

## Visual Quality

### Contact

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### Purpose

Visual quality is an important part of our environment because it helps assure that all Americans experience safe, healthful, productive, **aesthetically and culturally pleasing surroundings**. Transportation project development provides opportunities to preserve and enhance the visual quality of the travel experience and the project's visual effect upon the surrounding environment, a key part of the National Environmental Policy Act (NEPA) and other laws. (See "Legal Basis").

### Threshold Criteria

A Visual Impact Assessment (VIA) is part of a larger environmental review process, which in turn is part of a still larger highway project development process. As part of these processes, the VIA is intended to provide decision makers with information on the potential adverse and beneficial impacts on visual quality that can influence the selection of a preferred project alternative, refine scoping and inform design development. The VIA provides project managers with the information they need to most effectively mitigate adverse impacts on visual quality while implementing concepts to enhance existing visual quality.

In 2020, MnDOT transitioned from the previous "6 step VIA process" to the 2015 FHWA "Guidelines for the Visual Impact Assessment of Highway Projects" for MnDOT developed projects.

Early in the scoping process for a project, the Project Manager should contact the Environmental Planning & Design Unit for guidance on whether a VIA is needed, the level of effort, the schedule and cost impacts of the VIA.

All transportation projects can consider the visual effects. On more complex projects needing an Environmental Assessments (EA), Environmental Assessment Worksheet (EAW) or

Environmental Impact Statement(EIS), there would be an expectation that a VIA be considered, and depending on the project context, utilized. A VIA could be used on less complex Categorical Exclusion (CE)-type projects also, depending on the potential for visual impacts. The VIA is a good tool for improved public outreach within the NEPA/MEPA process. The VIA can also support other NEPA/MEPA processes within a project such as evaluating the project's visual effects on the setting of historic/archeological sites, overlooks and rest areas, local park and recreation areas, Wild & Scenic Rivers, National Parks, National Wildlife Refuges, etc.

If the project might have visual quality effects, a VIA can help ensure the best outcome. To conduct a VIA using the 2015 FHWA, 4-step process called "Guidelines for the Visual Impact Assessment of Highway Projects" see the steps outlined below and at [Guidelines for the Visual Impact Assessment of Highway Projects](#).

**Contact the Environmental Planning & Design Unit for assistance with:**

- Determining the need for a VIA
- Determining the level of a VIA using the Questionnaire or Comparative Matrix Methods
- Establishing the Area of Visual Effect (AVE)
- Conducting a VIA
- Documenting visual quality issues
- Serving on technical advisory committees

