

CHAPTER 5

INDIRECT IMPACTS AND CUMULATIVE IMPACTS SUMMARY

5.1 INDIRECT IMPACTS ANALYSIS SUMMARY

A technical report provided in **Appendix I** includes an analysis of the potential for indirect impacts that would result from the proposed project. The indirect impacts analysis was conducted in accordance with the Texas Department of Transportation's (TxDOT) *Revised Guidance on Preparing Indirect and Cumulative Impacts Analyses* (September 2010). Indirect impacts associated with the proposed Loop 375 Border Highway West Extension Project were investigated within a study area, or area of influence (AOI). Because the anticipated direct impacts would result in encroachment-alteration effects, the geographic boundary of the proposed project's AOI is delineated by traffic analysis zones associated with the *Mission 2035* Metropolitan Transportation Plan (MTP) that are traversed by the four Reasonable Alternatives.

Eight notable features composed of valued environmental components from community and economic perspectives, as well as vulnerable elements of the population (e.g. minority and/or low-income populations) were identified within the AOI. The eight notable features include six communities (Downtown El Paso, Chihuahuita, Buena Vista, La Calavera Canyon, Old Fort Bliss/Hart's Mill, and Anapra) and two industrial sites (CEMEX Plant and the former American Smelting and Refining Company (ASARCO) smelter plant).

Based on the assessments provided in **Chapter 4**, the types of project impact-causing activities that were heavily considered in the indirect impacts analysis included land transformation, construction alteration, changes in traffic, and access alteration. The probability for the proposed project to result in encroachment-alteration effects was explored for both ecological effects and socio-economic effects. No significant effects to ecological resources were identified. However, the potential for substantial effects to socio-economic resources were further assessed because of the improved access and mobility that would occur as a direct result of the reconfiguration of access to existing facilities to accommodate the proposed facility, as well as construction of new access points.

With respect to encroachment-alteration effects to socio-economic resources, indirect impacts would be driven by changes in travel patterns and access associated with the proposed project. Populations representing notable features associated with local communities (Downtown El Paso, Chihuahuita, Buena Vista, La Calavera Canyon, Old Fort Bliss/Hart's Mill, and Anapra) would experience some degree of adverse impact due to changes in or loss of access, and/or increased noise and visual intrusion. However, populations within these communities could also benefit from the indirect effects of improved east-west mobility, improved local and regional access, improved safety, reduction of incident delay along I-10, inclusion of context sensitive solutions related to aesthetics, and a design that coexists with border security.

In summary, the proposed improvements would result in beneficial impacts on the overall socio-economic conditions within the AOI, with some notable features bearing minor adverse impacts related to access depending on the build alternative. The potential for all eight notable features to be adversely impacted is unlikely as a result of the proposed project. Improved access, mobility, and linkage are anticipated to benefit and support the planned transition within the AOI to a more pedestrian and transit friendly environment as suggested by the City of El Paso's *SmartCode* (2008), *The Plan for El Paso* (2012 comprehensive plan), *Plan El Paso 2010: Connecting El Paso*, and the *El Paso Downtown 2015 Plan*.

Land use planning practices currently implemented by the City of El Paso would help manage any indirect impacts on regional and community growth within the AOI including impacts related to future development or redevelopment within the AOI, potential increased population density, and localized economic growth. Indirect impacts related to downtown El Paso with respect to access modifications are anticipated to be coordinated with the City of El Paso's goals to enhance redevelopment of the area as a pedestrian and transit friendly environment. The proposed Coles Street - Paisano Drive interchange would mitigate reduced access to downtown El Paso by providing more convenient access to most of the downtown area by way of Paisano Drive for travelers from the east, and travelers from the west would have access to Paisano Drive and east of the downtown area by way of Coles Street. In addition, the proposed ramp connecting New Mexico 273 and United States Highway 85 (Paisano Drive) would maintain the current access.

5.2 CUMULATIVE IMPACTS ANALYSIS SUMMARY

A technical report provided in **Appendix J** presents the cumulative impacts related to the proposed project. The cumulative impacts analysis was conducted in accordance with TxDOT's *Revised Guidance on Preparing Indirect and Cumulative Impacts Analyses* (September 2010). All of the resource categories considered in the Draft Environmental Impact Statement were candidates for indirect and cumulative impacts analysis. The initial step of the cumulative impacts analysis used information from the evaluation of direct and indirect impacts in the selection of environmental resources that were evaluated for cumulative impacts. The cumulative impact analysis focused only on: 1) those resources significantly impacted by the project; and 2) resources currently in poor or declining health or at risk even if the project impacts are relatively small (less than significant).

As shown in **Table 3** of **Appendix J**, the resources included in the cumulative impacts analysis include the following two resources: environmental justice communities and air quality. Based on the assessments provided in **Chapter 4** and **Appendix I**, the proposed project has the potential to directly and indirectly impact environmental justice communities in the region. Because these protected populations are considered to be in poor or declining health, environmental justice communities were included in the cumulative impacts analysis. Climate and air quality, although not substantially impacted by the project, may be considered to be in poor or declining health and therefore warrant inclusion in the cumulative impacts analysis.

A resource-specific study area, or resource study area, was defined for the two resources considered for cumulative impacts analysis. The examination of the current health and historical context of each resource was necessary to establish a baseline for determining the impacts of the proposed project and other reasonably foreseeable actions on the resources. Cumulative impacts are evaluated using the following factors: the historical context of each resource, current condition and trend, future land use and zoning plans, and the pertinent regulations and standards associated with each resource. These factors capture the influences that have shaped and are shaping the amount and quality of each resource, and which would continue to shape the resources into the future.

The analysis revealed that cumulative impacts related to the environmental justice communities are anticipated with regard to the displacement of residential and commercial properties, changes in access, visual impacts, and the economic impact of tolling on low-income users of the emerging system of toll roads being developed for the El Paso region.

Regarding air quality, any increased air pollutant resulting from increased capacity, accessibility, and development are projected to be more than offset by emissions reductions from U.S.

Environmental Protection Agency's (EPA) new fuel and vehicle standards or addressed by the EPA's and the Texas Commission on Environmental Quality's (TCEQ) regulatory emissions limits programs. Projected traffic volumes are expected to result in no impacts on air quality, and improved mobility and circulation may benefit air quality. Increases in urbanization would likely have a negative impact on air quality. However, planned transportation improvements in the study area as listed in a conforming MTP (*Mission 2035*), the upcoming draft *Horizon 2040* MTP (scheduled for completion at the end of 2012), and the 2011-2014 Transportation Improvement Plan, coupled with EPA's vehicle and fuel regulations fleet turnover, are anticipated to have a cumulative beneficial impact on air quality.

The EPA and TCEQ initiatives and programs are not expected to have any impact on future particulate matter-10 microns (PM₁₀) emissions from countries outside of the United States.