

Quality Environmental Documents

Presented by:

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Why focus on quality?

- ◆ Consistent, predictable, repeatable
- ◆ Efficient quality reviews
- ◆ Clear expectations



Define Quality

- ◆ Do environmental documents satisfy regulations?
- ◆ Are they useful to the public and decision makers?
- ◆ Are they prepared in a way that reduces paperwork and delay?



Council on Environmental Quality

Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. (40 C.F.R. § 1500.1(b))



Council on Environmental Quality

Focus on significant issues to be treated, not issues that are not significant or have been treated elsewhere, which should be eliminated from detailed study (40 C.F.R. § 1501.7(a)(2) and (3))



Council on Environmental Quality

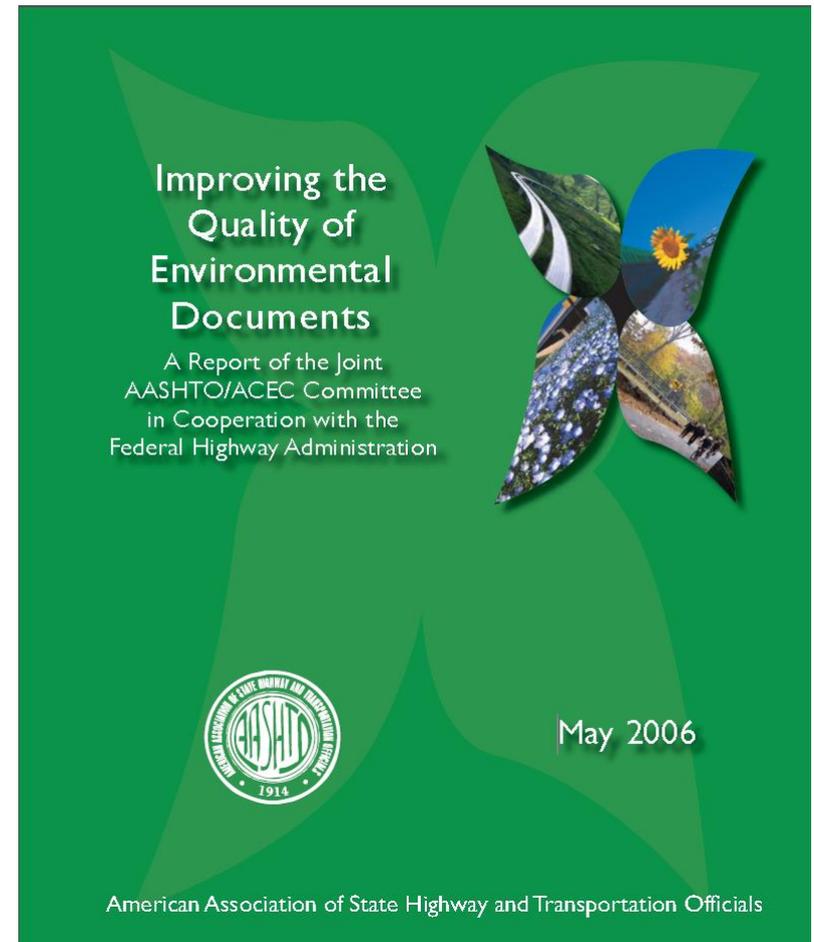
Written in plain language, employing appropriate graphics so that decision makers and the public can readily understand them. (40 C.F.R. § 1502.8)



