

Economic 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 where appropriate.

Not all WSDOT projects require the preparation of a full discipline report on a particular subject to adequately address the issues at stake. We developed this decision matrix to guide report authors on when to prepare an economic discipline report versus a letter to file. You should consider economic climate, regional and local economies, relocation of businesses, farm and business activity, employment, and property values as part of economic elements.

How do I Scale my Documentation?

Evaluating and documenting effects on a community's economic resources may take two forms:

You should complete a discipline report when you expect substantial effects or public controversy. If a discipline report is necessary, more detailed guidance information can be found in the **WSDOT *Environmental Procedures Manual*, Chapter 458**. You should right size your discipline report according to the level, type and intensity of effects.

If there are economic resources in the study area but there are little to no effects on them (relocations, changes in access/visibility etc.) a letter to file or Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form may be used for documentation.

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 economic resources. WSDOT and FHWA developed this list of exemptions.

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, you do not need to do any further analysis. You need to document applicable exemptions on the Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form. To consider the project exempt, all aspects of a proposed project's activities must be covered by an exemption.

Although it is unlikely that any of these activities would adversely affect economic resources, you should not make that assumption.

How to Use this Decision Matrix

If a project is not exempt, work through the following decision matrix questions to help determine whether a project's effects on the economy and local businesses 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.

The area of effects (study area) is defined as the furthest limits of the extent of potential impacts from the proposed project on economic resources. These boundaries may extend further than the physical limits of the project and are commonly ½ mile from center line.

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, you would apply the matrix 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.

1. **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? It is important for the author(s) to wait until some amount of preliminary engineering and design is complete before determining the effects of project relocations.

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, document findings and consider this effect cumulatively with results from the other decision matrix questions and proceed to question 2.

2. **Employment.** Will the proposed project change the location or result in a loss of greater than 10 percent of permanent jobs in the project area by relocating industrial and commercial businesses, bypassing diversions, imposing barriers, affecting growth or development, etc.? Consider especially those businesses owned or serving minority and low-income populations.

Yes – Prepare a discipline report.

No – If the project results in the relocation or loss of less than 10% of the permanent jobs in the project area, document findings and consider this effect cumulatively with results from the other decision matrix questions and proceed to question 3.

3. **Travel patterns.** Will the project permanently change travel patterns that could affect local businesses (e.g., remove heavy traffic volumes from a street bordering businesses highly dependent on drive-by customers, such as gas stations, etc.)?

Yes – Document findings and consider this effect cumulatively with results from the other decision matrix questions and proceed to question 4.

No – Document findings and proceed to question 4.

4. **Revenue.** Will the project affect revenue generation (e.g., lost on-street paid parking, reduced freight mobility, new or modified freight restrictions, tolling changes, etc.)?

Yes – Document findings but also consider the magnitude of this revenue loss relative to the overall local and regional economy, as well as the cumulative results from this decision matrix. Proceed to question 5.

No – Document findings and proceed to question 5.

5. **Property values.** Will the proposed project affect property values?

To answer: Consider traffic volumes, competing enterprises and centers, visibility, access, altered commercial sales potential, right-of-way annexation, land use, etc.

Yes – Document findings and consider this effect cumulatively with results from the other decision matrix questions. Proceed to question 5.

No – Document findings and proceed to question 5.

6. **Temporary construction effects.** Will the proposed project create temporary economic effects related to construction? Consider, for example:

- Traffic detours affecting community travel patterns and/or accessibility to businesses resulting in lost revenues?
- Reduced freight mobility?
- Employment changes?
- Loss of on-street paid parking spots?

Yes – Document and consider these effects cumulatively with results from the other decision matrix questions¹. In addition, lengthy detour times that substantially affect local business viability may warrant more detailed analysis.

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, a letter to file or Environmental Review Summary (ERS)/Environmental Classification Summary (ECS) form is appropriate for documenting project effects. However, if you decide the economic effects of the project to be substantial when considered in combination, or you anticipate substantial public controversy, prepare a right-sized discipline report to document project effects.

¹ Consider a combined social/economic discipline report if effects are multiple and minor.

Appendix A: List of Resources

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

Publications/Guidelines

- Annual budget information for relevant cities and counties.
- Comprehensive plans for relevant cities and counties
- Eagle, David, and Yorgos J. Stephanedes. 1987. Dynamic Highway Impacts on Economic Development. *Transportation Research Record*, No. 1116, pp.56-62.
- Economic Development Council (some offices maintain local economic and demographic information).
- Forkenbrock, David J., and Glenn E. Weisbrod. 2001. *NCHRP Report 456: Guidebook for Assessing the Social and Economic Effects of Transportation Projects*. Transportation Research Board and National Research Council, in cooperation with the Federal Highway Administration. National Academy Press: Washington, D.C. pp. 151.
- IMPLAN economic input-output model. Minnesota IMPLAN Group, Inc. IMPLAN is used to capture the multiplier effects of economic activities. It provides direct, indirect, and induced effects of economic activities.
- Labor market and economic analysis information for relevant cities and counties from the Washington State Employment Security Department.
- Metropolitan Planning Organization (MPO)/Regional Transportation Planning Organizations (RTPO) provide demographic information for their region.
- NCHRP Report 122 - Summary and Evaluation of Economic Consequences of Highway Improvements.
- 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/techadvs/t664008a.htm>
- U.S. Department of Commerce Bureau of Economic Analysis' Regional Input Output Modeling System (RIMS II).
- WSDOT Environmental Procedures Manual, Chapter 458. (Use the most current version). <http://www.wsdot.wa.gov/publications/manuals/fulltext/M31-11/458.pdf>

Web Sites

- U.S. Census Bureau: <http://www.census.gov/>
- U.S. Census 1990 and 2000: <http://factfinder.census.gov/servlet/BasicFactsServlet>
Basic facts and data sets by county, census tract, census block groups, etc.
- U.S. Department of Housing and Urban Development in Washington:
<http://www.hud.gov/local/index.cfm?state=wa>
- Washington Agricultural Statistics Service (WASS): <http://www.nass.usda.gov/wa/>
- Washington Center for Real Estate Research: <http://www.cb.wsu.edu/~wcrer/>
- Washington Office of Financial Management. Population estimates for towns, cities, and counties. <http://www.ofm.wa.gov/pop/estimates.asp>
- Washington State Employment Security Department (ESD). Labor Market and Economic Analysis. Information by type, industry employment and wages, covered employment and wages by industry. <http://www.workforceexplorer.com/cgi/mywi/?PAGEID=mywi>
- Washington State Department of Revenue. Quarterly Business Reviews.
<http://dor.wa.gov/content/aboutus/statisticsandreports/tid/statisticsreports.aspx>