INTRODUCTION AND READER'S GUIDE

This section introduces and summarizes the overall methodology for the Final Tier 1 EIS. This section replaces **Section 3.1** (Introduction) of the Draft Tier 1 EIS, which previously only summarized the organization of, and Tier 1 analysis methodology for, **Chapter 3** (Affected Environment and Environmental Consequences).

Condensed Final Tier 1 EIS

This Final Tier 1 EIS is presented in a condensed format per FHWA Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (1987). The Final Tier 1 EIS is a much shorter document than one prepared under a traditional approach. The condensed format avoids duplication of content presented in the Draft Tier 1 EIS that remains unchanged and does not affect the NEPA decisions to be made. This Final Tier 1 EIS does not republish all data and analyses at the same level of detail as the Draft Tier 1 EIS and its technical appendices; rather, this Final Tier 1 EIS references corresponding sections of the Draft Tier 1 EIS and presents noteworthy changes and updates since the publication of the Draft Tier 1 EIS.

FHWA and ADOT decided to use the condensed Final Tier 1 EIS format, in part, to streamline complex information as requested by several cooperating and participating agencies.

> Read **Chapter 6** (Preferred Alternative) to learn about the Preferred Alternative identified by the Final Tier 1 EIS and how it compares to the Recommended Alternative that was presented in the Draft Tier 1 EIS.

The organization of this Final Tier 1 EIS focuses on the comparison of the Recommended Alternative from the Draft Tier 1 EIS and the Preferred Alternative, with only limited references to the Purple, Green, and Orange Build Corridor Alternatives or lettered options (the smaller segments A, B, C, etc.) where necessary to explain differences in impacts. The condensed format allows the reader to understand the rationale for changes between the Recommended Alternative and Preferred Alternative and the potential environmental impacts and avoidance and mitigation associated with the Preferred Alternative.

Recommended Versus Preferred Build Corridor Alternatives

The Draft Tier 1 EIS analyzed three Build Corridor Alternatives – Purple, Green, and Orange – in addition to the No Build Alternative. The Draft Tier 1 EIS did not identify a Preferred Alternative as outlined in 23 CFR 771.123 but instead recommended an alternative for public feedback (the Recommended Alternative). The Recommended Alternative was a hybrid of mainly the Purple and Green Alternatives and was summarized in **Chapter 6** (Recommended Alternative) of the Draft Tier 1 EIS.

This Final Tier 1 EIS identifies a Preferred Alternative that is different than the Recommended Alternative, as shown on **Figure I-1**. **Chapter 6** (Preferred Alternative) describes why FHWA and ADOT changed the Preferred Alternative from the Recommended Alternative.

