locations for preliminary corridors within the study area. This process is intended to supplement the ETDM EST GIS analysis.
- By identifying the locations of the most sensitive social, cultural, natural and physical environmental resources, corridors were aligned to minimize involvement with these resources while meeting the engineering criteria.

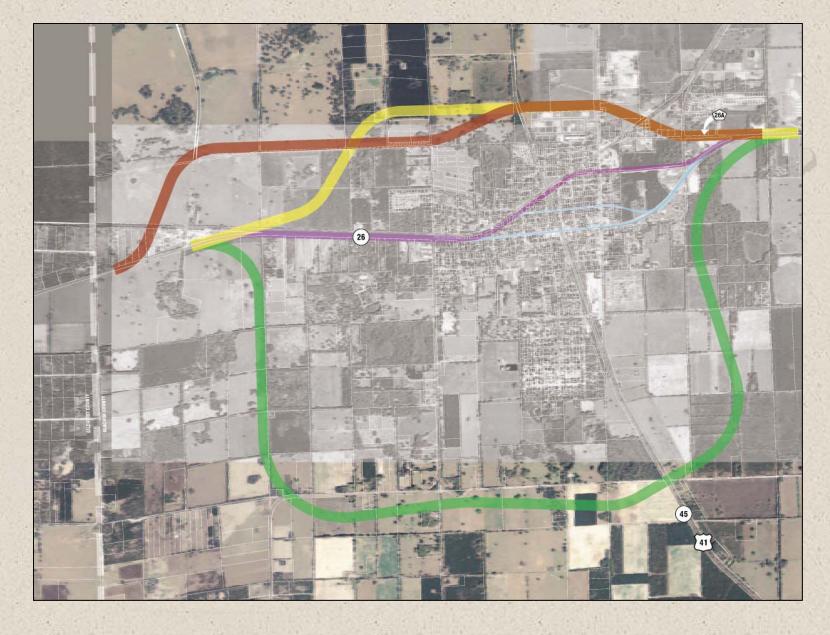


### **Define Initial Corridors**



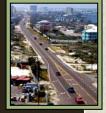


### **Define Initial Corridors**









# Standard ETDM Screening

- Project will be screened through the Planning or Programming Screen
- ETAT will review all alternatives and provide comment
- Comments that identify issues specific to each alternative and identify favorable and non-favorable alternatives with reasoning is very helpful in the ACE process

"All proposed alternatives, except Alternative 8, result in seagrass impacts and would be opposed by NMFS."

"Comparing this alternative to the other nine alternatives, this alternative would rank 8th in the consideration of wetlands and surface water resource." Standard ETDM Planning Screer

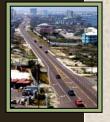
# Develop Methodology Memorandum

- Methodology Memorandum (MM) is a technical document which :
  - Describes the goals of the ACE
  - Identifies alternative corridors
  - Details the data and procedure the District will use to develop, evaluate, and screen alternative corridors

30 days for agency

ncy partner (understood)

- MM also details the process, including public involvement, and criteria that form the basis for decision-making
- ETAT reviews, comments, and agrees on the MM in the EST



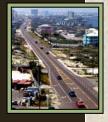
OEM concurs with the MM after the ETDM comment period

### **Refine Corridors**

- Evaluate corridors using criteria established and agreed upon in the MM
- Refine corridors to avoid potential effects considering the corridor vision, purpose and need, and potential environmental effects







