



## Florida Department of Transportation

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ANANTH PRASAD, P.E.  
SECRETARY

October 27, 2011

The Honorable Ray LaHood  
Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue SE  
Washington, DC 20590

Subject: TIGER III Discretionary Grant Application S.R. 30/U.S. 98 and Cody Avenue Single Point Urban Interchange Entrance to Hurlburt Field

Dear Secretary LaHood:

As you and your staff at the U.S. Department of Transportation review the applications for Transportation Investment Generating Economic Recovery (TIGER III) Discretionary Grant funding, I respectfully urge your strong consideration of the Florida Department of Transportation's (FDOT) application for funding for interchange improvements on U.S. 98 at the entrance of Hurlburt Field in Okaloosa County, Florida.

This important project will create a Single Point Urban Interchange (SPUI) at the entrance to Hurlburt Field, which is the Headquarters of the Air Force Special Operations Command and the 1<sup>st</sup> Special Operations Wing. The SPUI will improve access and capacity to Hurlburt Field, enhance safety, and improve response time for personnel living off base.

The right-of-way necessary to construct the interchange will be entirely on federal property and coordination to secure the appropriate easements is currently underway with Eglin Air Force Base Real Estate. The environmental documents have been signed by the Department of Defense and are currently under review to ensure compliance with Federal Highway Administration requirements. Construction on this design build project is currently estimated at \$21.2 million and can begin in 2013 with the needed \$16.2 million TIGER funds.

Thank you for your consideration of this application and project. Should you or your staff have any questions or need additional information, please contact James T. Barfield, P.E., District Three Secretary, at (850) 415-9200 or via e-mail at [tommy.barfield@dot.state.fl.us](mailto:tommy.barfield@dot.state.fl.us).

Sincerely,

Ananth Prasad, P.E.  
Secretary

# The Florida Department of Transportation

in Partnership with the

**United States Department of Defense,  
US Air Force, Okaloosa County** and

**Okaloosa-Walton Transportation  
Planning Organization**



Proudly Present:



## SR 30/US 98 and Cody Avenue Interchange Project, Okaloosa County TIGER Discretionary Grant Application

October 31, 2011

● The proposed project supports the Air Force Special Operations Command (AFSOC) that carry out mission around the globe



**TIGER DISCRETIONARY GRANT APPLICATION – OCTOBER 31, 2011**  
**SR 30 (US 98) and Cody Avenue Single Point Urban Interchange at the Entrance to Hurlburt Field,**  
**Okaloosa County, Florida**

**Project Type:** Highway Project eligible under Title 23, United States Code of Federal Regulations  
 State of Florida  
 Okaloosa County  
 Florida Department of Transportation (FDOT)  
 1<sup>st</sup> Congressional District  
 Urbanized Area

**Funds Requested:** \$16.2 million of TIGER Discretionary Grant Funds  
 Total Project Cost: \$21.2 million  
 Federal Funding Ratio of 76%

**Contact:** Mr. Ralph Yoder, Intergovernmental Liaison, FDOT District Three  
 P.O. Box 607, Chipley, FL 32428  
 (850) 415-9225, ralph.yoder@dot.state.fl.us

**Executive Summary**

In Okaloosa County, Florida, a critical intersection—SR 30 (US 98) and Cody Avenue—is in desperate need of reconstruction to maintain the only coastal east-west corridor in the region. The current intersection is a bottleneck and is optimized for the existing traffic pattern. The only option is to deliver a future overhaul. This application will confirm this very important transportation link is seriously congested and service levels are critical to maintain traffic flow and support future capacity. A new interchange will ensure unhindered, military, commercial, industrial, residential and resort visitor access; not only on a daily basis, but in the critical need for emergency evacuation and/or times of national disaster and security.

**The expected monetized benefits that will accrue from the project over the next 30 years total \$139.8 million, for a net benefit of \$124.4 million. Monetary benefits indicate a strong positive benefit to cost ratio for this project: 7.28. This project is “ready to go.”**

As graphically depicted on the cover of the application, this critical roadway supports not only the locals, but the region and nation. This project intersects and supports three military installations: Eglin Air Force Base, Hurlburt Field, and Duke Field, collectively on the **largest military base in the world**; Eglin Air Force Base. Most importantly to this project, **Hurlburt Field** which is the **8<sup>th</sup> largest base in the world**, is home to the Air Force Special Operations Command (AFSOC) and the 1<sup>st</sup> Special Operations Wing (1 SOW). AFSOC is America’s specialized air power. This project impacts the main access gate to Hurlburt Field and the only access onto the base for commercial vehicles. The AFSOC and the 1 SOW support other military bases throughout the world. Mission support and other activities critical to our nation’s security are not depicted on the cover nor mentioned in this application for security reasons, but are present. Military readiness confirms another vital reason funding this project is necessary.

With a population of 180,822 and housing the largest military installation in the United States, Okaloosa County’s primary economic generator is the military; second to that is tourism. Okaloosa County’s population is projected to top 198,000 by 2015. Despite the national economic condition and the Deepwater Horizon disaster, Okaloosa County experienced significant growth and incurred new job growth of approximately 500 with a





retainment of almost an equal amount providing a median wage of \$53,000. In addition to the continued growth within the gates of the military installations, a planned research and development center outside Eglin's West gate will garner thousands of additional new jobs. While job creation and economic competitiveness are welcomed, the ripple effect from this significant growth will only magnify the already optimized traffic pattern, further demonstrating the need to overhaul the intersection as quickly as possible.

You will find this project through local, state, and federal agency planning was first included in the Okaloosa-Walton Long Range Plan in 1993 and has been recognized as a burden and necessary since 2002. You will find it is "ready to go" and pre-construction activities are complete or underway to ensure the U.S. Department of Transportation (USDOT) success in meeting its requirements. This project is a good deal for the federal government in that it is met with almost a one-third match at the local level. This application will provide evidence and confirmation this project provides immeasurable cumulative benefits, as well as safety, operational and cost saving advantages. Additionally, it will enhance and secure this area, region, and nations consideration with regard to future military mission assignments.

The inability to replace the conventional intersection with a single point urban interchange (SPUI) will:

- Amplify the significant increases in daily congestion already in place resulting in:
  - » Increased travel times at **120 person hours daily, or \$936,050 annually**
  - » Increased vehicle miles traveled
    - \* Increased CO<sup>2</sup> emissions annually in kilograms, **greater than 1 million**
  - » Decreased safety: adding to the already high totals of crashes each with potential loss of life, injury, and property damage, **averaging \$3.8 million annually**
  - » Severe delay of truck/commercial traffic
  - » Gridlock during:
    - \* Military mission activities
    - \* Increased security levels
    - \* Economically significant events within the region
    - \* Hurricane and other emergency evacuations and/or times of national disaster or security
  - » Potential to compromise military mission activities
- Continue to diminish the only coastal east-west regional connectivity in Okaloosa County
  - » Potential for loss of connection for military, commercial, industrial, residential and resort visitor access

**The investment of \$21.2 million total cost of the project is needed today and the benefit will be repaid greater than seven times in the future** with the savings from time delay, Vehicle Miles Traveled (VMT), fuel consumption savings, and crash costs alone. The inability to replace the existing intersection will be detrimental to Okaloosa County, the metropolitan area, region, and nation.

**The TIGER Discretionary Grant is the last and only increment  
necessary to construct this critical project.**





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## I. PROJECT DESCRIPTION

The SR 30 (US 98) and Cody Avenue Interchange project in Okaloosa County is located in the center of Florida’s Emerald Coast and supports three military installations: Eglin Air Force Base (AFB), Hurlburt Field, and Duke Field, collectively on the **largest military base in the world**—Eglin AFB.

SR 30 (US 98) is the *only major east-west corridor* along the Panhandle Gulf Coast of Florida, and it connects the deepwater Ports of Pensacola and Panama City, which are both designated foreign trade zones. It also connects Eglin AFB with Tyndall AFB and Pensacola Naval Air Station (NAS). **Most importantly to this project, Hurlburt Field** is the home of the Air Force Special Operations Command (AFSOC) and to the 1<sup>st</sup> Special Operations Wing (1 SOW). AFSOC is America’s specialized air power. It provides Air Force special operations forces for worldwide deployment and assignment to regional unified commands.

The proposed project includes construction and modernization of the intersection (**creating 230 jobs**), a congested urban roadway in Okaloosa County, to a single point urban interchange (SPUI). The interchange to be constructed under this project is a significant travel corridor and is the core transportation component of the residents of Okaloosa County and Hurlburt Field.

### Okaloosa County :

- ✓ *Keystone county of the western panhandle of Florida that runs from the Gulf of Mexico to the Florida-Alabama state line.*
- ✓ *Nicknamed the Emerald Coast for its beautiful beaches.*
- ✓ *Home to over 180,000 residents.*
- ✓ *North Florida technology hub.*
- ✓ *Premier location for living, working, and vacationing.*
- ✓ *Sophisticated transportation network. Highway, rail, air, and water network of competitive opportunity.*

Since 1993, reconstructing the interchange has continued to be on the top priority list for the Okaloosa-Walton Transportation Planning Organization (OWTPO). This project is one of the three FDOT priority projects for the State of Florida. Key stakeholders, along with community leaders, continue to connect with local, state, and federal authorities to bring about an overhaul of the bottlenecked intersection. This project is in partnership with the U.S. Department of Defense, U.S. Air Force, the State of Florida, Okaloosa County, and the OWTPO. Project justification is demonstrated by all parties involved.