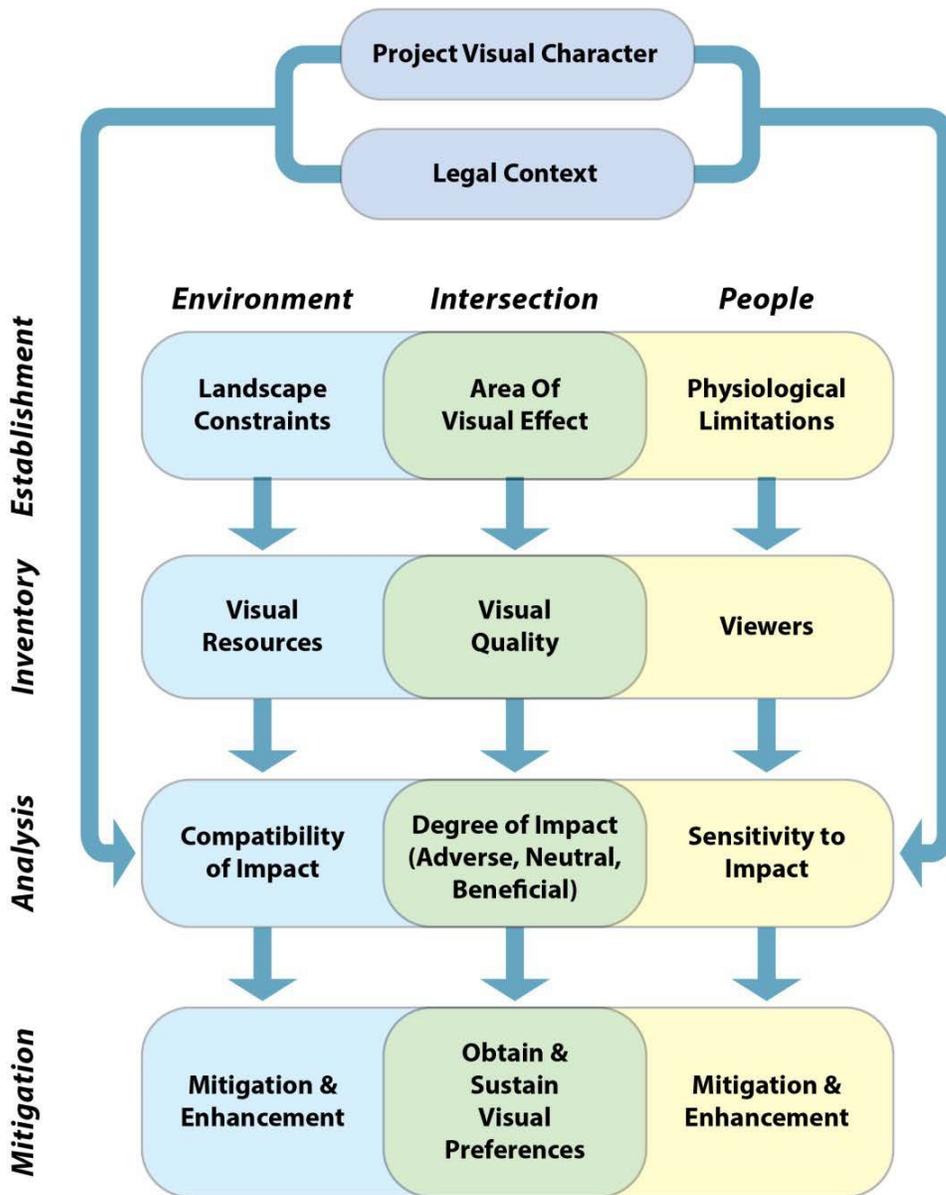
**If the project requires an EA, EAW, or EIS:**

A VIA is strongly recommended

**For other projects, a Visual Impact Assessment is recommended if the project involves:**

- Grading beyond the shoulder of the roadway Structures such as bridges & walls
- Lighting, railings, fencing, etc.
- Pedestrian and/or bicycle routes Vegetation (protect, add, modify or remove)
- Scenic Byways
- Rest areas, overlooks, state and community entrances
- Historic/Archeological sites
- Resources protected by federal or state law

## FHWA Visual Impact Assessment 4-step Process



The diagram illustrates the work flow of the FHWA 4-step VIA process. The process begins with the establishment phase, moving through the inventory and analysis phases, and concludes with a mitigation phase. Each phase is based on the interaction between people and the environment. The process is the same regardless of project complexity, but the level of effort can be tailored to fit the project.

## **FHWA VIA 4-step Process Overview**

The VIA process is carried out in four phases: Establishment, Inventory, Analysis, and Mitigation. See [Guidelines for the Visual Impact Assessment of Highway Projects](#) for details.

### **Establishment Phase**

The primary purpose of the establishment phase is to define the AVE, or the study area of the VIA. Preparers should determine the AVE by considering the landscape constraints (landform and land cover) and the physiological limits of human sight.

During the establishment phase, the authors should also build an understanding of the conceptual character of the proposed project, including a rough understanding of the project's visual character and determine if the community has any defined visual preferences.

### **Inventory Phase**

The purpose of the inventory phase is to examine *visual quality*, or what people like or dislike seeing. Visual quality is a relationship between viewers and their environment. To carry out this phase, preparers should first identify the components of the affected environment and the composition of the affected population, and then consider the relationship between them.

### **Analysis Phase**

The purpose of the analysis phase is to evaluate impacts on visual quality. Initially, authors should assess impacts the project may cause to the visual resources and viewers separately and then synthesize these separate evaluations and describe the degree of impact as *beneficial*, *adverse*, or *neutral*.

### **Mitigation Phase**

The purpose of the mitigation phase is to define the mitigation and enhancement efforts to be included in project design. This final phase of the VIA process is typically completed after a preferred alternative has been selected.