AASHTO/ACEC/FHWA

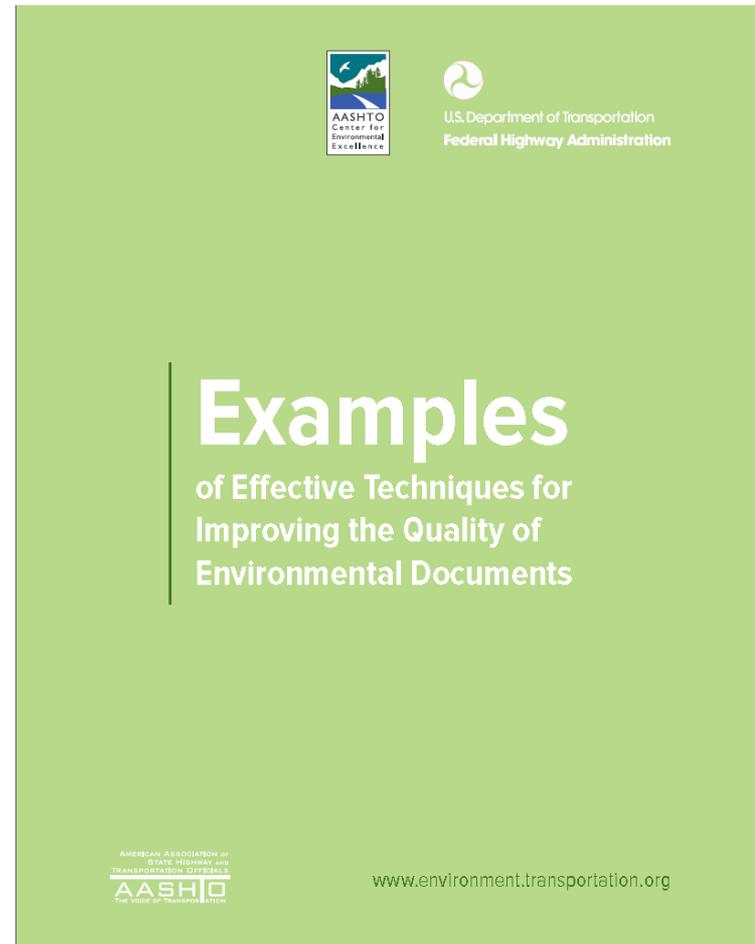
3 Core Principles

- ◆ Tell the story
- ◆ Be brief
- ◆ Meet legal requirements



Examples of Techniques

- ◆ Improving Overall Document Quality
- ◆ Meeting NEPA and Related Requirements



1. Tell the Story

- ◆ Readers easily understand...
 - Purpose and need for project
 - How each alternative would meet project goals
 - Strengths and weakness of each alternative



Techniques



- ◆ Provide a clear path of logic
 - What is the project trying to accomplish?
 - What are the effects?
- ◆ Write clearly for a broad audience
- ◆ Explain what the data mean in relation to the decisions to be made
- ◆ Use an editor to present a single voice

Project Example: Getting Organized

- ◆ **Annotated Outline**
 - Focus through scoping
 - Plan graphics
- ◆ **Style guide**
 - Grammar, word usage, acronyms, etc.
- ◆ **Technical editor**
 - Provide a single voice
- ◆ **Document coordinator for production**



Know Your Audience

- ◆ Public
- ◆ Decision Makers
- ◆ Regulators
- ◆ Resource Managers
- ◆ Judges



2. *Be Brief*

- ◆ Clear, concise writing
- ◆ Easy-to-follow format
- ◆ Effective graphics and visual elements
- ◆ Discussion in proportion to significance



Examples of Graphics

Sociocultural Data Report: Midway

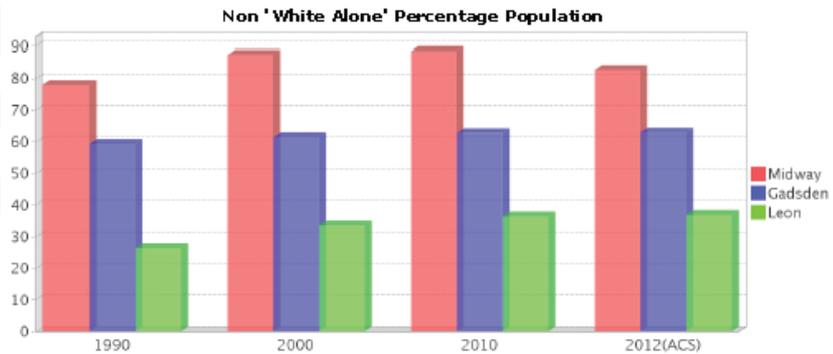
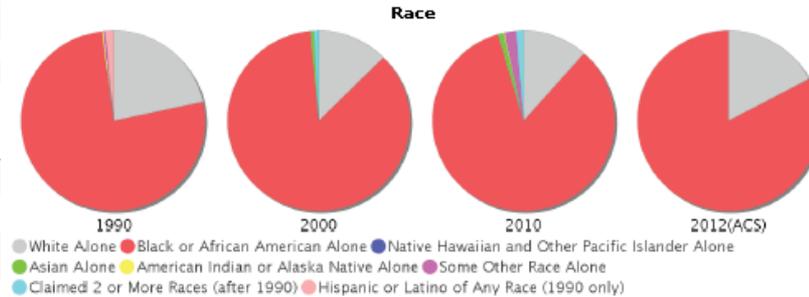
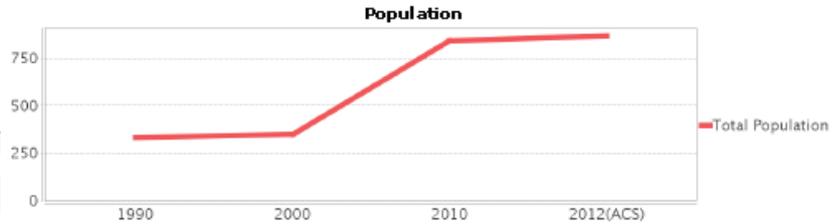
Area: 9,232 square miles
Jurisdiction(s): Cities: Midway
 Counties: Gadsden, Leon