SR 30 (US 98) runs along the Gulf of Mexico and intersects with Cody Avenue to act as the south access point at the main gate of Hurlburt Field. As the only coastal east-west corridor in southern Okaloosa County, the SR 30 (US 98) corridor is a critical transportation link that is seriously congested, and improved service levels are necessary to maintain traffic flow throughout





*“But the basic criteria are simple: America needs the kinds of projects that help spur lasting economic growth, reduce gridlock, provide safe, affordable and environmentally sustainable transportation choices and create jobs.”*

**The Florida Department of Transportation is confident the proposed project meets the criteria necessary to receive a TIGER Discretionary Grant.**



Okaloosa County, not only on a daily basis, but in the critical instance of emergency evacuation and/or times of national disaster and security. The needs for these improvements have been recognized by our partners and the public for many years. The proposed project will significantly reduce travel times and enhance safety along the corridor.

A SPUI is needed to ensure unhindered, compatible military, commercial, industrial, residential, and resort visitor access.

Only 40% of the traffic that passes through this intersection is entering or exiting Hurlburt Field. The remaining 60% consists of daily traveling public caught in the delays and at-risk safety conditions.

The proposed interchange will greatly enhance mobility and safety in this heavily congested corridor, allowing 60% of the through-traffic to travel undisturbed over Cody Avenue. The remaining 40% will see much improved access to Hurlburt Field and reduce delay for personnel and guests living off the base, subsequently enhancing the safety and efficiency—especially in times of emergency or national security.

A new interchange will provide a key link in Okaloosa County’s growing multi-modal network, maintain access throughout Okaloosa County to major job centers, avoid about 3,760 person-hours per day of new congestion, and sustain Hurlburt Field.

This project is a state-of-good-repair project with greater than a triple return on investment. **This project will create short-term jobs as well as contribute to improved economic activity to secure the future economic competitiveness and livability**

**of Okaloosa County, the region, and nation.** The project ensures sustainability and upon completion, immediately improves safety along this critical corridor and benefits the United States as a whole.

**Existing Conditions**

SR 30 (US 98) is presently a four-lane divided urban arterial highway, which connects Pensacola, Fort Walton Beach, and other Florida panhandle coastal communities. The existing facility is classified as an urban principal arterial. The US 98 typical section consists of a 30-foot depressed, grassed median with flush 8-foot inside shoulders and ditch bottom inlets. It includes four 12-foot lanes with 10-foot outside shoulders, 4 feet of which are paved. The eastbound roadway is centered in the 200-foot right-of-way. The posted speed limit in the project vicinity is 45 mph, and the design speed is also 45 mph. The intersection of Cody Avenue at US 98 is signalized with mast arms. Westbound to southbound left turns are currently



*Model simulation of existing conditions. (Larger graphic in Appendix A)*





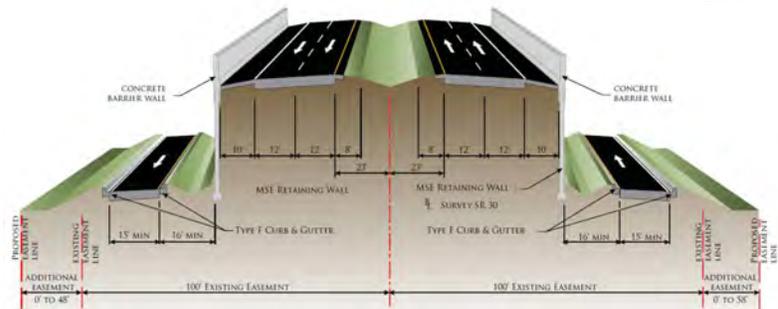
prohibited at the intersection; they must be made in advance of the intersection, by turning left at an unsignalized median opening onto a parallel service road running along the south side of US 98.

**Proposed Interchange**

The project will construct a single point urban interchange (SPUI) at SR 30 (US 98) and Cody Avenue at the entrance to Hurlburt Field. The project will construct two 2-lane bridges on SR 30 (US 98) over Cody Avenue along with ramps to and from SR 30 (US 98) to Cody Avenue, and the reconstruction of Cody Avenue to accommodate the proposed improvements. The project will extend approximately 3,350 feet west of the intersection of SR 30 with Cody Avenue and 2,500 feet east of the intersection.

The typical section will allow the potential widening to the inside in the future (for 6-laning). This allows one signalized intersection.

The eastbound off-ramp will start as a one-lane ramp and transition to a three-lane ramp as it approaches the intersection with Cody Avenue. The ramp will provide dual eastbound to northbound left turn lanes and a single eastbound to southbound right turn lane. The dual left turn lanes will accommodate the simultaneous



*A larger version of the proposed interchange graphic can be found in Appendix A.*

turning movement of a passenger vehicle and a 53-foot semi truck with either vehicle in the inside of the turning movement.

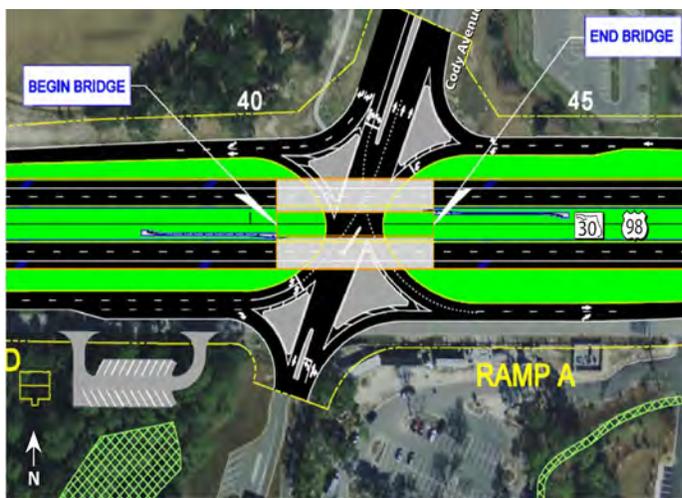
By isolating military-related traffic from civilian, the signalized intersection beneath the overpass can be tailored to the needs of Hurlburt Field, thereby significantly improving base access efficiency.

**The traffic pattern for the existing intersection is optimized. A no-build alternative is clearly not an option. Relief is necessary for this burdened intersection.** It is neither cost-effective nor feasible to continue to invest in this roadway with only temporary short-term solutions.

No-build will continue and increase maintenance of the existing intersection to remain a factor in its use and expense of operation. Based on current traffic growth trends, the existing intersection will not accommodate forecasted traffic volumes and is expected to decline

in level of service (LOS) in future scenarios. Furthermore, as the volume of traffic increases, the crash rate is expected to increase if capacity and other improvements are not made.

Evidenced throughout this application is the fact this project will build infrastructure that will significantly improve the condition of the existing transportation facilities and systems for years to come. It will preserve and create jobs, leading to economic growth; encourage partnership for sustainable communities; decrease transportation costs; and provide a cleaner environment. This project allows



*Proposed interchange (Larger graphic in Appendix A)*





efficient traffic flow to a wide array of accessible, affordable, and interconnected transportation choices that are beneficial for people and the environment.

FDOT and its partners have been actively working on this important project for nearly 10 years. Preliminary engineering, traffic studies, and environmental reviews required for the transportation investments to proceed are complete or in final stages of review and approval.

FDOT is prepared and anxious to begin design-build of this project as soon as possible, and no later than September 2012. There are no pre-construction activities needing resolution that could delay construction. A realistic milestone schedule for this project is shown in **Table 1**.



Current conditions



Future conditions (model simulation)

vibrant and sustainable economy and create nationally and globally competitive advantages, not only for the military, but also for the development of industry and increased income potential.

Table 1: Milestone Schedule	
Task	Completion Date
Approved FONSI Forms	December 2010
Completion of NEPA Review	December 2011
R/W (Easement Obtained)	February 2012
Work Program Amendment	July 2012
Design-Build Advertisement	September 2012
Contract Award	April 2013
Notice to Proceed Issued	May 2013
Design-Build Start	May 2013
Construction Start	March 2014
Design-Build Completion	March 2016

### III. GRANT FUNDS & SOURCES/ USES OF PROJECT FUNDS

The \$16.2 million TIGER award will be added to the \$5 million set aside in a Construction Reserve Account established by FDOT. Commitment of Funds, Appendix G.

Table 2: Funding Source		
Funding Source	Amount	Percentage
TIGER	\$16.2 million	76%
FDOT	\$5 million	24%
Total Project Cost	\$21.2 million	100%

## II. PROJECT PARTIES

The grant recipient for this project will be FDOT District Three, which is overseen by James T. Barfield, PE, Secretary. The Grant will be administered by the Intergovernmental Liaison, Mr. Ralph Yoder.

The SR 30 (US 98) at Cody Avenue project is recognized as necessary to the transportation infrastructure of northwest Florida. As evidenced in this application, construction of the interchange project will provide the necessary capacity to relieve congestion and move additional travelers. It will grow a

**The net present value for this project is greater than \$124 million. The benefit-cost ratio is 7.28** with additional benefits that are not quantifiable, such as:

- Relieves congestion.
- Facilitates employee travel to the workplace.
- Enhances the safety of the corridor.
- Protects the critical missions of Hurlburt Field, Duke Field, and Eglin AFB.
- Maintains tourist access along the Florida coast.
- Improves hurricane evacuation routes.
- Provides jobs.





## IV. SELECTION CRITERIA



### A. LONG-TERM OUTCOMES

**Simply put, the current intersection is a burden to all who travel it.**

The SR 30 (US 98) and Cody Avenue project will have significant long-term benefits for the local economy, the region, and the nation. Operations at Hurlburt Field are an integral element of the local and regional economy, as well as an essential training and operations facility for the AFSOC. Protecting the base's ability to carry out its mission is essential to the long-term success of Hurlburt Field and regional economic vitality.

Although the proposed interchange project will provide essential traffic efficiency benefits in operation at the base main gate, the primary long-term benefit to the community at-large is separation of through-traffic not destined for the base from base traffic. Approximately 40% of the morning peak-hour eastbound traffic arriving at the intersection is going to work at the base, while the remaining 60% continue eastward to other destinations. The flow of the left-turning traffic destined for the base is primarily dependent on two elements: limited left-turn green signal phase timing that limits flow through the intersection for mainline traffic and limited queuing space on the base for security checkpoint operations. In addition, with new facilities being constructed and more activities occurring on base south of US 98, left turns are backing up and causing delay. Further, at times traffic in the turn lane is backing up into the through lane causing delay, not only for travelers, but for school buses and emergency vehicles creating unsafe conditions.