## **Relationship to the HPDP**

### **Class I Actions (EIS Projects)**

**Scoping Documents (SD) & Scoping Decision Document (SDD)** Conduct early assessment of magnitude and significance of potential visual impacts -- noting any need for further visual impact assessment.

### **Draft Environmental Impact Statement (DEIS)**

When the potential for visual quality impacts exists, identify and list the impacts to the existing visual resources, the relationship of the impacts to potential viewers of and from the project's alternatives, as well as measures to avoid, minimize, or reduce the adverse impacts. The Visual Impact Assessment will help identify and document visual impacts and mitigation. When there is potential for visual quality impacts, explain the consideration given to design quality, art and architecture in the project planning. These visual resources may be particularly important for projects located in or near historic/archeological properties where adverse effects may occur to their settings or negative impacts on the characteristics of a Wild and Scenic River, etc. Document the VIA analysis within an individual chapter of the DEIS. When a proposed project will include features associated with design quality such as landscape, pavement, lighting, street scape furnishings, bridges, bicycle/ pedestrian routes, art and architecture, circulate the DEIS to state and local arts councils and other organizations with an interest in design, art and architecture. A draft Section 4(f) Evaluation may be needed if 4(f) properties are affected. A Section 106 Memorandum of Agreement (MOA) may be needed if 106 properties are affected. If within a Wild & Scenic River, an evaluation of the project by the National Park Service under the Wild and Scenic Rivers Act, Section 7(a), may be needed.

### **Final Environmental Impact Statement (FEIS)**

Document any proposed visual impact mitigation for the preferred alternative. Complete Final Section 4(f) Evaluation, and Section 106 MOA and Wild & Scenic Rivers Section 7(a), if needed.

### **Record of Decision (ROD)**

Include summary statement on visual quality impacts and mitigation.

### **Project Records**

Store VIA documentation in an e-Docs or similar location that is accessible to all project partners and meets long term project storage needs.

### **Visual Quality Manual (VQM)**

A document to carry forward the results of the VIA assessment and public engagement by further developing design concepts for project segments, guidance for visual resource protection and specific design details that benefit visual quality and or mitigate non-benefitting impacts.

## **Class II Actions (Categorical Exclusions)**

### **Categorical Exclusion Determination (CATEX)**

- Contact Environmental Planning & Design Unit, to determine the level or scalability of VIA for CATEX's.

If the potential for visual impacts exists, the CATEX should follow the guidance for the DEIS and FEIS discussed above.

## **Class III (EA/EAW Projects)**

### **Environmental Assessment (EA)**

If the potential for visual impacts exists, the EA should follow the guidance for the DEIS and FEIS discussed above.

### **Finding of No Significant Impact (FONSI)**

Include summary statement on the visual quality assessment.

### **Visual Quality Manual (VQM)**

A document to carry forward the results of the VIA by detailing design concepts for project segments, guidance for protected resources and references to specific design intent.

## For Class I, II, and III Actions – Environmental Management Plans

Ensure that all VIA mitigation commitments are incorporated into the Plan, Specification and Estimate by documenting them in the [Environmental Management Plans \(Green Sheets\)](#).

## Agencies Involved

Agencies involved will vary depending on the nature of the visual impact. Tribal officials, local units of government, resource agencies, neighborhood groups, public and private institutions, advocates for specially designated roadways and businesses along the project corridor are typical groups involved in the visual impact assessment.

## Permits/Approvals

None required for visual impact assessment.

## Legal Basis

The National Environmental Policy Act (NEPA) states the need to "assure for all Americans safe, healthful, productive, and **aesthetically and culturally pleasing surroundings**."

The Highway Beautification Act of 1965 was to provide effective control of outdoor advertising and junkyards, to protect the public investment, to promote the safety and recreational value of public travel and preserve natural beauty, and to provide landscapes and roadsides development reasonably necessary to accommodate the traveling public.