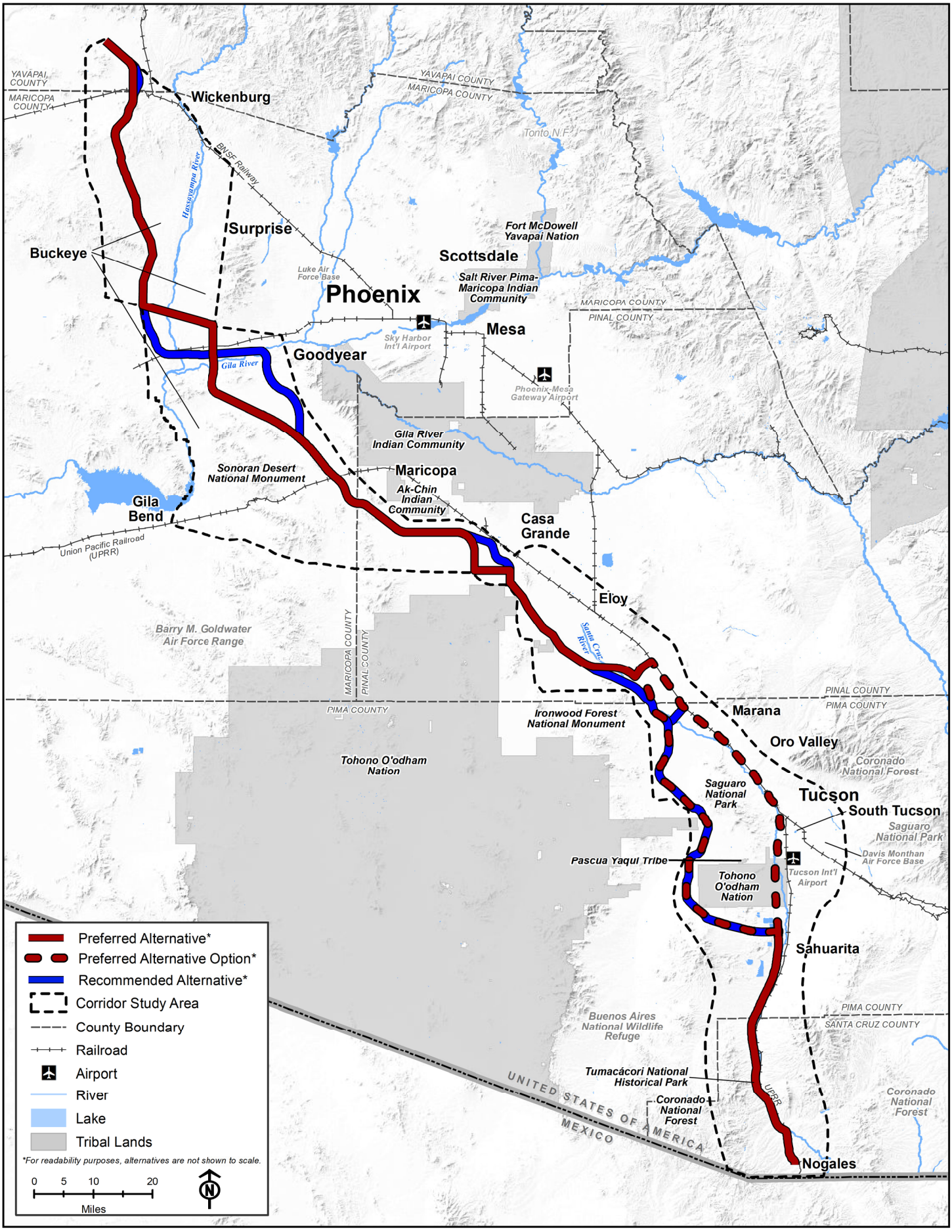

Figure I-1. Recommended and Preferred Alternatives

As shown on **Figure I-1**, FHWA and ADOT are carrying forward two options in Pima County. The Draft Tier 1 EIS recommended the Green Alternative in Pima County. Feedback on the Draft Tier 1 EIS requested more detailed environmental studies and engineering for the I-11 Corridor in this area. FHWA and ADOT considered these comments and modified the Preferred Alternative to carry forward both the west option in Pima County (Recommended, or Green Alternative) and east option in Pima County (Orange Alternative). Because no decision is being made between the west option and the east option at this time, FHWA and ADOT did not conduct additional analyses differentiating between these two options.

Final Tier 1 EIS Organization

This Final Tier 1 EIS is organized as follows:

Chapter 1, Purpose and Need	This chapter summarizes the purpose and need from the Draft Tier 1 EIS and discusses any changes since the Draft Tier 1 EIS was published.
Chapter 2, Alternatives Considered in Draft Tier 1 EIS	This chapter briefly summarizes the Purple, Green, and Orange Build Corridor Alternatives described in more detail in the Draft Tier 1 EIS. *This chapter only describes the three original Build Corridor Alternatives, which formed the building blocks of the Recommended (hybrid) and Preferred (hybrid) Alternatives. The Recommended and Preferred Alternatives are described in **Chapter 6** (Preferred Alternative).*
Chapter 3, Affected Environment and Environmental Consequences	This chapter briefly summarizes the impacts of the Purple, Green, and Orange Alternatives, and compares the Recommended Alternative and Preferred Alternative by resource area. *This chapter does not repeat detailed information related to the Purple, Green, and Orange Alternatives but instead focuses on the Recommended and Preferred Alternatives, which are hybrids of the Purple, Green, and Orange Alternatives. Refer to the Draft Tier 1 EIS for details on the Purple, Green, and Orange Alternatives.* Sections of **Chapter 3** (Affected Environment and Environmental Consequences) follow this format: • Summary of Draft Tier 1 EIS • Summary of Changes Since Draft Tier 1 EIS • No Build Alternative • Recommended Alternative • Preferred Alternative • Mitigation and Tier 2 Analysis The length and complexity of changes to **Section 3.13** (Water Resources) warrant republishing the entire section rather than following the condensed format. Indirect and cumulative impacts by resource are described in **Section 3.17** (Indirect and Cumulative Effects).
Chapter 4, Draft Preliminary Section 4(f) Evaluation	The length and complexity of changes to this chapter warrant republishing the chapter rather than following the condensed format.