Separating all left turns in both directions and allowing through-traffic to fly over the intersection will separate the two functions of the present intersection. This will maximize the flow of through traffic without any delay due to congestion, signal delays, or turns, as well as

minimize the inconvenience for workbound trips both on the base and in the regional economy. Separation of traffic will also provide quicker and easier access to Hurlburt Field for mission activities and in times of national security.

#### ✓ 1. State of Good Repair

As a design-build project, **this project is “ready to go”** within 90 days notification of award. Although a number of incremental improvements have occurred at the location of the proposed intersection over time (additional lanes; signal improvements; signal timing; and on-base gate efficiency improvements), all have been optimized for the traffic pattern. The interchange project has been on the Okaloosa-Walton TPO Long Range Transportation Plan (LRTP) priority list for a number of years. Lack of funding has and continues to postpone this critical improvement project. Funding is the only hurdle to resolve this critical need.

The proposed interchange will entirely replace the existing SR 30 (US 98) lane configuration with separated overpasses for SR 30 (US 98) east and west through-traffic and traffic beneath the bridges allowing fully controlled left turning and through movements entirely dedicated to base-destined traffic both north and south. Full replacement and elevation of the travel lanes of SR 30 (US 98) throughout the limits of the proposed project would remediate existing facilities and provide newer roadway facilities meeting both existing and future capacity requirements, retrofitting safety improvements (shoulders; bike/pedestrian facilities; lighting; and signage replacement), minimizing future maintenance requirements, and **providing for a replacement life cycle of over 20 years (pavement) to 75 years (bridges).**

The proposed interchange project has been coordinated with all utility providers with facilities in the vicinity of the improvement to assure efficient adjustment, relocation, or protection of in-place facilities during construction and access for maintenance after completion of construction.





### Local, State, and Regional Plans

The interchange project is included in the OWTPO 2030 Long Range Transportation Plan (LRTP) and the [2030 Transportation Needs Plan](#). The 2030 LRTP indicates the SR 30 (US 98) and Cody Avenue intersection improvement on Map A (p. 25) and in the Adopted Needs Assessment Roadway Project table on page D-4.

The SR 30 (US 98) and Cody Avenue location has been included in several regional corridor studies and coordination between FDOT, Hurlburt Field, Eglin AFB, and Okaloosa County. This location is an important connection to the local transportation system serving local citizens commuting to and from Hurlburt Field, work, school, shopping and recreational activities, and as a part of the east-west hurricane evacuation route.

In 2003, a project development and environment (PD&E) study was conducted to examine various interchange alternatives at the SR 30 (US 98) entrance to Hurlburt Field. The PD&E process is specified by FDOT for new road development and meets all federal and state requirements for new road construction and environmental impacts pursuant to the National Environmental Policy Act (NEPA). The purpose of the study was to find a solution that would alleviate traffic congestion at the entrance to Hurlburt Field's main gate. The PD&E study was performed by Okaloosa County on behalf of the Department of the Air Force (Air Force) and was conducted in cooperation with FDOT and Hurlburt Field. An Enterprise Florida, Inc. (EFI) Defense Infrastructure Grant funded the PD&E Study. The full PD&E study can be viewed [here](#).

As an update to the 2003 PD&E study, a Final environmental assessment (EA) was prepared in July 2010 for the Department of the Air Force, and Okaloosa County in cooperation with Hurlburt Field, and FDOT District Three. The goal of the study was to determine a solution that satisfies the objectives of the local and regional communities' transportation network and Hurlburt Field's traffic issues at the main

gate entrance and to determine the viability of and potential impacts of the proposed interchange project. The EA can be viewed [here](#).

Additionally, a [Finding of No Significant Impact](#) (FONSI) was determined for this project and executed on December 7, 2010, by Claude V. Fuller, Jr., Colonel, U.S. Air Force, Director, Installations and Mission Support.

The proposed interchange will:

- Increase capacity.
- Improve access to Hurlburt Field.
- Improve the operation of the interchange.
- Enhance safety.
- Improve level of service (LOS).
- Reducing traffic delays and congestion.
- Improve safety.
- Prevent traffic congestion that currently affects the main gate operation.

**Without these improvements** and with a projected significant increase in the average annual daily traffic (AADT), **the congestion in this region will quickly continue to deteriorate the capacity of SR 30 (US 98) below an acceptable LOS.** Therefore, an interchange at this location is proposed and supported.

### Capacity Improvements

The TIGER investment of \$16.2 million will construct an interchange facility along SR 30 (US 98) and Cody Avenue that will enable its future function as a regional arterial to be maintained. This improvement will immediately increase safety and relieve the congested corridor by eliminating the conflicting objectives of facilitating access to Hurlburt Field and free flow of east-west traffic on SR 30 (US 98). The project also will replace, enhance, or develop major utility infrastructure and will integrate environmentally-sustainable design features, foremost among them is reduced vehicle idle time for stopped vehicles at the





signal (thereby reducing air pollution); construction within existing or limited additional right-of-way (that limits clearing of additional vegetation); and providing for improved stormwater management.

**The interchange is planned beyond the 20 year (roadway) and 75 year (bridges) capacity.** The bridge could allow widening to the inside in the future (for 6-laning). Final design regarding the need or desire to have the contractor install the substructure for a future six lane bridge when the initial four lane bridge is constructed will be considered and offered as a Bid Alternate.

The existing volume per day (vpd) and volume per hour (vph) through-traffic capacity of SR 30 (US 98) at this intersection will be extended much further into the future, and the improvement will also expand future capacity and match future improvements when SR 30 (US 98) is widened both east and west in Okaloosa County.

Table 3: Hurlburt Field Facilities Located, Planned, or Programmed South of SR 30 (US 98)	
Facility	Phase and Impact
Visiting Officers Quarters (Hotel)	New, 120 rooms, 35 employees
Visitors Center	Opening 2011, 4 employees
Joint Operations Planning Facility	Opening 2011, 4 employees, 40 attendees per day
Museum	Planned
Housing Privatization Program	Planned, 73 homes
Unspecified Future Development Parcel	Planned

Further, while base facilities south of US 98 have been limited in the past, creating the need for fewer westbound to southbound left turns, new facilities are being planned or programmed, are under construction, or will be constructed in the future, which would create the need for more westbound left-turn traffic (see Table 3). Where previously the

eastbound to northbound left turning movement in the peak morning period caused the most severe congestion, in the future both left turning movements will be congested due to increased new development on the south side of SR 30 (US 98).

**Life-Cycle Costs**

**Reconstruction of the roadway will markedly reduce the life-cycle costs** of the SR 30 (US 98) and Cody Avenue intersection in the following ways:

- The existing roadway surface will be replaced with asphalt with longer-wearing capabilities.
- The new roadway base material replaces degraded materials used on the original alignment due to wear and tear; thus allowing the newly widened and surfaced roadway.
- Withstand truck traffic within the region.
- The new road surface will have a minimum design life of 20 years. FDOT will extend the life of the road surface to 40 years by implementing its routine maintenance practices to include only one future need to mill and resurface.
- New design will be directed in a fashion that will protect the road surface, base, and shoulders from deterioration or erosion.
- The bridges will have a design life of 75 years.
- The design will be compatible with best management practices for roadside mowing and maintenance equipment access and use.

**✓ 2. Economic Competitiveness**

The military and supporting industries are the primary economic generator for Okaloosa County. The overall defense economic impact is over \$6 billion annually. Tourism is the second largest economic contributor with an estimated 4.5 million people visiting the Emerald Coast annually. Add this population influx to the more than 180,000 local population and that equates to stability and opportunity.





The SR 30 (US 98) corridor intersection currently carry an average of 36,000 vehicles daily. Traffic along this roadway is projected to increase to 64,000 vehicles. The current condition of the roadway pattern is optimized and failing service levels.

#### Total Department of Defense Employment

**Northwest Florida—46%** Northeast Florida—26%  
Central Florida—19% South Florida—7%

The proposed interchange project will enhance vehicle and pedestrian safety, and based on the travel study is projected to **reduce travel times along this important corridor by an average of 120 hours per day, \$936,050 annually.** After completion of the reconstructed interchange, the monetary value of resulting travel time **savings over the next 30 years totals more than \$28 million.** The new interchange is essential to Hurlburt Field and Okaloosa County's transportation network. Allowing the present intersection to continue to deteriorate and fail will eliminate a major artery that is critical to the United States military in the ability to effectively carry out mission activities. An average 18,000 vehicles enter and exit the Hurlburt Field access at the intersection.

According to the Executive Office of the President of Economic Advisors, for every \$92,000 of government spending, it is estimated that one job-year is created, with 64% from direct and indirect effects and 36% from induced effects. The new interchange is expected to create 147 direct or indirect jobs and 83 induced jobs. In addition, Okaloosa County and its region is marketed by many agencies that support and contribute to the overall economic development and competitiveness. Outlined in the following pages are agencies that are in continued pursuit of economic competitiveness and growth for this area, region and nation. You will see demonstrated examples of global partnering and pursuit, military growth and investment as well as technology, industry and others.

The monetary value for the growth currently planned or anticipated by these agencies has not been calculated as part of this application, but clearly demonstrate the project is necessary to return to normal operations and provide the future capacity required to remain competitive which will in-turn provide many direct and indirect benefits to the area.

In 2008, the Okaloosa Economic Development Council partnered with Erik Steinberg of the Swedish-American Connection to foster a relationship of culture, education, tourism, and business for the two regions. Since that time, business expos and trade missions have been held to identify compatible industries, explore markets, and obtain information on feasible partnering, agents, distributors, and investors.

