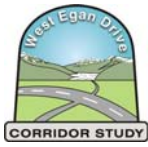


Section 2 - Chapter 2

Existing Physical, Environmental, and Socio-Economic Conditions





2 Existing Physical, Environmental, and Socio-Economic Conditions

This chapter presents a summary of the key findings of our analysis of existing natural conditions (geology, water, and biotic communities) and built environmental conditions (land use, socioeconomic, noise, and light emissions). The background environmental data needed to assess the potential scope and magnitude of any potential impacts is provided in the Chapter 2 Technical Memorandum in the Chapter 2 Appendix. As required by the National Environmental Policy Act (NEPA), administered by the Federal Highway Administration, environmental documentation will be necessary for the proposed action carried forward.

Natural Environment

The natural environment encompasses landforms and geology, hydrology, surface water, fish and wildlife, endangered and threatened or protected species, essential fish habitat, and wetlands. Potential transportation system solutions in the study area considered the following:

- The main rivers or creeks within the project area are the Mendenhall River, Jordan Creek, and Duck Creek. (The Duck Creek Advisory Group is an advocate for the restoration and preservation of the latter.)
- All of the above are identified by the National Marine Fishery Service (NMFS) as anadromous fish streams, important for spawning and rearing of salmon and trout species. Any proposals for transportation system changes in the vicinity of these waters are likely to require review by the NMFS.
- There is wildlife, e.g. riparian habitat, on the edge of the Mendenhall River and in the wetlands along Egan Drive west of the intersection with Yandukin Drive. Fish, bald eagles, geese, mallards and other waterfowl, as well as small mammals (mink, river otter, and moles), are found there.
- There are no known endangered or protected species within the study area.
- Wetlands are found north of Egan Drive in the vicinity of Mendenhall Loop Road, and along Glacier Highway and Shell Simmons Drive. The Mendenhall Wetlands State Game Refuge is close by, adjacent to Juneau International Airport.

Built Environment

This analysis includes historic and cultural background, local government system, land use, 4(f) property (see definition below), social/socioeconomic conditions, future development plans, air quality, recreation, noise, aesthetics, and solid waste/hazardous waste.

As potential solutions to the transportation problems are considered, particular attention has been paid to the following elements:



- Section 4(f) of the 1966 USDOT Act (recodified in 1983 as U.S.C. 303) provides for special land use protections to parks, recreation facilities, and refuges. Applicable properties within the study area include a portion of the Mendenhall River Greenbelt/Kaxdigoowu Héen Dei (Brotherhood Trail). The Mendenhall Wetlands State Game Refuge, Dimond Park, and perhaps the Pipeline Skate Park.
- The economy of Juneau is generally more stable than that of Southeast Alaska as a whole due to a lack of dependence on the timber and fisheries industries. However, because of the large government component in Juneau, the economy of the state as a whole directly affects Juneau. A major uncertainty facing Juneau is the potential for a move of the state capital.
- Although only a small percentage of the population in the Mendenhall Valley lives in the study area, over 31 percent of the businesses in the City and Borough of Juneau (CBJ) are located within the study area, employing over 3,000 people. These include major retail centers such as Fred Meyer, Mendenhall Center, Vintage Business Park, Nugget Mall, Jordan Creek Mall, and Airport Mall that draw traffic from throughout the Borough and Southeast Alaska. These businesses also generate local vehicle and pedestrian trips along and across the transportation facilities within the study area.
- The majority of the businesses within the study area that depend heavily on drop-in traffic are located in malls or areas of grouped businesses with common access to the street network. Most of the businesses in the corridor with independent access are destination businesses.
- Potential major future developments that may have an impact on travel along and across the West Egan Drive Corridor are the following:
 - NOAA/NMFS office building and laboratory at Lena Point
 - Kensington Gold Mine 45 miles north of Juneau
 - Second bridge crossing to Douglas Island
 - 1,400-acre Cascade Point for residential, marine, and commercial related development)
 - North Douglas Road/West Douglas Development: extended road connection to West Douglas, potential housing, and a deep-water harbor.
- In the past, the Environmental Protection Agency (EPA) has classified the Mendenhall Valley as an air quality Non-attainment Area for particulate matter with a size of 10 micrometers or less (PM-10). Efforts by the CBJ have successfully reduced the amount of PM-10 such that the Mendenhall Non-attainment Area is now in maintenance status (ongoing monitoring).
- The three major trail connections within the study area that should be preserved and/or enhanced are the Kaxdigoowu Héen Dei Trail (Brotherhood Trail), Airport Perimeter Trail, and the Thunder Mountain Trail.
- Noise policy and requirements will need to be reviewed during the environmental documentation phase.



- Juneau does not have any sites contaminated with hazardous materials listed on the EPA's National Priorities List (NPL). Four sites are listed for Juneau on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Hazardous Waste Database, and eight sites are list in the CERCLIS archives. These sites will be reviewed, as alternatives are developed to determine if they add cost or liability to one or more alternatives.