Chapter 5, Coordination and Outreach	This chapter summarizes outreach and coordination for the Draft Tier 1 EIS and includes details on outreach since the Draft Tier 1 EIS.
Chapter 6, Preferred Alternative	This chapter compares the No Build, Recommended, and Preferred Alternatives and provides the rationale for changes between the Recommended and Preferred Alternatives.
Chapter 7, Summary of Mitigation and Tier 2 Analysis	This chapter summarizes the mitigation measures and Tier 2 analysis commitments to facilitate compliance in Tier 2. The mitigation measures and Tier 2 analysis commitments are numbered for clarity and accountability.

Geographies

Chapter 3 (Affected Environment and Environmental Consequences) of the Draft Tier 1 EIS described the Build Corridor Alternatives in three sections: South, Central, and North. This Final Tier 1 EIS describes changes between the Recommended and Preferred Alternatives where needed in terms of five geographies as shown on **Figure I-1**.

- I-19: Nogales to Sahuarita (Santa Cruz and Pima Counties)
- Sahuarita to Marana (Pima County)
- Marana to Casa Grande (Pinal County)
- Casa Grande to Buckeye (Pinal and Maricopa Counties)
- Buckeye to Wickenburg (Maricopa and Yavapai Counties)

This Final Tier 1 EIS compares the Recommended and Preferred Alternatives on an end-to-end basis and discusses key decision areas, where applicable. Comparison tables include the west option in Pima County and east option in Pima County. The west option in Pima County assumes the Central Arizona Project (CAP) design option, as described in **Chapter 6** (Preferred Alternative).

Tier 1 Analysis

The Tier 1 analysis identifies and compares the potential impacts of the Build Corridor Alternatives and the No Build Alternative, as described in **Chapter 2** (Alternatives Considered in Draft Tier 1 EIS). The Build Corridor Alternatives have several common features.

- Each Build Corridor Alternative is a 2,000-foot-wide corridor within which a future alignment would be located (**Figure I-2**). The assumed ultimate typical cross section for the I-11 facility is approximately 400 feet wide, but the specific alignment location and width would be refined as part of the Tier 2 analyses. The analysis applied in Tier 1 is sufficient to compare corridor alternatives, and the Build Corridor Alternative selected in Tier 1 would provide Tier 2 studies the flexibility to identify a specific alignment that responds to additional information identified during the more detailed Tier 2 analysis.

- A typical cross section was developed to inform the comparative analysis of the Build Corridor Alternatives. Future cross sections for a specific alignment may be refined in Tier 2 analyses. In locations where a corridor alternative would be co-located with an existing transportation facility, it is assumed that the implementation of the I-11 Corridor would result in capacity improvements as needed to meet Level of Service (LOS) C (in rural areas) or D (in urban areas) for both I-11 and the co-located facility. Assumptions regarding cross sections are provided in **Appendix E1** (Conceptual Drawings) of the Draft Tier 1 EIS. Definitions of the levels of service are provided in **Chapter 1**, **Figure 1-6** of the Draft Tier 1 EIS.

