

TSK 450–a: Define the Land Use Study Area

Step 2 in EM Figure 4590-1: Basic Land Use Analysis Process

See also: [EM Chapter 450, ESO Discipline Specialist](#)

Effective: June 2012

Start task: Region Environmental Coordinator or Local Agency determines a land use analysis is needed to conduct land use analysis.

End task: Study area established and base map created.

1. **Collect design data** from the WSDOT Project Office. This should include, project limits and a basic description of the project (e.g., On SR XX, between MP 59.1 and 87.7, the project is to construct an additional lane, improve road shoulders, pave, and install a new signal).
 - a. At least 30% design drawings are best.
 - b. Include location and project limits for all alternatives being considered in the environmental document.
2. **Estimate study limits** a minimum of ½ mile each side of centerline and ½ mile beyond the project limits.
 - a. Extend study limits the same distance each side of centerline for all alternatives.
 - b. Extend study limits linearly for ½ mile before starting and after ending MPs (i.e., start project study limit at MP 58.6 and end at MP 88.2 in the example above).
3. **Adjust study limits** by estimating the potential effect of the following on your land use analysis. This will require judgment based on your knowledge of the project area or input from your stakeholders.
 - a. The types of impacts likely to be created by your project (noise, relocations, and potential changes in travel patterns). Make sure that the study area is large enough so the impacts can be fully and fairly evaluated.
 - b. Consider changing the boundary so it conforms to geo-political boundaries (e.g. neighborhoods, city limits, parks, and census block boundaries). Be consistent and inclusive. Don't stop half a block short of the city limits, bisect neighborhoods, or exclude essential services such as schools.
 - c. Look at the study area as a whole – is the size of the study area consistent with the size of your project – neither too big nor too small? Do the boundaries make sense? Are they reasonable and defensible?
 - d. Consider asking stakeholders (especially local agency staff) to endorse the study limits. Document how you addressed their concerns in the project file.

- e. Make sure that the study limits for the land use analysis match those for the social analysis.
4. **Document** your assumptions and logic for the decisions you made in step 3.
5. **Create a base map.**
- a. Outline the study area.
 - b. Show the project footprint and all alternatives.
 - c. Show jurisdictional and geographic features (city and county limits, highways, county roads, streams).
 - d. Scale the map so that the relationship between project improvements and alternatives and anticipated ROW purchases can be seen.
 - e. Consider using an air photo as the background for the base map. Air photos which show individual buildings are most useful.
6. **Build on this base map to illustrate other land use information collected in the analysis.**