General Population Trends

Description	1990	2000	2010	2012(ACS)
Total Population	332	350	841	867
Total Households	104	118	300	320
Average Persons per Acre	0.11	0.10	0.14	0.11
Average Persons per Household	3.18	2.93	2.67	2.57
Average Persons per Family	3.58	3.41	3.00	3.22
Males	159	163	381	405
Females	174	187	460	462

Race and Ethnicity Trends

Description	1990	2000	2010	2012(ACS)
White Alone	73 (21.99%)	44 (12.57%)	97 (11.53%)	150 (17.30%)
Black or African American Alone	257 (77.41%)	301 (86.00%)	705 (83.83%)	716 (82.58%)
Native Hawaiian and Other Pacific Islander Alone	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Asian Alone	0 (0.00%)	2 (0.57%)	8 (0.95%)	0 (0.00%)
American Indian or Alaska Native Alone	1 (0.30%)	0 (0.00%)	2 (0.24%)	0 (0.00%)
Some Other Race Alone	1 (0.30%)	0 (0.00%)	17 (2.02%)	0 (0.00%)
Claimed 2 or More Races	NA (NA)	3 (0.86%)	11 (1.31%)	0 (0.00%)
Hispanic or Latino of Any Race	5 (1.51%)	1 (0.29%)	33 (3.92%)	25 (2.88%)
Not Hispanic or Latino	327 (98.49%)	349 (99.71%)	808 (96.08%)	842 (97.12%)
Non White Alone	259 (78.01%)	306 (87.43%)	744 (88.47%)	717 (82.70%)



Which would you rather read?

Highway Capacity Manual Level of Service (LOS) Descriptions

LOS A - primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delay at signalized intersections is minimal.

LOS B - reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver in the traffic stream is only slightly restricted and delays are not bothersome.

LOS C - stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than in LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the free-flow speed for the arterial classification.

LOS D - borders on a range in which small increases in flow may cause substantial increases in approach delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of the free-flow speed for the arterial classification.

LOS E - characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

LOS F - characterized by arterial flow at extremely low speeds, from less than one-third to one-quarter of the free-flow speed. Intersection congestion is likely at critical signalized locations, with long delays and extensive queuing.

LEVELS OF SERVICE

for Freeways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. No delays
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. No delays
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. Minimal delays
D		63	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. Minimal delays
E		50	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. Significant delays
F		<50	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. Considerable delays

Source: 2000 HCM, Exhibit 23-3, Speed-Flow Curves and LOS for Basic Freeway Segments

Clear, Concise Writing Style



Be Brief

☑ USE

Everyday Words:

Due to the fact = Because

In the event of = If

Pronouns:

I, we, you, they, their, etc.

Active Voice:

NO = The candle was jumped over by Jack.

YES = Jack jumped over the candle.

NO = The tank was checked by the pilot.

YES = The pilot checked the tank.

Active Verbs:

Conduct an analysis = analyze

Provide assistance with = assist

Give consideration to = consider

Present Tense:

The cost is \$10,

not,

The cost shall be \$10

Contractions:

we've, you'll, etc.

