

Social Effects – Decision Matrix

Introduction

Both NEPA and SEPA emphasize efficiency in the analysis of impacts. The CEQ Guidelines require agencies to reduce excessive paperwork by discussing only briefly those issues that are not significant (40 CFR 1500.4). Impacts shall be discussed in proportion to their significance (40 CFR 1502.2). Both statutes provide for the use of categorical exclusions as a method to streamline the environmental review process when appropriate.

Not all WSDOT projects require the preparation of a full discipline report on a particular subject to adequately address project effects. We developed this decision matrix to guide report authors on when to prepare a social discipline report versus a letter to file. Social elements should include neighborhoods, residents, public services, public utilities, recreation amenities, noise and air quality conditions, and non-vehicular modes of transportation.

How do I Scale my Documentation?

Analyzing and documenting effects on a community's social resources can take two forms:

Complete a discipline report when effects to social resources are expected or you are unsure of any effects or when the project is expected to cause public controversy. If a discipline report is necessary, you can find more detailed guidance information in the WSDOT *Environmental Procedures Manual*, Chapter 458 and the social effects webpage (<http://www.wsdot.wa.gov/Environment/EJ/Default.htm>).

You should right size the discipline report according to level, type and intensity of effects.

If you find no effects on social resources (relocations, noise, cohesion etc.) a [letter to file](#) (pdf 135k) or the Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form including demographics along other documentation may take the place of a discipline report.

We designed this decision matrix to help you identify which form of documentation is appropriate. Using the matrix requires professional judgment. The facts of any particular project may not fit neatly within the examples given in the matrix and will require the author to use best professional judgment. Authors should consult with the appropriate WSDOT technical staff to agree on the appropriate level of documentation.

Is the Project Exempt?

The first step in using this decision matrix is to determine whether the project is exempt. The following list identifies project activities that are **unlikely** to result in adverse effects on social resources.

Exemptions:

1. Roadway surface replacement, overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking, that do not expand the existing wearing surface.
2. New installation, or replacement or repair of lighting, signs, signals, and other traffic control devices, informational signage/kiosks, and street furniture **within existing right of way limits.**
3. Installation, replacement, or repair of safety appurtenances including but not limited to guardrails, barriers, glare screens, rumble strips, snow and ice detectors and energy attenuators.
4. Repair or replacement of curb and gutter, sidewalks and catch basins within the same location.
5. Emergency repairs to maintain the structural integrity of a bridge or roadway and to remove landslide and rockslide material from travel lanes and shoulders.
6. Construction of turning lanes and pockets, auxiliary lanes (e.g., truck climbing, acceleration and deceleration lanes), sidewalks and shoulder widening **within existing right of way limits.**
7. Installation of bicycle and pedestrian lanes, paths and facilities **within existing right of way limits.**

If the proposed project activities meet one or more of the exemptions, no further analysis is required. Applicable exemptions must be documented on the Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form. All aspects of a proposed project's activities must be covered by an exemption, to consider the project exempt.

How to Use this Decision Matrix

If a project is not exempt, work through the following decision matrix questions to help determine whether the project's effects on social resources should be documented in a "right sized" discipline report, a letter to file or just the Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form.

If the proposed project is not exempt, social resources and demographic data need to be identified in the area of effects. The area of effects (study area) is defined as the furthest limits

of the extent of potential impacts from the proposed project on social resources. If an EJ report is done separately, the study areas should match each other. The study area may extend further than the physical limits of the project. This boundary will likely extend further than the physical limits of the project, usually ½ mile from center line.¹

If no populations or social resources are located within the proposed project area of effects, document the findings, as appropriate, and provide the demographic data to support the findings. A list of resources (Appendix A) is available to help you complete the decision matrix questions.

Decision Matrix

The decision matrix is a step-wise approach that uses a series of questions with yes or no answers to provide direction. Normally, the matrix is applied at the start of a project during scoping. Since many projects change over the course of the design process, it is important to occasionally re-evaluate the answers to these questions. Public controversy or cumulative effects could make a discipline report rather than a letter to file appropriate, even if other effects are minor.

You may identify effects on minority and low-income populations – also known as environmental justice (EJ) populations –while assessing a project’s effect on a community’s social resources (see WSDOT’s [EJ decision matrix](#) [pdf 64k]). If so, specific analysis must be done to determine whether effects on EJ populations are disproportionately high and adverse (see Chapter 458 of WSDOT’s *Environmental Procedures Manual*, and the WSDOT environmental justice webpage: <http://www.wsdot.wa.gov/Environment/EJ/EnviroJustice.htm>)

1. **Community cohesion.** Will the proposed project affect community cohesion by separating or isolating any portion of the community (e.g., minority, elderly, disabled, transit-dependent, large family, income level, and owner/tenant status), from the rest of the community or services? Will the project isolate neighborhoods either physically or functionally that previously were connected?

