

## **7.0 PREFERRED MOBILITY ENHANCEMENT ALTERNATIVE**

The development and evaluation of alternatives for the I-10 Master Plan utilized a tier screening process. This process permitting the alternatives to be successively screened and ranked, thereby eliminating alternatives that did not meet the study's objectives. The I-10 Master Plan utilized two tiers for the evaluation, each with an increasing level of detail.

The PMEA synthesizes the recommended Tier 1 CMEAs and the recommended Tier 2 Interchange Concepts.

### **7.1 MAINLINE PREFERRED MOBILITY ENHANCEMENT ALTERNATIVE**

CMEA No. 2 is the mainline PMEA for Segment 2 of I-10.

The PMEA for Segment 2 from I-75 to just west of CR 125, of I-10 mainline of Segment 2 is 4 GPL, with the exception of one subsection (between CR 229 and CR 125), where the I-10 mainline is being designed as 6 GPL.

### **7.2 INTERCHANGE PREFERRED MOBILITY ENHANCEMENT ALTERNATIVE**

#### **7.2.1 I-75**

The Interchange PMEA for I-75 is the Level 1 Concept. The I-75 Level 1 Concept corrects all geometric and operational deficiencies, meets the mobility needs without any land use impacts at a lower cost than the alternative Level 2 Concept

The I-75 Level 1 Concept is illustrated on Figure 5-1.

#### **7.2.2 US 41 (SR 25)**

The Interchange PMEA for US 41 is the Level 1 Concept. The US 41 Level 1 Concept corrects all geometric and operational deficiencies, meets the mobility needs with minimal land use and environmental impacts.

The US 41 Level 1 Concept is illustrated on Figure 5-3.

#### **7.2.3 US 441 (SR 47)**

The Interchange PMEA for US 441 is the Level 1 Concept. The US 441 Level 1 Concept corrects all geometric and operational deficiencies, meets the mobility needs with minimal land use and environmental impacts at a low cost.

The US 441 Level 1 Concept is illustrated on Figure 5-4.

#### **7.2.4 US 90 (Baker County)**

The Interchange PMEA for US 90 is the Level 2 Concept. The US 90 Level 2 Concept corrects all geometric and operational deficiencies, meets the mobility needs without any land use impacts although its construction costs are a little higher than the alternative Level 1 Concept.

The US 90 Level 2 concept is illustrated on Figure 5-6.

#### **7.2.5 CR 229**

The Interchange PMEA for CR 229 is the Level 2, Alternative 1 Concept. The CR 229 Level 2, Alternative 1 Concept corrects all geometric and operational deficiencies and meets the mobility needs without any land use impact.

The CR 229 Level 2 Alternative 1 Concept is illustrated on Figure 5-8.

### **7.3 OTHER ELEMENTS**

#### **7.3.1 ITS**

According to the FDOT Central Office ITS Office report, Interstate 10 Corridor Implementation Plan for Florida's Principal FIHS Limited-Access Corridors, there is no ITS coverage on I-10 from I-75 to CR 125 in Baker County. The report also identifies functional gaps in ITS coverage. A functional gap is defined as a area that lacks the appropriate technological infrastructure to support advanced ITS projects. The area from I-75 to CR 125 in Baker County is listed as an ITS Functional Gap in the report.

The current ITS programs along Segment 2 of I-10 include Motorist Aid Call Boxes. The roadside call boxes are deployed at one-mile intervals. Communication with a base position that sends assistance is achieved by a series of microwave towers. The call boxes are a partnership between the FDOT and the FHP. The FDOT maintains the call boxes, acknowledges calls for assistance, and redirects call to the FHP. The FHP dispatches service vehicles to aid motorists.

ITS improvements to I-10 are identified in the FIHS 2025 Cost Feasible Plan. In order to better serve the traveling public and the freight industry, fiber optics and traveler information are planned for the length of the corridor. Specific ITS improvements include Freeway Management Systems; implemented through conceptual projects that include Closed Circuit TV cameras, loop detectors and Dynamic Message Signs (DMS) for all interchanges. It should also be noted that the I-10/I-75 interchange is listed as a "Moderate" priority for ITS improvement in the Interstate 10 Corridor Implementation Plan for Florida's Principal FIHS Limited-Access Corridors Report.

### **7.3.2 Hurricane Evacuation**

The FDOT's Analysis of Florida's One Way Operations for Hurricane Evacuation: I-10 Jacksonville to Tallahassee / Monticello (US 19) Report investigated the feasibility of reverse-laning I-10 from Jacksonville to Tallahassee in an effort to mitigate travel delays and the highway congestion that characterized the Hurricane Floyd evacuation in 1999.

This report cites the need to provide and / or maintain adequate communications infrastructure along I-10 in order to effectively execute these evacuation scenarios. Such infrastructure would primarily be needed to adequately accommodate the dynamic message sign network and other mechanisms to keep the public informed throughout the evacuation. In addition, some improvements related to signing and fixed object protection would be necessary to safely serve westbound traffic flow on the eastbound roadway.