The following laws are related to visual quality:

Description	Code
National Environmental Policy Act (NEPA) of 1969	<a href="#">42 U.S.C. 4321</a> et seq.; see also <a href="#">23 CFR 771-772</a> (FHWA regulations) and <a href="#">40 CFR 1500-1508</a> (CEQ regulations)
Highway Beautification Act of 1965	<a href="#">23 U.S.C. 131</a> , <a href="#">23 U.S.C. 136</a> , <a href="#">23 U.S.C. 319</a> , (Public Law 89-285)
Section 4(f) and 6(f) of the Transportation Act	<a href="#">23 U.S.C. 138</a> , <a href="#">49 U.S.C. 303</a> (Public Laws 100-17, 07-449 and 86-670)

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National Historic Preservation Act of 1966, Section 106

Wild and Scenic Rivers Act of 1968, Section 7(a)

Antiquities Act of 1906 – national monuments

National Trails System Act of 1968

National Scenic Byways Program established by the Intermodal Surface Transportation Efficiency Act of 1991

## Guidelines/Regulations

Creator (Agency/Author)	Subject of guideline/regulation	Date
FHWA	Highway Beautification- <a href="#">23 CFR 750</a> ; 23CFR 750 has several parts which discuss advertising, informational and directional signs.	
FHWA	Junkyard Control and Acquisition - <a href="#">23 CFR 751</a>	
FHWA	Landscape and Roadside Development - <a href="#">23 CFR 752</a>	
FHWA	<i>Visual Impact Assessment for Highway Projects</i>	1981
FHWA	"Visual impacts" from FHWA Technical Advisory <a href="#">T6640.8A</a> )	1987
MnDOT	6-Step VIA Process in HPDP	1989
MnDOT	Tech Memo <a href="#">06-19-TS-07</a> , Design Policy - "Design Excellence Through Context Sensitive Design"	2006
TRB	NCHRP Report 741 <a href="#">Evaluation of Methodologies for Visual Impact Assessments</a>	2013
FHWA	<a href="#">Guidelines for the Visual Impact Assessment of Highway Projects</a>	2015

## Appendix

### Process for Visual Impact Assessment

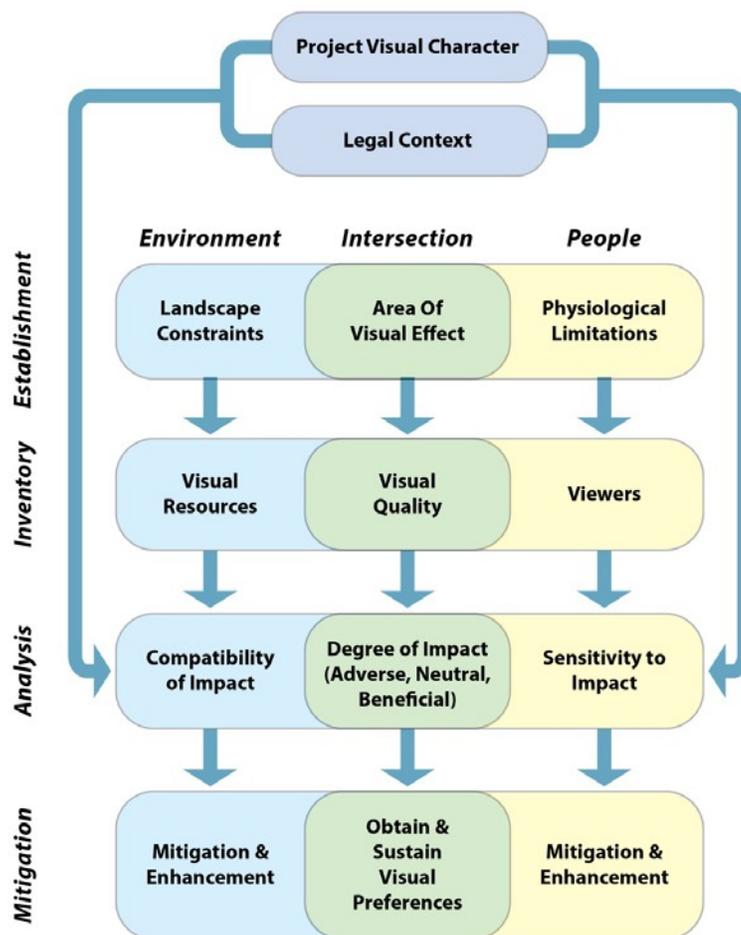
#### Before Starting

Before doing the Visual Impact Assessment, it is helpful to talk and plan with the Environmental Planning & Design Unit.