*With a sophisticated transportation network—the county's highway, rail, air, and water transportation systems—Okaloosa County is equipped to expand its globalization.*

Okaloosa County and the surrounding region are thriving due to high tech employment—primarily focused around aviation, aerospace and engineering—and the military facilities that are located in the region.

In 2005, Okaloosa County was re-designated as an Enterprise Zone (EZone) with a term through December 31, 2015 to assist the County, its residents and the private sector in productive business enterprises. The Okaloosa-Crestview EZone Qualified Industries are Aviation/Aerospace, Electronics Design/Manufacturing, Information Technology and Metal Fabrication & Machining. These qualified targeted industries are sustainable economic generators for the area. They provide high wages and are considered to be growth industries. Growth industries stimulate the local economy by increasing the direct and indirect impact on other businesses in the area.





## Okaloosa County Economic Development Council Defense Support Initiative

Okaloosa County's Economic Development Council's (EDC) Defense Support Initiative (DSI) supports the presence and contributions of the military units at Eglin AFB, Duke Field, and Hurlburt Field, and their associated activities and affiliated consultants, service providers, and support contractors.

*To remain competitive in the regional, state, and national economy, we must ensure and protect the efficient operation and transportation capacity of the only coastal east-west corridor as well as protection of the mission and function of the military bases as top priorities.*

The Okaloosa County EDC originated the DSI in 1991 to focus on supporting and maintaining local military installations and their existing missions. The EDC, through its DSI Committee, is recognized by the State of Florida as the official representative and lead agency in the Okaloosa County area for base-community initiatives. The mission of the DSI is to support and promote the local military installations and their positive economic contributions to the area while nurturing the relationships with the civilian communities that house them.

The presence of the multi-service military units at Eglin results in a greater density of technology-based and defense-contracting firms creating industry clusters. These military installations provide a direct economic impact and an indirect impact with a ripple effect of military spending. **Seven of the ten largest defense contractors in the State of Florida have a presence in Okaloosa County.** An industry cluster of these targeted businesses catering to the local military installations has developed over the years. There are approximately 300 of these businesses in Okaloosa County that work with local suppliers to obtain the goods and services necessary to meet the needs of the military; creating jobs and sustaining the economy. The DSI supports and advocates for the aviation, aerospace,

technology, engineering, manufacturing and defense contract companies in the tri-county area. The [EDC 2010-2011 Report to Okaloosa County](#) provides documentation of this support.

### Economic Impact

The University of West Florida Haas Center for Business Research released a Florida Defense Industry Economic Impact Analysis in January 2008 and provided these statistics.

- About 35% of northwest Florida regional output is driven by defense spending; 18% for northeast Florida, 5% for central Florida, and 3% for south Florida.
- Average earnings per military job in Florida are at 175% of average earnings across all Florida jobs.
- **In 2005, average military earnings per job were \$68,540 compared to an average of \$39,990 for all Florida jobs.**
- In Okaloosa County, defense-related spending accounts for 73% of economic activity.

### Northwest Florida Defense Coalition

The EDC functions as the lead organizer for the five-county Northwest Florida Defense Coalition Washington, DC delegation. Approximately 55 key business and community leaders participate in this regional military support mission. Shared community concerns include the Joint Gulf Range, air space, transportation and energy. The DSI composes a talking point-paper for the Congressional Delegation and Pentagon leaders addressing community concerns.

### BRAC Growth Management

The 2005 BRAC decisions resulted in growth encompassing the Army's cantonment development and bed down of their 7<sup>th</sup> Special Forces Group (7SFG) and the Air Force's Joint Strike Fighter Initial Training Center for the Joint Strike Fighter. The 7SFG realignment infused 2,000 soldiers into the area between April and September 2011. Additionally, the





training center will support 1,563 personnel and their families by 2016. The first flight team arrived at Eglin in early 2011. With a total population growth of 9,800, the realignment has, and will continue to, significantly impact the military, civilian, and business traffic along this corridor and this intersection in particular.

The EDC and DSI support the Okaloosa Board of County Commissioners' tri-county Joint Land Use Study (JLUS), and their tri-county Growth Management Plan. The EDC and DSI continue their involvement in the regional Gulf Range Airspace Strategic Initiative addressing the regional airspace issues and concerns.

Among the technology-based firms that have chosen to locate in Okaloosa County are Boeing, Lockheed-Martin and Raytheon. With a well-trained and growing workforce, an attractive cost of doing business and a great quality of life, companies find it an appealing place to do business.

*For years visitors have flocked to Destin, "the luckiest fishing village in the world."*

Some of the best restaurants in northwest Florida serve up local seafood nightly, overlooking beautiful white beaches and azure waters. Area recreational and cultural amenities provide something for everyone year round.

With a vibrant dual economy focused around the military presence and the unique Gulf coastal resort communities, the region seeks to protect both elements of its livelihood. Assuring efficient operation of the military bases as well as

protecting the transportation capacity of its limited east-west corridor facilities is essential.

*The FDOT and TIGER investment will serve to protect both important economic engines in the region by facilitating safe, convenient, secure access to Hurlburt Field, and separated through-traffic for the traveling public along the coasts.*



*A larger version can be found in Appendix A.*

### Florida's Great Northwest

The western 16 counties of the Florida Panhandle are closely affiliated in the pursuit of economic development opportunities with Florida's Great Northwest, a clearing house of economic development, business, and marketing data and promotional materials. Florida's Great Northwest describes Okaloosa County [this way](#):

Local military bases support more than 60,000 military, civil service and military dependents. The Fort Walton Beach-Crestview-Destin Metropolitan Statistical Area (MSA) has the 10<sup>th</sup> highest job growth rate among 300 MSAs in the nation. **The region has also been ranked by Forbes magazine as one of the top-ten best small places to live.**

### Regional Transportation Connectivity

Clearly, within the region, the primary support infrastructure is in place to foster a strong and sustainable economy; what is needed is equal support for the transportation infrastructure to assure sustainability. When constructed, this interchange will allow unhindered military, commercial, resident, and





resort visitor access along the corridor. Maintaining traffic flow at the Hurlburt Field main gate is essential.

**As the only east-west corridor along the Gulf Coast, it is necessary to protect and enhance sustainable traffic capacity** along SR 30 (US 98) in Okaloosa and Santa Rosa Counties. If left unimproved, the traffic congestion at the Hurlburt Field main gate will continue to degrade the transportation network in northwest Florida and hinder Hurlburt growth.

**Traffic Projections**

Projections from the Northwest Florida Regional Planning Model of the traffic volumes on SR 30 (US 98) east and west of the intersection show that through 2035, the amount of traffic along SR 30 (US 98) is anticipated to increase as shown (Annual Average Daily Traffic (AADT), 2010 count and 2035 projected):

Count Location (Segment)	AADT 2010 (Count)	AADT 2035 (Projected)	Increase
West of Hurlburt	40,380	68,200	68.9%
East of Hurlburt	31,500	60,600	92.4%

**This level of traffic growth is expected to degrade the efficiency of the transportation network further if the intersection is left unimproved.** The current roadway configuration, combined with future traffic projections and the lack of alternative regional transportation routes creates a sub-standard, congested condition and an unsafe, inconvenient, at-risk security condition for the military mission at Hurlburt Field. A select link analysis was performed using the Northwest Florida Regional Planning model. The results of this analysis are summarized in **Table 5**. By removing the remaining 65.3% west bound volume and 73% east bound volume and carrying it over the intersection will immediately relieve the capacity at this intersection and allow traffic to flow much more

efficiently and timely thereby saving time and costs for all those that travel it.

Location	Total 2-Way	To/From Hurlburt + Eglin	Hurlburt + Eglin Traffic over Total Volume on each Link (%)
West of Hurlburt	67,904	23,530	34.7%
East of Hurlburt	60,738	16,364	26.9%

**Effects on the Regional Economy**

Okaloosa County and the surrounding region have a thriving economy based on two essential economic sectors: military missions at Eglin AFB, Duke Field, and Hurlburt Field, and coastal resort tourism. Most employment in the region is either in these sectors, or secondarily related to services supporting them. Protecting the existing and future roadway capacity of SR 30 (US 98) to allow it to carry both essential military-related traffic and coastal tourist traffic is essential. As population growth occurs and the missions at Hurlburt Field and Eglin AFB continue to grow, travel along this single coastal transportation corridor will be further degraded without separating travel destined for Hurlburt Field and through-traffic destined to employment centers off-base. As traffic along the corridor continues to increase, both functions will be hindered. Alternative routes to SR 30 (US 98) for through-traffic along the coast do not exist, therefore, separating the two functions of base access and coastal through-traffic will allow turning movements and through-traffic to be serviced simultaneously. The proposed project is essential to provide simultaneous use.