	CORRIDORS								
COMPARISON CATEGORY		Existing SR 292		River Road		Ono Island		Innerarity Poir / Canal Road	
SOCIAL ENVIRONMENT	Quantity	Rank	Quantity	Rank	Quantity	Rank	Quantity	R	
Local Government Planning Consistency Miles of non-arterial road adjacent to incompatible (residential and recreational) zoning (p. 35)	0.0	1	3.2	2	\$5	3	7.6		
Mobility Miles existing roadway classification not "Arterial" (p. 39)	0.0	1	1.8	2	5.6	3	- 6.8	14	
Community Cohesion Miles of corridor adjacent to residential zoning (p. 40)	2.1	1	3.5	2	5.5	3	7.6	1	
Potential Relocations Residential and commercial/public relocations (p. 42)	0	1	6	2		3	10	1	
Pight of Way Miles of road where right-of-way is required (p. 43) Visual/Aesthetics	0.1	1	2.4	2	53	- 4	4.9	1	
Visual/Aesthetics Miles of non-arterial road adjacent to residential zoning (p. 44) Visual/Aesthetics	0.0	1	1.7	2	55	3	76	- 4	
Value Aestherics New high level bridge crossings in viewshed (p. 44) CULTURAL RESOURCES	0	1	1	2	1	2	- t-		
Historic R esources	1.1	1							
Miles in or adjacent to moderate to high probability areas (p. 45) Recreation, Preservation, Conservation	0.0	1	1.6	2	5.8	4	53		
Acres direct involvement (p. 49) Section 4(f)	0.0	1	22.0	4	0.0	3	0.0		
Acres direct involvement with potential 4[f] resources (p. 52) Section 4(f)	4	3	- 1	2	1	1		14	
Potential Section 4(f) properties adjacent to corridor (p. 52) NATURAL ENVIRONMENT				~		- 1			
Water Qual Ity Feet of structure over water (p. 53)	2,162	1	2,762	2	(9,111)	4	6,824		
Water Quality Miles of corridor adjacent to 303d waterbody (p. 53)	0.8	1	0.8	1	0.8	1	45	1	
Outstanding Waters (Florida and Alabama) Acres of right-of-way acquired from OFW/OAW (p. 56)	0.0	1	22.0	-4	0,0	1	0,0		
Essential Fish Habitat Acres of structure over designated Essential Fish Habitat (p. 57)	1.7	1	2.5	2	16.9	4	15.1	3	
Seegrass Impacts Acres of structure over seagrass beds (p. 57) PRBM Critical Habitat	0.0	1	0.0	1	0,5	- 4	0,1	2	
Acres PKBM critical habitat impacted without mitigation (p. 60) PHYSICAL ENVIRONMENT -	11.2	3	22.8	-4	0.0	1	0.0	- 53	
Noise Noise Miles of cerridor in residential zoning (p. 62)	2.1	1	3.5	2	5.5	3	7.6		
Navigation New or widened structures over navigable waters (p. 62)	1	1	2	3	3	4	1		
COST. OPERATION		1							
Cost Total road and bridge cost in millions (p. 65)	548.7	2	\$41.0	1	\$73.2	3	580.5	- 2)	
Constructability Miles of corridor through developed areas (p. 66)	5.6	2	3.8	-11	6.0	3	10.5	23	
Traffic Operations Number of named intersections within corridors (p. 67)	12	2	10	1	23	3			

REST

Refine and/or eliminate alternative corridors and attach Alternative Corridor Evaluation Report (ACER)

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### **Refine Corridors**

		ALTERNATIVE	ALTERNATIVE	ALTERNATIVE	ALTERNATIVE	ALTERNATIVE	ALTERNATIVE	ALTERNATIVE	ALTERNATIVE
20- 10 July		1	2	3	4	5	6	7	8
194 M - 24 (1)	Total Acres	746	1038	1024	1190	1458	1074	1224	1484
1.	Total Length (Miles)	12	12	12	12	12	12	12	12
all for the	Historical Structures	1	1	0	0	0	0	0	0
	Social Impacts	1	1	0	0	0	0	0	0
Г	Low Quality (Acres)	340	410	374	372	392	396	392	414
Wetlands	Medium Quality (Acres)	16	28	18	29	87	31	43	103
wettanus	High Quality (Acres) <b>Total Acres</b>	62 <b>418</b>	139 <b>577</b>	111 <b>503</b>	171 <b>573</b>	284 <b>763</b>	155 <b>583</b>	1     43     103       55     210     320       33     645     838       0     0     0	
Habitat	Priority 1 (Highest) (Acres) Priority 2 (Acres) Priority 3 (Acres) Priority 4 (Acres) Priority 5 (Lowest) (Acres)	0 20 45 468 62	0 285 90 581 62	0 379 58 535 46	0 506 103 529 46	0 463 149 740 107	0 341 125 530 73		
	- Total Acres		1018	1018	1184	1458	1068	1218	1484
The second se	Floodplains (Acres) Endangered Species ation Impacts (Acres)	163 0 111	298 0 147	222 2 173	316 2 299	478 0 509	233 2 207	323 2 207	<b>482</b> 0 496
	adway Cost (millions)	\$205	\$205	\$197	\$197	\$197	\$205	\$205	\$204

**Decision Making** 





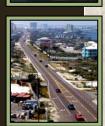
E

# **Prepare Alternative Corridor Evaluation Report**

 Alternative Corridor Evaluation Report (ACER) summarizes the alternative corridors analysis and documents the alternatives that are eliminated or carried forward to the PD&E Study



ETAT reviews ACER in the EST to acknowledge understanding of the ACER and submit comments



OEM approves ACER after the ETDM comment period

SANTA ROSA SOUND ALTERNATE CROSSING STUDY



### ALTERNATIVE CORRIDOR SUMMARY REPORT

Santa Rosa Sound Alternate Crossing Study

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, corried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C \$327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT.