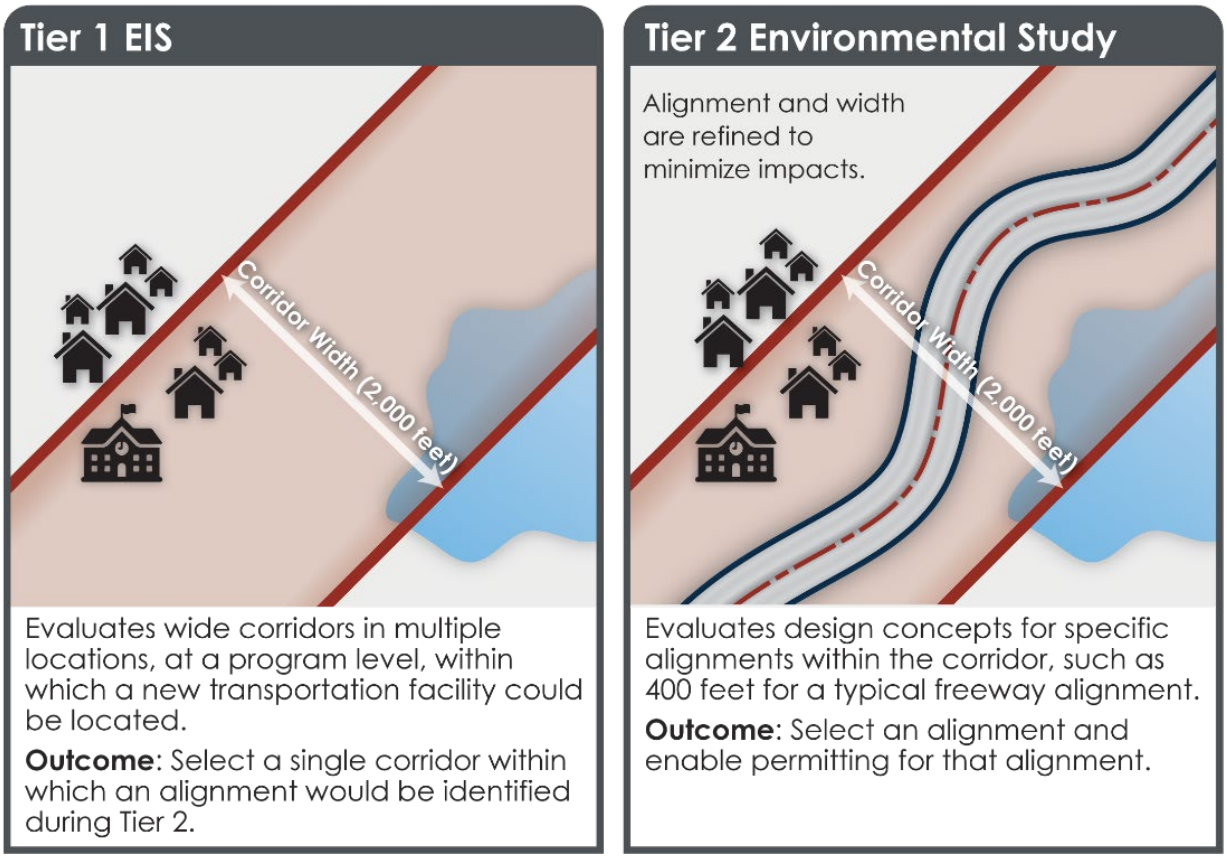

Figure I-2. Tier 1 versus Tier 2 Level of Detail

- Specific interchange locations are not identified for the Build Corridor Alternatives. However, a set of potential interchange locations was assumed for purposes of the analysis based on the most current available transportation network in the Arizona Statewide Travel Demand Model (AZTDM). It is assumed that interchange locations would be accommodated within the 2,000-foot-wide corridor.

The level of analysis for the Tier 1 EIS is qualitative and programmatic, reflecting the broad definition of the corridor for the Tier 1 EIS. The analysis relies on readily available data, mapped information from resource and regulatory agencies, previously completed environmental studies, and aerial imagery. Some technical efforts for the Tier 1 EIS involved limited site visits and field work in selected areas.

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