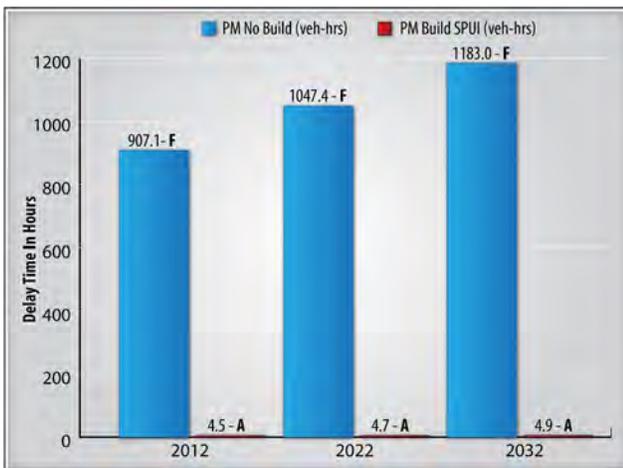
**Delay Time Reduction**

Travel time and delay studies are used to determine the momentary, hourly, daily, and annual delay time caused by congestion in a travel route by segment or at intersections. Intersection delay is most often described





in seconds of delay and defined by intersection level of service (LOS). Similar to a grade in school, **LOS A is the best and suggests the free flow of traffic, while LOS F is the worst and indicates inadequate service.** Analysis of the intersection based on existing conditions, estimated future conditions, and for the build or no-build alternative indicates significant delay to through-traffic exists and will continue to increase through the period 2011-2032, ultimately reaching a deteriorated level of service equivalent to LOS F, an unsafe condition at the project intersection. **Detailed time delay charts can be viewed in Appendix A.**



The completed TIGER investment will provide a beneficial traffic impact to the area at the newly constructed interchange by alleviating the current congestion at the intersection, improving safety, and allowing Hurlburt Field personnel easier and more efficient access to the installation. In the opening year, this investment will result in a 99% reduction in traffic delay realized over the no-build alternative. **This reduction in delay will result in a total cost savings of over 120 hours per day, which equates to a monetary savings of \$936, 050 annually, and greater than \$28 million over 30 years.**

If no-build, the existing traffic congestion will continue to deteriorate as the area's population and Hurlburt Field employment continue to increase. Current significant impacts to traffic flow and delay time will

continue to worsen. Traffic congestion could impact base access during critical mission requirements. Based on the traffic crash and growth data, no-build will result in an increase in traffic crashes associated with the main gate entrance to Hurlburt Field.

Due to the unique mission characteristics of AFSOC and the 1 SOW, Hurlburt Field's move to staggered work hours has done little to alleviate the congestion problem. During periods of mobility preparations or increased alert, **when most military personnel** (and many civilians) **must be present** (often with little advance warning), **traffic backups occur that could delay or compromise mobility operations and/or mission activities.** Consequently, this project is necessary to improve access and traffic flow to ensure military readiness (HDR, 2010a). (<http://www.dot.state.fl.us/planning/Policy/tigeriii/d3-support.shtm>)

### ✓ 3. Livability

Okaloosa County and the region enjoy a high quality of life in a desirable location that is attractive to families, military employers, and resort visitors alike. Maintaining the livability of the region requires managing requirements to encourage and sustain competing sectors of the economy; those that are related to the intensive military presence in the area, and those that facilitate an enjoyable visit to the area that will attract repeat visitors and new visitor growth. Maintaining the ability to travel SR 30 (US 98) along the coast will mean that visitation will remain attractive while the important missions of the military bases are protected and sustained.

*By affording better, less congested, and safer commute between home and place of employment, the quality of life in the community will be positively affected.*

**Table 6** shows a lower mean travel time to work and higher median household and family income in Okaloosa County as compared to the United States figures. Related to livability is the ability to locate a





choice of residence close to employment. The mean travel time to work shown in the table is lower than that of the US as a whole, however, the statistic represents individuals surveyed who live in Okaloosa County only. Since large numbers of those employed in Okaloosa County either live in Walton County to the east or Santa Rosa County to the west and have a much longer travel time to work, the average travel time to work of those employed in Okaloosa County is likely much higher. Maintaining the travel time to work (or reducing it) serves to foster livability. **The SR 30 (US 98) and Cody Avenue project will assure that the minimum travel time along SR 30 (US 98) in south Okaloosa County is maintained into the future.**

Factor	Okaloosa Co	US
Mean Travel Time to Work	21.9 minutes	25.2 minutes
Median Household Income	\$53,741	\$51,425
Family Income	\$64,207	\$62,363

The interchange improvements are anticipated to decrease the mean travel time to work of 21.9 minutes by fully eliminating congestion at the Hurlburt Field main gate intersection.

**Maintaining Tourist Travel Access**

In no other place on Florida’s 9,000 miles of coastline are there beaches and coastal systems equivalent to the northwest Florida Gulf of Mexico coastline. In Okaloosa County alone, there are approximately 25 miles of snow-white sand beaches along which are located some of the premier world-class resorts and locales: the beaches of Walton County and the Destin area, Okaloosa Island, and Ft. Walton Beach east of Hurlburt Field, and Navarre Beach, the Gulf Islands National Seashore, and Pensacola Beach west of the base. Each of these communities have demonstrated the economic benefits of sustainable beachfront development and all are recognized in the world as some of the finest coastal destination communities.

These seaside communities and destinations attract many visitors annually, making tourism an important economic sector of Okaloosa County. Preserving the ability for visitors to travel the Gulf coast along SR 30 (US 98) is a critical element in preserving and growing the economy of the region. The ability of visitors to travel SR 30 (US 98) without also interfering with the critical missions of Hurlburt Field will be enhanced through the construction of the interchange by separating the two functions of access to the base and regional and local through-traffic to visitation destinations.

**✓ 4. Sustainability**

**Sustaining Efficient Traffic Flow**

SR 30 (US 98) is the only east-west US highway to access communities within the coastal area of Okaloosa, Santa Rosa, and Walton Counties. In addition, as noted previously, a substantial tourist seasonal resort population must use the single SR 30 (US 98) corridor to access destinations, services, recreation facilities, and to pass through the coastal region. Sustaining the long-term use of this coastal access corridor well into the future requires specific incremental improvements in locations where the new facility will be most effective. The fact that Hurlburt Field has both a nationally critical military mission is unquestionable; it is also a critical component of the local economy and access to and from Hurlburt Field is equally important. The proposed SR 30 (US 98) interchange is one location where through-traffic can be fully separated from turning traffic, thus allowing LOS to remain effective into the future.

**Limiting Air Pollution**

Idling vehicles produce air pollutants in excess of that of moving vehicles. By eliminating long queues at the intersection, vehicle emissions will also be reduced.

*Carbon Monoxide Emission Reduction (kg): 1,089,000*





### Limiting Inefficient Fuel Use

Idling vehicles use fuel inefficiently. The US Department of Energy and US Environmental Protection Agency sponsor a web site, [www.fueleconomy.gov](http://www.fueleconomy.gov), which notes the inefficiencies of vehicle idling on a [Driving More Efficiently](#) page. The page notes that “Idling can use a quarter to a half gallon of fuel per hour, depending on engine size and air conditioner (AC) use.” Also noted are the estimated extra fuel costs of idling: \$0.01-\$0.03/minute (AC off) and \$0.02-\$0.03/minute (AC on). Eliminating idling time for through-traffic will greatly reduce individual and community fuel consumption.

*Fuel Consumption Savings:*  
1,472,591 (gal)  
\$4.8 million  
Basis: \$3.40/gal (AAA)

### Limiting Unproductive Use of Time

Congestion wastes precious time—personal time, business opportunities, and productive labor. Delay has costs. By eliminating the time wasted at the Hurlburt Field main gate in its present condition and separating through-traffic, delay costs will be reduced and the productive capacity of the local economy will be sustained.

*99% reduction in traffic delay*

### Limiting Environmental Impacts to Local Natural Resources

Limited stormwater management facilities exist at the present intersection. The proposed interchange project will be constructed with stormwater management facilities designed to more effectively convey, manage, store, and filter runoff from the new construction limiting impacts to surrounding natural resources.

## ✓ 5. Safety

Safety issues at the Hurlburt main gate are directly related to peak period congestion and issues related to intersection congestion, such as rear-end collisions, and turning movement collisions. The roadway has been optimized for its traffic pattern and

had several modifications from its original design to add lanes and lengthen turn lanes. However, with increasing growth in the area and its accompanying traffic, congestion has literally outgrown the ability for the intersection to handle increasing traffic without severe congestion, or interfering with the efficient operation of the Hurlburt Field missions.

*The proposed SPUI will completely resolve the localized effect of congestion at the Hurlburt main gate by fully separating the two functions of traffic at the location—traffic destined for the base, and through-traffic.*

### Previous Studies

A Main gate Subarea Development Plan (65% submittal dated May 2011) prepared for the Hurlburt Field 1<sup>st</sup> Special Operations Civil Engineer Squadron by Woolpert, provided field observations of typical traffic conditions at the base main gate as follows:

- Queues exceeded the storage and taper lanes.
- The queues traveled approximately 175' into the eastbound through lane on SR 30 (US 98) creating a safety hazard for the eastbound through movements.
- Vehicles entering the main gate are stopped between 10 to 15 seconds for the identification check.
- Additional delay is experienced with triple processing due to driver confusion of where to go.
- During main gate processing, traffic backs up into the SR 30 (US 98) intersection.
- Back up of security check queues prohibit vehicles traveling eastbound to utilize the full green time for the left turn movements.
- Additionally, the eastbound left turning traffic is often stopped in the middle of the intersection when their signal indication turns red when security check queues are backed up.
- Phase traffic is prohibited timely (westbound or northbound) from utilizing their green time.





**Crash Data**

SR 30 (US 98) is a four-lane divided highway within the vicinity of the proposed project. If no capacity improvements are made to the intersection, the facility service level is expected to continue to decline to LOS F for both the AM and PM peak hours, based on current traffic growth trends. An evaluation of the number and type crashes at the project location reveals that the most common crashes are rear-end collisions. Due to the large volume of vehicles attempting to enter Hurlburt Field during the peak hours, traffic flow deteriorates to stop-and-go conditions resulting in this increased number of rear-end collisions. Those attempting to use SR 30 (US 98) to travel east to Walton County or west to Santa Rosa County during these peak hours are caught in this gridlock as well, contributing to rear-end collisions.

*The new interchange will reduce monetary economic loss to \$9.6 million for a savings of over \$12 million.*

When the flow of traffic in peak conditions exceeds the capacity of either the security check points at the main gate, or additionally the left turn signal timing phase, traffic backs up into the through lanes of SR 30 (US 98) causing congestion at this point. More importantly, this increases the likelihood of rear-end collisions as a slow queue moves forward. Fully separating the SR 30 (US 98) through-traffic as is proposed by this project will eliminate the dangerous conflicts caused by the severe congestion due to left turns and security checks.