<sup>-</sup>M No. 415474-4-22-01 <sup>-</sup>ederal Aid Project No. TBE ETDM No. 14236 This planning product may be adopted into the environmental review process, pursuant to Title 23 USC \$ 168(4)(d) of the state project development process.

### September 2017

Prepared for: Florida Department of Transportation District 3 1074 Highway 90 Chipley, FL 32428

## **Prepare Alternative Corridor Evaluation Report**

ALTERNATIVE CORRIDOR EVALUATION REPORT

SANTA ROSA SOUND

### 8.2 Corridor Alternative 2

### 8.2.1 Corridor Analysis Results

Alternative 2 ranked fifth out of the ten corridors in terms of overall corridor performance. Alternative 2 is the second best performing alternative that utilizes the existing Brooks Bridge crossing, and the least costly to construct at \$134.9M. However, it is not among the best options for reducing traffic congestion in the downtown core (ranking 5th out of 10 for traffic performance). Corridors 2, 3, and 4 would utilize existing SR 30/US 98 to move traffic between the project limits, shifting traffic flow around the downtown core. The advantages and disadvantages from the Alternative 2 corridor analysis are summarized in Figure 8-2.

### 8.2.2 Public Feedback

Public input was very limited with respect to Alternative 2 and did not provide a clear message either in support of, or opposition to. Alternative 2, Without specific reference to Alternative 2, some representatives of the Stakeholder Advisory Group and members of the public were very much opposed to any option that would eliminate the Publix grocery store. However, the Chamber of Commerce generally supports options that re-route traffic around the core of downtown. That viewpoint, however, is not universally shared by all of the downtown Merchants Association.

### 8.2.3 Agency Feedback

Following the September 20, 2016 Alternatives Public Meeting, the City of Fort Walton Beach passed a Resolution 2016-19 on October 11, 2016 supporting Corridor Alternative #2. Meeting minutes from the City reflect that the City Manager advised that Alternative 2 is the one preferred by City Staff, which would utilize the existing alignment of Brooks Bridge and route through traffic around the Heritage Park and Cultural Center, followed by Alternative 10, which also utilizes the existing alignment of Brooks Bridge but routes through traffic to Hollywood Boulevard. Council discussed their preference for Alternative 2 and directed that only that alternative be included in the resolution. The vote on the motion to adopt Resolution 2016-19 as amended, to include support of only the Corridor Alternative #2, carried unanimously.

In the ETDM screening of the Corridor Alternatives, the State Historic Preservation Officer voiced concern over this route due to potential impacts on the Fort Walton Mound which was listed on the National Register of Historic Places in 1966, and is designated as a National Historic Landmark. However, other resource agencies (EPA and NMFS) strongly favored the options that would not construct a new bridge crossing.

#### 8.2.4 Conclusion

After considering the results of the corridor analysis, along with public and agency feedback, Alternative 2 was determined to be not feasible, but could be further evaluated following completion of the City of Fort Walton Beach Master Plan



FM No: 415474-4-22-01

8-6

ALTERNATIVE CORRIDOR EVALUATION REPORT

SANTA ROSA SOUND

Figure 8-2 | Alternative 2 Corridor Evaluation Summary



### ALTERNATIVE 2

Disadvantages

and pedestrian facilities

· Minimal improvement to safety

resources

· Provides the least improvement to transit, bike

· Highest impact to historical and archaeological

### Advantages

- · Lowest overall estimated cost
- · Lowest impact to community cohesion
- · Lowest impact to neighborhoods
- · Lowest impact to water quality
- · Lowest impact to essential fish habitat (gulf
- sturgeon)
- · Lowest impact to wildlife and habitat
- Lowest impact to Gulf Islands National Seashore
- Lowest impact to navigation (utilizes the proposed Brooks Bridge Replacement bridge)
- · Lowest mitigation cost
- · Best in terms of overall engineering analysis