To answer: Examine census block group data using and consider contacting community service providers, schools, churches, etc. If you need help with obtaining census data, use [our guidance](#) (pdf 24k).

Yes – Prepare a discipline report and proceed to question 2.

No – Document findings and proceed to question 2.

¹ If this is a combined social/EJ report and it is a tolling project, you will need to establish a travelshed as well. The purpose of a travelshed is to identify the users of the facility so you can identify the effects on them. For more information see “for the analyst” section in our FAQs on the WSDOT EJ webpage.

2. **Relocation.** Will the project result in any right of way acquisition or relocation of residences, businesses, or community services? It is important to wait until some amount of preliminary engineering and design is complete before you determine the effects of project acquisitions and relocations.

Yes – Document findings and proceed to question 3.

No – Document findings and proceed to question 7.

3. **Residential relocation.** Will the project relocate more than 25 residences or more than 10 percent of the project area's population?

Yes – Prepare a discipline report.

No – If the project results in the relocation of less than 25 residences or 10 percent of the project area's population, consider this effect cumulatively with results from the other decision matrix questions. If no residences are relocated as a result of the project, document findings and proceed to question 4.

4. **Business relocation.** Will the project relocate businesses that represent a substantial part of the community's economy or greater than 10 percent of the employment in the project area?

Yes – Prepare a discipline report.

No – If the project results in the relocation of businesses representing a minor part of the community's economy or less than 10 percent of the employment in the project area, consider this effect cumulatively with results from the other decision matrix questions. If no businesses are relocated as a result of the project, document findings and proceed to question 5.

5. **Relocation of community and social services.** Will the proposed project affect community services, such as educational facilities and schools, religious institutions, social institutions (community centers, health services, social service organizations, etc.), emergency response services, public services and utilities, cemeteries, or government institutions?

To answer: Analyze census data and consider conducting interviews with community and social service providers. Consider service travel times, access, service areas, new facilities and services, needed facilities and services.

Yes – Document findings and proceed to question 6.

No – Document findings and proceed to question 7.

6. Are the affected community and social services unique in the project area (e.g., a health clinic, the only local community center, etc.)?

Yes – Prepare a discipline report.

No – If the affected community and social services are not the only providers in the project area, consider this effect cumulatively with results from the other decision matrix questions. Proceed to question 7.

7. **Right-of-way.** Will the project acquire property for right-of-way? It is important for the author(s) to wait until some amount of preliminary engineering and design (typically 30 percent) is complete before determining the effects of project right-of-way acquisitions.

Yes – Document findings and proceed to question 8.

No – Document findings and proceed to question 9.

8. Will the loss of property for right-of-way result in relocation of residences, businesses, or community and public services? For example, obtaining frontage right-of-way when reconfiguring an entrance or exit ramp to a limited access highway may change the access to an auto-dependent business and reduce traffic flow to the point of having to relocate.

Yes – A letter to file may be sufficient; however, consider this effect cumulatively with results from the other decision matrix questions regarding relocation of residences, businesses, and community and public services (questions 2-6). Proceed to question 9.

No – Document findings and proceed to question 9.

9. **Physical intrusion – noise, air quality, and visual effects.** Will the project result in any noise, air quality, or visual effects on the adjoining residential community?

Yes – Consider these effects cumulatively with results from the other decision matrix questions. These effects may also be covered in other project discipline reports

(e.g., noise, air quality, and aesthetics); results should be summarized here with appropriate cross-references. Document findings and proceed to question 10.

No – Document findings and proceed to question 10.

10. **Parks and recreation.** Will the proposed project affect parks and recreational features and amenities, such as playgrounds, community parks and gardens, open space, trails, access to water, views/aesthetics, etc.?

To answer: Consider conducting interviews with park and recreation managers; consider local activities and facilities, including uses and number of visitors per day, access, ownership, and official national, state, or local significance.

Yes – Consider this effect cumulatively with results from the other decision matrix questions. Document findings and proceed to question 11.

No – Document findings and proceed to question 11.

11. **Travel patterns.** Will the proposed project permanently change community travel patterns, facilities, and accessibility for vehicles, commuters, transit, bicycles, and/or pedestrians?

To answer: Examine use projections and capacity, safety, and travel times. Also consider accessibility (e.g., cutting off streets, separating residents from services, changing access to private property, etc.) to private property, urban centers, churches, schools, parks and recreation areas, businesses, and community services and facilities.

Yes – Consider this effect cumulatively with results from the other decision matrix questions. Permanent effects on local and businesses may warrant additional economic evaluation (see [economic decision matrix](#) [pdf 64 k]). Document findings and proceed to question 12.