SR 30 (US 98) traffic crash data for 2004 through 2009 was obtained from information compiled by the FDOT Safety Office. The Safety Office makes this information available for PD&E studies in order to help identify existing problem areas. The characteristics of each crash are broken down for direct comparison with all of the other crashes that occurred during the

*This project increases safety immediately by removing 60% of the present traffic flow up and over the intersection. This design could equate to a 50% reduction in potential collisions.*

same period. Only crashes that resulted in injuries and/or the issuance of criminal charges are included in the FDOT summaries. An estimate of the economic loss, property damage, and a safety ratio are determined for each state road section based on the data assimilated from the individual crashes occurring in each year. The results of the crash analysis is summarized in **Table 7** (HDR, 2010a): (<http://www.dot.state.fl.us/planning/Policy/tigeriii/d3-support.shtm>)

Table 7: Summary of Crashes	
Number of Incidences	Annual Average
100 crashes	20 crashes
86 injuries	17.2 injuries
1 fatality	0.2 fatalities

- *The ratio of the actual crash rate to the critical crash (Safety Ratio) rate averaged approximately 0.245 for 2004 through 2009.*
- *32 percent of the total crashes were rear-end collisions.*
- *60 percent of the total crashes were related to the entrance of Hurlburt Field along SR 30 (US 98).*

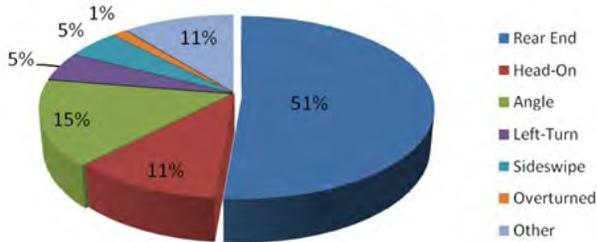
Crash data was also documented by the Woolpert main gate SDP:

- *Crash data was provided for the 2009 to 2011 calendar years for the main gate area as well as for the entire installation. 27 crashes have occurred during that period in the area of the main gate. Overall the main gate area accounts for almost 11 percent of all crashes across Hurlburt Field.*





The following is an updated analysis of traffic crashes from the FDOT Crash Analysis and Reporting System (CARS).



**Table 8: Crash Summary 1 Mile West to 1 Mile East of Hurlburt Field Entrance**

Year	Total Crashes	Property Damage Only	Number of Injuries	Number of Fatalities
2005	22	10	23	0
2006	17	11	8	0
2007	27	12	23	1
2008	18	7	19	0
2009	23	13	19	0
2010	31	17	21	0
<b>Total</b>	<b>138</b>	<b>70</b>	<b>113</b>	<b>1</b>

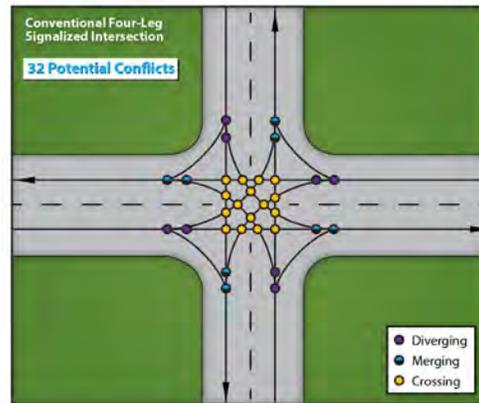
**Total Economic Loss: \$22,309,632**

According to the FHWA Crash Modifications Clearinghouse, upgrading an at-grade intersection to a grade-separated intersection results in a crash modification factor (CMF) of 43. Utilizing recent FDOT crash data, **this results in a reduction of crashes from 138 to 60 within the project area. This reduces the monetary economic loss to \$9.6 million from \$22.3 million—a savings of over \$12 million.**

*All of the design and construction elements will decrease the expected number of collisions, and the accompanying deaths, injuries, and property losses along the corridor.*

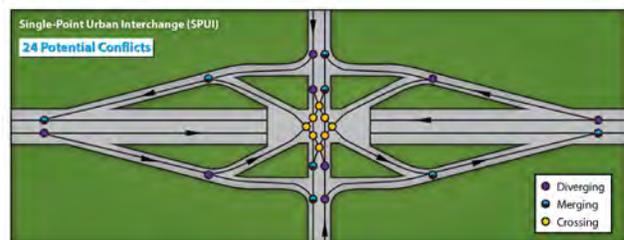
**Proposed Safety Improvements within the SR 30 (US 98) and Cody Avenue Project**

There are 32 potential conflict points for a conventional intersection and 24 potential conflict points for a single-point urban interchange. The SPUI will have no angle conflict points and only eight crossing conflict points.



The conversion of a signalized four-leg intersection to a SPUI will immediately remove eight potential conflicts and offer these benefits:

- Potential for a significant decrease in collisions involving major street through-traffic.
- Potential for a significant decrease in midblock collisions.
- Potential for a major decrease in angle collisions.



The proposed interchange will eliminate vehicles from backing up onto SR 30 (US 98) to the east of the intersection while entering Hurlburt Field by providing a dedicated right turn facility. Additionally, vehicles exiting Hurlburt Field onto SR 30 (US 98) in the westbound direction will have a dedicated lane which eventually merges onto SR 30 (US 98), thus





avoiding the current practice of vehicles attempting to make a right turn onto SR 30 (US 98) onto the through lane. This will alleviate existing conflict points and decrease the number of collisions.

Additionally, vehicles traveling on SR 30 (US 98) whose destination is not Hurlburt Field will have an east-west through movement that will not be signalized thus eliminating the delay that motorists currently experience due to the signalized intersection and the back-up of vehicles entering and exiting Hurlburt Field.

*The successful award of the TIGER Discretionary Grant is the final piece of the SR 30 (US 98) and Cody Avenue project funding package.*

**Hurricane Evacuation**

One cannot evacuate the coast without first traveling east or west to access a north-south route. The SR 30 (US 98) and Cody Avenue project serves a critical purpose as a major east-west [hurricane evacuation route](#) along the Okaloosa County and northwest Florida coast. Furthermore, any Hurlburt Field evacuation efforts further delay the normal evacuation efforts making this intersection a bigger than usual bottleneck during a storm event. Additionally, the SR 30 (US 98) bottleneck congestion could hinder Hurlburt Field emergency operations when highway access is necessary and/or critical. The current intersection contributes to the congestion.

**Table 9** below shows that **Okaloosa County exceeds the Florida Department of Emergency Management recommended 12-hour time frame for evacuation.**

Table 9: Hurricane Evacuation Clearance Times per Hurricane Category in Okaloosa County				
Cat 1	Cat 2	Cat 3	Cat 4	Cat 5
13.5 hr	19.25 hr	19.25 hr	21.75 hr	21.75 hr

Source: Tri-County Growth Management Plan. Okaloosa, Santa Rosa, Walton. HDR, Matrix Design Group, Haas Center University of West Florida, September 2009

**The new interchange will:**

- Facilitate evacuation during emergency or hurricane conditions.
- Provide increased capacity for Hurlburt Field to exit the installation more efficiently.
- Significantly reduce delays as an east-west evacuation.
- Provide a more efficient evacuation route.



*A larger version of this graphic can be found in Appendix A.*



**B. Job Creation and Near-Term Economic Activity**

**Present Employment Conditions and Projected Job Creation**

The SR 30 (US 98) and Cody Avenue project is “ready to go.” This project will rapidly inject short-term economic stimulus into the economy of Okaloosa county through the creation of construction jobs, and in the long term will directly contribute to the creation of an even greater number of permanent new jobs already planned or being recruited. According to the Executive Office of the President of Economic Advisors, for every \$92,000 of government spending, it is estimated that one job-year is created, with 64% from direct and indirect effects and 36% from induced effects. That means with this SR 30 (US 98) and Cody Avenue project, **230 total jobs will be created with 147 direct and indirect jobs, and 83 induced jobs.**





Based on per capita income (2009 Census) of \$28,631, this project would provide a monetary value of greater than \$6.5 million.

undergraduate and graduate level research facilities, including a scientist and student housing facility. **Groundbreaking is anticipated Summer 2012.**

**Table 10: Construction Spending and Short-term Job Creation**

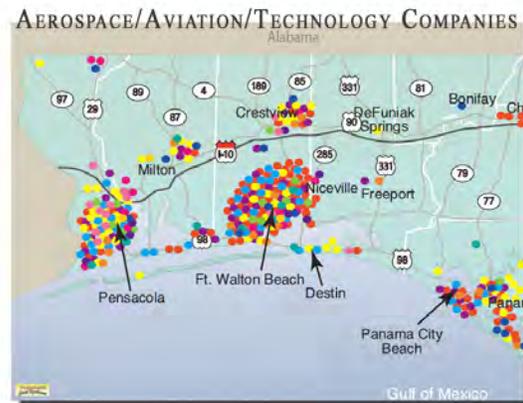
Time Frame	Construction Spending	Total Jobs Created	Construction Labor Effort	Direct Jobs	Induced Jobs
2013	\$ 1.5 million	16.5	34320	11	6
2014	\$ 6.2 million	67	139568	43	24
2015	\$ 9.5 million	104	216320	67	37
2016	\$ 4 million	42	88192	27	15
Total	\$21.2 million	230	478400	147	83

**Northwest Florida Technology Hub**

**Okaloosa County is the technology hub in Northwest Florida with over 275 technology-based companies in centralized areas and growing!** The high growth, high-wage STEM (Science, Technology, Engineering and Mathematics) industries are targeted by the Okaloosa County Economic Development Council for Okaloosa's

Despite the national economic condition and the Deepwater Horizon oil spill, Okaloosa County experienced significant growth and incurred approximately 500 new jobs providing a median wage of \$53,000. **A planned research and development center outside Eglin's West gate and within 10 miles of the project will garner thousands of additional new jobs.** The development is a ground lease of approximately 98 acres of Air Force property. The project is a joint venture targeted to provide facilities for research and technology firms with ongoing missions with the Air Force such as Boeing and Northrup Grumman. [The Emerald Coast Technology and Research Center](#) will house approximately 2.1 million square feet of class "A" office, technology and research lab space supported by an educational core of

growth and recruitment. These high-growth, high-wage industry sectors for the next five years include manufacturing, information technology, professional business services, medical sciences, and financial based industries.