#### FM No: 415474-4-22-01

8-7



## **Prepare Alternative Corridor Evaluation Report**

ALTERNATIVE CORRIDOR EVALUATION REPORT

SANTA ROSA SOUND

### 8.7 Corridor Alternative 7

### 8.7.1 Corridor Analysis Results

Alternative 7 tied for first out of the ten corridors in terms of overall corridor performance. Corridors 5, 6, 7, 8, and 10 would shift traffic patterns to Hollywood Boulevard. The change of traffic pattern would be beneficial in terms of reducing traffic congestion in the downtown core and would provide an alternate parallel path for traffic movement, but would substantially increase traffic along a corridor that contains more residential and school uses. Conversely, however, it would also provide benefit to the small-scale commercial development in terms of increased traffic flow. The advantages and disadvantages from the Alternative 7 corridor analysis are summarized in Figure 8-7.

### 8.7.2 Public Feedback

#### Public input was more defined for Corridor Alternative 7:

- Twenty-five (25) respondents agreed with the recommendation to further study Alternatives 7 and 10,
- Seventeen (17) respondents disagreed with the recommendation to further study Alternatives 7 or 10,
- Seventeen (17) comments indicated support for Alternative 7,
- Three (3) comments were received in opposition of Alternative 7.
- The Stakeholder Advisory Group did not make a unified motion with respect to Alternative 7, however, 10 individuals indicated their support for Alternative 7, and 1 individual indicated their opposition to Alternative 7

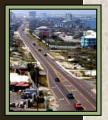
### 8.7.3 Agency Feedback

As described in Section 6.2.3, Eglin AFB completed a Mission Impact Assessment and transmitted the findings to FDOT on March 27, 2016 that expressed concern with Alternative 7. The letter stated that "After careful consideration of the assessment's findings as well as keeping in mind the viability of Eglin's Test and Training Range capabilities into the future, we do not support the inclusion of these routes on the list of alternatives moving forward for consideration. As is the case with all the routes identified that would require Air Force property, caution is urged in making any assumption that those lands could be made available should the project move beyond merely a concept."

From the ETDM screening, the resource agencies strongly favored the options that would not construct a new bridge crossing, and did not favor options that would construct a new bridge. Corridor Alternative 7 was not favored by EPA, NMFS, and FHWA, and concerns were raised by the Gulf Islands National Seashore. NPS requested to be a Cooperating Agency if Alternative 7 is considered.

### 8.7.4 Conclusion

After considering the results of the corridor analysis, along with public and agency feedback, Alternative 7 was determined to be a feasible alternative for further study.

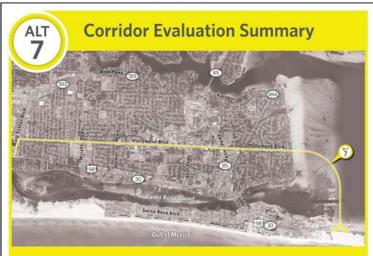


FM No: 415474-4-22-01

ALTERNATIVE CORRIDOR EVALUATION REPORT

SANTA ROSA SOUND

Figure 8-7 | Alternative 7 Corridor Evaluation Summary



### ALTERNATIVE 7

### Advantages

- · Lowest potential for overall displacements (residential and non-residential)
- · Minimal aesthetic impacts
- · Lowest impact in regards to traffic noise
- · Lowest right-of-way cost · Low potential to impact historical and archaeological resources
- · Low potential for impact to parks and recreation
- · High potential to improve traffic operations
- · Provides the most benefit to transit, bike and pedestrian facilities

### Disadvantages

- · Highest impact to essential fish habitat (gulf sturgeon)
- · Inconsistent with Eglin AFB missions

FM No: 415474-4-22-01



8-16

## **Summary of ETAT Activities**

- Review Planning or Programming Screen and provide individualized comments for each alternative (review - 45 days)
- Review MM and provide comment on analysis process and criteria for decision-making (review - 30 days)



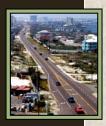
Review ACER to acknowledge understanding of the ACER and submit comments (review - 30 days)

Review Planning or Programming Screen Review Methodology Memo

Review ACER

CREATENTS IN GRADUITLE

Decision Making

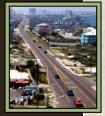






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Efficient Transportation Decision Making