No – Document findings and proceed to question 12.

12. **Travel detours.** Will the proposed project require traffic detours during construction that would temporarily affect community travel patterns and accessibility to social services, amenities, or businesses?

Yes – Consider this effect cumulatively with results from the other decision matrix questions. Lengthy detour times that substantially affect social service provision or local business viability may warrant more detailed analysis and/or economic evaluation (see [economic decision matrix](#) [pdf 64 k]).

No – Document findings.

Decision Matrix Results

If you were not prompted to prepare a discipline report as a result of working through the decision matrix, document project effects in a letter to file or use of the Environmental Review Summary (ERS)/Environmental Classification Summary (ECS). However, after you consider the combined social effects of the project or any substantial public controversy, prepare a discipline report to document project effects.

Appendix A: List of Resources

The following suggested resources are available as references and guidance during the social effects documentation process:

Publications/Guidelines

- Bender, Thomas, *Community and Social Change in America*. Rutgers University Press, New Brunswick, NJ, 1978.
- *Building Projects that Build Communities*, Washington State Department of Transportation (WSDOT). http://www.wsdot.wa.gov/biz/csd/BPBC_Final/
- *Community Impact Assessment: A Quick Reference for Transportation*. Federal Highway Administration (FHWA). September 1996.
http://www.ciatrans.net/CIA_Quick_Reference/Purpose.html
- *Community Impact Mitigation Case Studies FHWA-PD-98- 024*: FHWA. May 1998.
<http://www.ciatrans.net/Casestud.html>
- Comprehensive plans for relevant cities and counties
- Economic Development Council (some offices maintain local economic and demographic information).
- *Flexibility in Highway Design* FHWA-PD-97-062 FHWA. July 1997.
<http://www.fhwa.dot.gov/environment/flex/>
- Housing authorities for relevant cities and counties.
- Metropolitan Planning Organization (MPO)/Regional Transportation Planning Organizations (RTPO) provide demographic information for their region.
- *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions* National Cooperative Highway Research Program (NCHRP)
http://gulliver.trb.org/publications/nchrp/nchrp_rpt_480a.pdf
- *Public Involvement Techniques for Transportation Decision-Making*. FHWA/ Federal Transit Authority (FTA). September 1996.
<http://www.fhwa.dot.gov/REPORTS/PITTD/cover.htm>
- Real estate trends for communities in the project area from local real estate offices.
- *Technical Advisory 6640.8 (a) Guidance for Preparing and Processing Environmental and Section 4(F) Documents*, FHWA , October 30, 1987.
<http://www.fhwa.dot.gov/legsregs/directives/techadv/t664008a.htm>

- *Washington Rural Health Assessment Project (WRHAP) Monograph: Population Trends in Rural Washington, 1990-2000*, Washington State Department of Health, Office of Community and Rural Health. 2003.
- *WSDOT Environmental Procedures Manual, Chapter 458*. (use latest)
<http://www.wsdot.wa.gov/publications/manuals/fulltext/M31-11/458.pdf>

Web Sites (web site references should list date accessed)

- Administration on Aging: <http://www.aoa.gov/>
- American Community Survey: <http://www.census.gov/acs/www/>
- American Fact Finder: <http://factfinder.census.gov/servlet/BasicFactsServlet>
- Child Nutrition Program, Office of Superintendent of Public Instruction.
<http://www.k12.wa.us/ChildNutrition/default.aspx>
- Ethnic and Special Audience Newspapers in the Pacific Northwest:
<http://db.lib.washington.edu/press/>
- Governor's Office of Indian Affairs, WA State: <http://www.goia.wa.gov>
- HHS (US Department of Health and Human Services). The latest HHS poverty guidelines. <http://aspe.hhs.gov/poverty/>
- National Center for Educational Statistics: <http://nces.ed.gov/ccd/schoolsearch/>
School-specific demographic information and information on free and reduced price meals program by county and school.
- TIGER files: <http://www.census.gov/geo/www/tiger/index.html>
Census maps
- U.S. Census Bureau: <http://www.census.gov/>
- U.S. Census Bureau Small Area income and poverty estimates
<http://www.census.gov/hhes/www/saipe/>
- U.S. Department of Housing and Urban Development:
<http://www.hud.gov/apps/section8/index.cfm>
Section 8 housing information by county.
- WSDOT Context Sensitive Solutions: <http://www.wsdot.wa.gov/biz/csd/>
- WSDOT social and community effects website:
<http://www.wsdot.wa.gov/Environment/EJ/Default.htm>
- WSDOT Tribal Liaison: <http://www.wsdot.wa.gov/tribal/default.htm>