*The Emerald Coast Technology and Research Center*

**Job Creation**

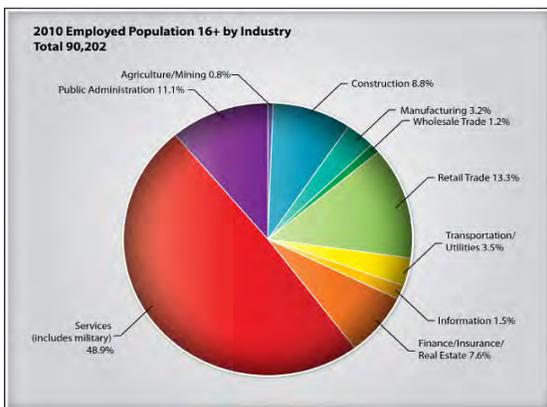
Due to budget constraints, the SR 30 (US 98) and Cody Avenue interchange project is NOT currently scheduled within the FDOT work program for construction. Confirmation of TIGER grant funding will allow the fast-track design-build project to be under contract immediately, fostering both job creation and preservation in the near-term.





*While job creation and economic competitiveness are welcomed, the ripple effect from this significant growth will only magnify the already optimized traffic pattern; we must provide overhaul to this intersection as quickly as possible.*

Initiation of the SR 30 (US 98) and Cody Avenue construction effort will create short-term demand for construction employment within the region. The vast majority of these construction-related jobs will be filled by current employees of local and regional road construction contracting firms located in north Florida, many of which are struggling to keep their forces gainfully employed. Many of those employed by regional road contracting businesses live within the region and will benefit from the additional employment opportunities.



A larger version of this graphic can be found in Appendix A.

### Facilitation of Growth

Over the past several years, AFSOC and 1 SOW personnel numbers have increased in response to changing global events. Hurlburt Field is now the eighth-largest Air Force base in the United States in terms of personnel. In connection with AFSOC's mission, Hurlburt Field also hosts an average of more than 10,000 transient personnel per year, with an average stay of one or two weeks; most of these visitors are housed in contract quarters off-base. Due to land constraints at Hurlburt Field, an estimated two thirds of its military personnel are housed off-base. Fort Walton Beach and the other communities

surrounding Hurlburt Field have experienced rapid growth in permanent residents, both civilians and military retirees. As Hurlburt Field expands its activities and services, installation personnel and their families, along with local military retirees, will access Hurlburt Field more frequently. Seasonal tourism and the absence of local mass transit further contribute to traffic congestion. The Okaloosa County road improvement program has not been able to keep pace with this growth (HDR, 2010a).

### Equal Opportunity

FDOT vigorously enforces social equity requirements and equitable contracting practices in our construction contracts. FDOT requires that minority business enterprises be afforded the full opportunity to submit bids. No businesses, employees, or potential employees will be discriminated against because of race, creed, national origin, gender, age, marital status, or disability.

FDOT's Standard Specifications for Construction Projects, Sections 7-24 through 7-26 will be enforced for equal opportunity, disadvantage business enterprises, and on-the-job training requirements.



### C. INNOVATION

**FDOT has always been committed to long-term operations, safety, and maintenance.**

Local agencies are working hard to promote non-motorized transportation options, improved bus transit, and regional connections. Though primarily a road project, the SR 30 (US 98) and Cody Avenue project will keep Okaloosa County connected.



Proposed interchange (model simulation)





**Innovation is delivered with this project by:**

- Immediate removal of 60% of the traffic flow from this congested intersection that is critical to both local and national security.
- Immediately removes 12 potential conflict points, significantly decreasing opportunity for collisions.
- Cost savings by constructing and improving this interchange beyond 20 years for roadway and 75 years for the bridges.
- Fast-track design-build process that incorporates quality control and quality assurance.
- Compact SPUI design further reduces time delays.
- Utilization of value engineering to promote innovation to reduce costs and minimize impacts.



**D. Partnership**

This project is being sponsored, and will be managed, by FDOT District Three.

**FDOT is in partnership with The United States Department of Defense, US Air Force, Okaloosa County, and the OWTPO to ensure its success and commitments to USDOT.** The current alignment of project partners has resulted from a lengthy planning process that began in 1993.

Throughout the planning process we, along with our partners, have taken numerous steps to inform and involve the public and community groups, including holding technical meetings and public meetings/presentations, and by publishing the draft environmental impact statement for public review and comment.

As evidenced by the Letters of Support included in Appendix B, this project has the formal support of the following officials, agencies, and groups:

**United States Senate**

Senator Bill Nelson

**U.S. House of Representatives**

Jeff Miller, 1<sup>st</sup> District

Steve Southerland, 2<sup>nd</sup> District

**The Florida Senate**

Greg Evers, 2<sup>nd</sup> District

Don Gaetz, 4<sup>th</sup> District

**Florida House of Representatives**

Doug Broxson, District 1

Matt Gaetz, District 4

Brad Drake, District 5

Marti Coley, District 7

**United States Air Force**

Colonel James C. Slife, Colonel, Hurlburt Field

**Economic Development Council of Okaloosa County**

Lawrence Sassano, President

**Okaloosa Walton Transportation Planning Organization**

Jim Wood, Chairman

**The Defense Support Initiative**

Samuel B. Burkett, III, Chairman

**Florida's Great Northwest**

Don Kirkman, President

**Okaloosa County Board of County Commissioners**

James Campbell, Chairman

James Campbell, Chairman

**Okaloosa County School District**

Alexis Tibbetts, Ed.D, Superintendent of Schools





## E. Results of Benefit Cost Analysis

### Evaluation of Expected Costs and Benefits

A Benefit Cost Analysis has been prepared for this project and the funding application. **It is important to note, the analysis performed was conservative in its assumptions, and that benefits will probably be greater than the value provided.** The spreadsheet with calculations and supporting data can be found in Appendix C.

The projected construction cost of this project is \$21.2 million, and the **expected monetized benefits that will accrue from the project over the next 30 years total \$139.8 million, for a net benefit of \$124.4 million.** Monetary benefits have been evaluated and indicate a strong positive benefit to cost ratio for this project: **7.28**.

As previously described, SR 30 (US 98) is the only east-west coastal corridor, thus it is of primary importance to our economy as well as a critical link in the transportation network of Okaloosa County, the region and to our nation. The SR 30 (US 98) intersection is the only commercial entrance available to Hurlburt Field. Allowing the intersection to deteriorate will create an even larger traffic burden on FDOT, Okaloosa County and the surrounding region resulting in significant congestion, safety, and delay costs. Replacing the intersection in a timely manner will result in a savings of significant delay, crash, and operations and maintenance costs. The Benefit Cost Analysis performed for this project shows that reconstruction of the intersection will save the tax payers, FDOT, Okaloosa County and the surrounding region about **\$124.4 million** (Net Present Value, 2010 dollars).

#### Non-Monetized Savings

Other non-monetized savings as mentioned in sections above include items such as: reduction in fuel consumption, vehicle emissions, increased maintenance, and other related costs. In addition, the project will allow the corridor and all of its users,

including commercial traffic, to return to “normal” operation. The return to normal operation will include realized indirect benefits.

#### Non-Monetized Costs of No-Build:

- Congestion and disconnected corridor
- Loss of business in the developed, urbanized area of the County
- Diverted patrons
- Job loss
- Disinvestment in area/city
- Decreased property values of homes/businesses
- Increased maintenance costs to locals as there are no local roads this traffic can shift to
- Congestion and detours create additional emissions
- Less sustainable use of transportation network
- Decreased air quality leading to more health issues

#### Non-Monetized Benefits of Build:

- Safety improvements
- Increased access
- Civic pride
- Scenic values of the reconstructed corridor
- More attractive business environment
- Increase way-finding abilities
- Avoided costs of crashes

#### Calculated Benefits

Both FDOT and TIGER investments reap positive benefits in relation to costs. **Table 11** summarizes the total project benefits. Consistent with USDOT guidelines, benefits and costs were discounted at 7% resulting in a **benefit-cost ratio of 7.28**. Projects with a benefit-cost ratio greater than **1.0** have greater benefits than costs as well as positive net benefits-the higher the ratio, the greater the benefits relative to the costs. Construction of the interchange will have a **benefit-**





**cost ratio much higher than 1.0 providing much greater benefits relative to its cost.** The high benefit cost ratio reflects the considerable demonstratable benefits of this project. **The importance of Hurlburt Field and Eglin AFB to national security make the case even stronger.**

Table 11: Summary of Project Benefits and Costs	
Total Discounted User Benefits	\$140 million
Discounted Construction Cost	\$20 million
Discounted Total Agency Cost	\$15 million
Fuel Consumption Savings (gal.)	1.4 million
Carbon Monoxide Emission Reduction (kg)	1 million
Net Present Value	\$124.4 million
<b>Benefit-Cost Ratio</b>	<b>7.28</b>

*For complete analysis, see Appendix C.*

### Benefit-Cost Analysis Methodology

#### Benefit-Cost Model

The benefit-cost analysis was performed using the software program MicroBENCOST developed in the early 1990's through the National Cooperative Highway Research Program as a comprehensive and convenient framework for doing highway user benefit-cost analysis on personal computers.

MicroBENCOST is designed to analyze different types of highway improvement projects in a corridor. Benefits are calculated for existing and induced traffic, as well as for diverted traffic in a competing parallel route or when a bypass project is evaluated.