*“A VIA scoping questionnaire or a comparative matrix method can help determine the appropriate level of VIA. Either method can be used, and regardless of the method used, as the VIA is developed, evaluate whether the level of analysis and documentation is appropriate for the project and adjust as necessary to new information.”*

### VIA 4-step Process Overview

#### Visual Impact Assessment Process



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## **Mitigation Phase**

The purpose of the mitigation phase is to define the mitigation and enhancement efforts to be included in project design. This final phase of the VIA process is typically completed after a preferred alternative has been selected.

The full 4 step VIA process can be found at:

[https://www.environment.fhwa.dot.gov/env\\_topics/other\\_topics/VIA\\_Guidelines\\_for\\_Highway\\_Projects.aspx](https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.aspx)

## **After Completion**

After completing the VIA, see the Prepared Statements section below, select a statement to include in the environmental document and modify it to fit the project. If necessary, document also in a separate Visual Quality Manual.

## **Prepared Statements that can be used within the environmental document:**

### **Projects with No Adverse or Beneficial Effect on Visual Quality**

If a project will have no adverse or beneficial effect on visual quality, the following statement should be used:

"No significant impact to the visual resources of the natural, cultural, and project environments is anticipated. No significant impact to the ability of the affected population to view visual resources is anticipated. Visual quality will, therefore, not be altered by the proposed project. The proposed project will have no significant adverse impacts to visual quality nor will it create any opportunities to enhance visual quality in the project area."

### **Projects That Have an Effect on Visual Quality**

For projects which have an effect on visual quality, assemble from the following phrases, a statement applicable for your project.

For projects with impacts to visual resources, use: "The proposed project will create (adverse or beneficial) impacts to visual quality by causing (minor or major) changes to the visual resources of the (natural, cultural, or project) environments. (List particular resources which will be affected. List adverse impacts first; enhancements, second.)"

For projects with major adverse impacts to visual resources, add: "The proposed project will mitigate (avoid, minimize, or compensate for) adverse impacts to (natural, cultural, or project) visual resources. It will (list specific mitigation practices.)"

For projects with minor adverse impacts to visual resources, add: "The adverse impacts to (natural, cultural, or project) visual resources are minor. No mitigation of adverse impacts is necessary."

Note that a project may, for example, have minor impacts to cultural visual resources and major impacts to natural visual resources. In that case, both of the above paragraphs could be used

### **Projects with Opportunities for Enhancing Visual Resources**

For projects with opportunities to enhance visual resources, add: "The proposed project will enhance visual quality by removing undesirable (inharmonious, disorderly, or incoherent) visual resources; by rehabilitating formerly desirable (harmonious, orderly, or coherent) visual resources; (and or) by adding desirable (harmonious, orderly, or coherent) visual resources. It will (list specific enhancements.)"

For projects with impacts to viewing, use: "The proposed project will create (adverse or beneficial) impacts to visual quality by causing (localized or widespread) changes in the ability of (neighbors or travelers) to see the visual resources of the (natural, cultural, or project) environments. (List particular views which will be affected. List adverse impacts first; enhancements, second.)"

For projects with widespread impacts to viewing, add: "The proposed project will mitigate adverse impacts of (neighbors or travelers) to see desirable (harmonious, orderly, or coherent) scenes. The project will avoid (diminishing or obstructing) desirable (harmonious, orderly, or coherent) views. Impacts that cannot be avoided, will be minimized. The project will compensate for impacts which cannot be minimized. It will (list specific mitigation practices.)"

For projects with localized impacts to viewing, add: "The adverse impacts to viewing by (neighbors or travelers) are minor. No mitigation of adverse impacts is necessary."

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Note that projects may, for example, have minor impacts to travelers and major impacts to neighbors. In that case, both of the above paragraphs could be used.

For projects which enhance viewing, add: "The proposed project will enhance visual quality by limiting access to undesirable (inharmonious, disorderly, or incoherent) views or by improving access to desirable (harmonious, orderly, or coherent) views. It will (list specific enhancements.)"