

CHAPTER NINE – IMPACTS AND BENEFITS

Transportation benefits are numerous. Nearly every social or economic activity involves some form of transportation. Mobility drives the economy. Travel times are significantly decreased with a good transportation system. The delivery of goods and services becomes widespread and increasingly efficient. Unfortunately, along with the benefits come impacts. Land use impacts, vehicle costs, roadway maintenance, project costs, pollution and accidents are all by-products of a transportation network. The purpose of this chapter is to provide a general discussion of the process of determining impacts and benefits of projects included in the Cache Regional Transportation Plan.

I. Environmental Impacts and Benefits

The Cache Regional Transportation Plan was developed in an effort to meet the transportation needs of the Cache Valley in the year 2030. Transportation projects such as transit, highway/road and trail networks all will have positive and negative impacts on both the physical and societal environment. This chapter will attempt to set policy directions for the transportation projects within the Cache Valley. Impacts and benefits of transportation projects should be considered related to:

- **Roadway network:** Utilizing the roadway network to support the vibrancy of the central downtown area will provide numerous benefits to the citizens of Cache Valley. The better the roadways perform, the greater the benefits to the public. Mobility will be improved, commutes will be less stressful, travel times will be reduced and the delivery of goods and services will expand.
- **Land use:** The way land is used is a main determining factor in the success of a region's transportation system. A dense, compact development pattern is more economical in terms of infrastructure, land usage and initial development costs. Compact development tends to lead to higher public transit use and encourages pedestrian activity.
- **Economic development:** A well designed transportation system improves the economy by making goods and services easier to transport and more convenient to attain. There is a correlation between convenience and the amount of goods and services sold. A solid transportation infrastructure is vital to a strong economy.
- **Environmental:** The interaction between the natural and the built environment.
 - **Wetlands:** Wetlands provide an invaluable resource to our ecosystem. Section 404 of the Clean Water Act protects wetlands from development without a permit from the Army Corps of Engineers. Designing the roadways to protect the wetlands in the Cache Valley is in accordance with the requirements of the CWA and leads to a more sustainable community.
 - **Air quality:** Without proper planning the Cache Valley will become a non-attainment area as defined by the Clean Air Act. Transportation planners need to plan for viable transportation alternatives that reduce personal automobile dependency so that the Cache Valley will continue to benefit from clean air.
 - **Water quality:** Water quality can be greatly impacted by the amount of hard surfaces (including roadways) in a region. Hard surfaces lead to polluted runoff instead of the water table's natural percolation cycle.

- Farmland: Preservation of farmland is important in maintaining the character of the Cache Valley. Farmland preservation is one of the components that adds to the quality of life in the Cache Valley.
- Historical/archeological sites: Historical and archeological sites are another component that is hard to measure, but adds to the character and quality of life in the Cache Valley.
- Public transit use: A good transit system provides goods and services that are otherwise unattainable to persons without access to an automobile or people who choose not to use an automobile. Public transit allows the young, the elderly and the disabled to have a viable transportation option. A good public transit system will provide benefits by reducing automobile dependency and air pollution while supporting the economy of the downtown Logan area.
- Pedestrian/bicycle use: A good pedestrian network provides not only an alternative mode, but also a recreational opportunity. Trail systems add to the quality of life in Cache County by encouraging exercise and healthy lifestyles.

II. NEPA Process

While the above elements are important components of the natural and built environment in the Cache Valley and each deserves their own thoughtful and comprehensive analysis, it is not practical that this be done in this Regional Transportation Plan. The transportation planning process allows for and even requires this level of analysis in the environmental analysis phase for individual projects where detailed impacts and benefits to the environment are quantified. This plan does not attempt to perform a comprehensive environmental analysis or Environmental Impact Statement as required by the National Environmental Policy Act (NEPA). At this point, projects included in this plan are for planning and modeling purposes only. Some projects amount to little more than a proposed line on a map. It is not intended to identify specific alignments for planned corridors. When a formal proposal is made, the NEPA process will follow.