Table 12: SR 30 (US 98) Project Cost by Type	
Type	Cost
Right-of-way/easements	N/A
Design Engineering	\$2 million
Construction	\$17.1 million
Construction Engineering	\$ 2.1 million
Total Cost	\$21.2 million

MicroBENCOST evaluates seven types of highway projects:

- Capacity enhancement
- Bypass construction
- Intersection or interchange improvement
- Pavement rehabilitation
- Bridge improvement
- Highway safety improvement
- Railroad grade crossing improvement

Highways may contain several different types of high occupancy vehicle (HOV) facility configurations. Only highway projects are considered. Benefit categories considered:

- User travel times
- Vehicle operating costs
- Accidents

#### Benefit-Cost Methodology

The MicroBENCOST model was set up to calculate the benefit-cost ratio of the build scenario measured against the no-build scenario. In this case, the build scenario was the construction of a SPUI and the no-build scenario kept the facility in its current configuration which is an at-grade signalized intersection. Traffic counts and projections (AADT) were input into the model for initial year intermediate year and design year. Vehicle type parameters were entered into the model for both automobile and truck including value of time as well as vehicle operating costs. Other major variables loaded into the MicroBENCOST model included: average accident costs (including fatal, injury and property damage only), construction costs, speeds, project length and type of improvement for the build scenario. It should be noted that there are numerous parameters and variables within the program that are used to model the benefits and costs of a project.





The baseline for the analysis was 2010 and the last year of the analysis period was 2032. It was assumed that the project would be open to traffic by 2014. All referenced costs are in present day dollars.

### Evaluation of Project Performance

FDOT will collect traffic data on an annual basis to evaluate project performance, including average daily traffic volumes along the corridor in the vicinity of the SR 30 (US 98) and Cody Avenue project. Bicycle counts will be monitored across the corridor and collected as necessary. This data will be analyzed at regular intervals. Collision data will be analyzed annually.

As part of its pavement management program, FDOT will make annual inspections of the newly constructed interchange. The inspections follow the Pavement Condition Index (PCI) procedure. The PCI method measures the occurrence of several pavement distress types and assigns a pavement condition index based upon the density (area affected) and severity of the observed distress. The pavement management data is used to develop paving priorities, model pavement deterioration and forecast future pavement condition, and estimate the impact of different funding scenarios on the condition of the street network. The performance of the pavement will be tracked over time using FDOT's asset management methodology.

The Florida Department of Economic Opportunity and Okaloosa County will track growth in housing and employment as well as other growth areas that will benefit from improved access provided by the TIGER Discretionary Grant award. Monitoring of housing and employment is also performed to track progress in meeting growth management targets.

## V. PROJECT READINESS AND NEPA COMPLIANCE

An Environmental Document (FONSI) was previously completed and approved by the Department of Defense. The document is being updated to meet Federal Highway Administration

(FHWA) guidelines to obtain FHWA approval for the environmental study. An environmental review under the National Environmental Policy Act has been initiated for this project. The proposed action requires an update to the Noise Study and a more extensive public review process.

The public review process provides an opportunity for the public to comment on federal actions addressed in NEPA documents. A public notice was placed in the Florida Administration Weekly announcing the availability of the Draft EA and FONSI for public review and comment. A copy of the publication as it can be viewed [here](#). Copies of the Draft EA and FONSI were made available for review on the web at <http://www2.hurlburt.af.mil/library/index.asp> under the "Hurlburt Field Environmental Documents."

### A. Schedule

FDOT commits to USDOT that FDOT will be successful in completion of all pre-construction, required approvals and activities as required by June 30, 2013, to ensure the USDOT the TIGER Grant funds will be fully obligated in advance of the September 30, 2013, statutory deadline.

Upon receiving notification of receipt of TIGER funding, FDOT will begin the bidding process scheduled to begin September 2012.

See Appendix D for a detailed project schedule.

### B. Environmental Approvals

Completion of NEPA requirements is expected to be complete by November 2011. Upon completion of the documents, they will be submitted along with final the application to the FHWA for review and approval. Based on prior completion of the NEPA review process, the required NEPA review is anticipated to be completed by December 2011. Preliminary engineering documents, approved NEPA and FONSI documents are available [here](#). This necessary project is "ready to go" in less than 90 days after grant award. See Appendix D for a detailed NEPA schedule.





State Road 30/US 98 and Cody Avenue, Okaloosa County			◆ Task
ID	Task Name	Finish Date	◆ Task Complete
1	Primary Task		◆
2	Florida Administrative Ad published	Fri 10/7/11	◆
3	General Media Release	Mon 10/17/11	◆
5	Okaloosa-Walton TPO briefing	Thu 10/20/11	◆
5	Legal Notice published (first print)	Mon 10/10/11	◆
6	Legal Notice published (second print)	Fri 10/21/11	◆
7	Submit Final Noise Study Report	Fri 10/21/11	◆
8	NWFTCA briefing-Port St. Joe	Thu 10/27/11	◆
9	Hearing	Tue 11/1/11	◆
10	Public Comment period closes	Mon 11/14/11	◆
11	Transcript Certification, Comments, and Coordination Report to FDOT	Wed 11/30/11	◆
12	Submit FONSI to DEMO for FHWA Submittal	Wed 11/30/11	◆
13	NEPA Certification	Sat 12/31/11	◆

**NEPA Complete December 2011**

**Right-of-Way**

The right-of-way necessary to construct the interchange will be entirely on federal property and coordination to secure the appropriate easements is currently underway with Eglin AFB Real Estate.

**FDOT has received approval by the Eglin Facilities Board on June 23, 2010 for the SR 30 (US 98) project. A Survey and Legal description has been given to the Eglin Real Property Office and an Environmental Baseline Survey has been completed.**

Eglin AFB is prepared to execute the easement with FDOT for the interchange. **Completion of the R/W phase /Easement Obtained will be complete in February 2012.** The commitment letter can be found in Appendix E.

**Design**

Conceptual plans can be viewed [here](#).

**Legislative Approvals/State and Local Planning**

The project is supported by the local and state officials, as well as community leaders. Furthermore,

the interchange project has been in the long range transportation plan of the OWTPO for more than ten years.

The OWTPO adopted its 2025 LRTP on June 21, 2001. On August 22, 2002, the OWTPO voted to amend the 2025 Cost Feasible Plan to include an interchange at SR 30 (US 98) and Cody Avenue (HDR, 2010c). As of 2010, this project is one of the top priorities for Okaloosa County, FDOT, Hurlburt Field, and the community.

Once funding notification is received, FDOT will initiate the appropriate documentation seeking approval of the Florida Legislature, as well as the Executive Office of the Governor. Legislative approval will be obtained through the Work Program Amendment Process. Additionally, FDOT will coordinate with the appropriate planning agency to amend the Transportation Improvement Plan so it can be amended into the State Transportation Improvement Plan.

This project is a partnership with the U.S. Department of Defense, U.S. Air Force, the State of Florida, Okaloosa County, and the OWTPO.

**Technical Feasibility**

Traffic studies and preliminary engineering design work has been completed for all elements of this project. Roadway improvements will be completed in accordance with FDOT and Florida Department of Environmental Protection (FDEP) requirements.

FDOT plans to provide a 60-day period for contractors to put together their bid packages. By moving forward with the project as soon as possible, FDOT expects competitive bids in the current economic climate. FDOT has prepared detailed design and construction criteria along with conceptual plans in order to ensure consistent bids. The construction approach minimizes impacts to users of the corridor and keeps people and goods moving well into the future.





### Financial Feasibility

Local match funding for this project will be provided by FDOT set aside in a Construction Reserve Account. FDOT has demonstrated its ability to effectively manage grants, with more than 10 federal grants currently under management. The following is a brief summary of major on-going grants:

- American Recovery and Reinvestment Act (ARRA) of 2009
- Innovative Bridge Research & Deployment Program
- Interstate Maintenance Discretionary Projects
- National Scenic Byways Program
- Public Lands Highway Discretionary Program
- Transportation, Community, and System Preservation Program
- Truck Parking Border Infrastructure Program
- Disadvantaged Business Enterprises Services
- On-the-Job Training Services
- Value Pricing Pilot Program

All grants are currently in compliance with all programmatic and financial reports on all cooperative agreements with federal agencies.

### VI. FEDERAL WAGE RATE CERTIFICATION

FDOT agrees to comply with the requirements of subchapter IV of chapter 31 of title 40, United States Code of Federal Regulations (Federal Wage Rate Requirements) for all work associated with this project. Please see attachment F for the signed certification statement.

### VII. CHANGES TO THE PRE-APPLICATION

The Total amount of TIGER funds requested and the non-Federal funds committed were entered in the pre-application as: Total amount of TIGER funds requested: \$16,950,000. Non-federal funds committed: \$4,250,000. Total Project Cost: \$21,200,000.

The Total amount of TIGER funds requested and the non-Federal funds committed are: Total amount of TIGER funds requested: \$16,200,000. Non-federal funds committed: \$5,000,000. Total Project Cost: \$21,200,000.

### CLOSING

Nowhere is it more important to provide an investment for smarter, safer and more strategic approaches to transportation infrastructure than in an area that is booming in industry growth. The award of the TIGER Discretionary Grant to reconstruct the SR 30 (US 98) and Cody Avenue intersection to a SPUI will provide the transportation infrastructure necessary to facilitate and strengthen the region's connectivity, economic opportunity, productivity and access to jobs, education, recreation and governmental services as well as nationally and globally competitive advantages, not only for the military, but also for the development of industry and increased income potential. As evidenced in this application, it will significantly return payback on its investment. The TIGER award and investment in this significant transportation infrastructure improvement secures not only the future of this urban community and the American military, but also the future of the region and nation.

*I am confident this project will create jobs and spur long-term economic growth as well as provide the transportation infrastructure necessary to meet the demands for progress and growth already planned and evidenced in this application. I am pleased and respectfully present the TIGER Discretionary Grant Application for your consideration and award. This is an American transportation project, ready to be constructed by American workers, to strengthen an American county, region, and nation.*

**-James T. Barfield, PE, Secretary, District Three**