☒ AVOID

Acronyms/Abbreviations:

The #1 reader complaint

Modifiers: "totally" unrealistic, "completely" dead

Doublets: "null and void," "rules and regulations"

Noun Strings: "contract fee level test procedure"

Jargon:

Obtain assistance consistent with your requirements = get the help you need
(explain technical terms)

Shall:

("shall" imposes no legal obligation on the reader)
instead of "shall," use:

Must = mandatory

Must not = prohibited

May = optional

Should = recommended

Example

Instead of this...

Intersections that are projected to operate with especially long delays or overcapacity during the PM peak hour are identified as “congested intersections.” These intersections are those that operate under LOS F conditions (average vehicle delay of greater than 80 seconds) or ICU greater than 100 percent. Congested intersections are further identified as “highly congested” if they exceed 110 seconds of average vehicle delay and have an ICU greater than 110 percent.

Example

Say this...

What are congested and highly congested intersections?

Congested intersections are intersections that cause drivers considerable delay. A driver might wait between one and two minutes to get through a traffic signal at a congested intersection. At a highly congested intersection, a driver might wait two minutes or more to get through the traffic signal.



Don't dumb down; Clear up!

“Writing with greater clarity does not mean removing technical details from NEPA documents; it means explaining technical details in a way that is understandable to non-technical readers.”

Example

Environmental regulatory agencies need a breakdown by type of wetland with the appropriate terminology. **Explaining those technical terms is appropriate and helpful; eliminating them entirely is not.**

Palustrine Emergent Wetlands

This type of wetlands is defined by the dominance of erect rooted herbaceous (not woody) wetland plants. If there is >30% cover of woody plants, then the type would be Scrub-Shrub or Forested.



Focus on Important Issues



- ◆ Use scoping process to limit detail
- ◆ Include notes in annotated outline
- ◆ Concentrate on relevant issues and analyses
- ◆ Briefly discuss non-significant issues

Incorporate by Reference



- ◆ **Separate technical information into appendices**
- ◆ **Cross-reference rather than repeat details**
- ◆ **Summarize and refer to technical analyses and conclusions**

Example



U.S. Department
of Transportation
Federal Highway
Administration

CHAPTER 4 Environmental Resources and Impacts

Techniques to note:

- includes supporting studies in appendices, referenced in main body;
- note that these appendices are on the CD, not in the printed copy.

finding^o for the impacts to historic resources. FHWA concurred with the *de minimis* finding on Jan. 18, 2013.

For additional details about the Cleveland Opportunity Corridor project's potential impacts on cultural resources, please refer to the *Phase I History/Architecture Survey Report for the Opportunity Corridor Project* (January 2010), the *Phase I Archaeological Literature Review, Prehistoric Context, and Archaeological Sensitivity Assessment for the Opportunity Corridor Project* (February 2010), and the *Phase I Archaeological Resource Review and Disturbance Assessment for the Proposed Opportunity Corridor Project* (November 2012). These reports, as well as the Section 106 and Section 4(f) coordination, are on the CD included with this DEIS.

The No-Build Alternative is not expected to impact historic resources.

WHAT RESOURCES ARE NOT PRESENT

the CLEVELAND OPPORTUNITY CORRIDOR PROJECT

any source water protection area for public water systems. Additionally, there are no community or non-community public water systems that use groundwater located near the project. The City of Cleveland has a public water supply system that obtains drinking water from Lake Erie. For additional details about drinking and groundwater resources, please refer to the Ohio EPA mapping on the CD included with this DEIS.

For additional details about the natural resources field studies and conclusions, please refer to the *Level 2 Ecological Survey Report for Opportunity Corridor* (PID 77333) (January 2010). This report is on the CD included with this DEIS. A copy of the correspondence from ODOT confirming that no further ecological coordination was required for the Cleveland Opportunity Corridor project is also on the CD.

HOW WOULD WATER QUALITY BE AFFECTED?

3. Meet Legal Requirements

- ◆ No longer than necessary to comply with NEPA and other legal / regulatory requirements
- ◆ Ensure the substance of the analysis is valid and understandable
- ◆ Evidence that the decision was not arbitrary and capricious
- ◆ Incorporate by reference



***Make use of the project
administrative record.***



Legal Sufficiency Considerations

- ◆ Identify and explain key assumptions
- ◆ Describe methods used to develop data
- ◆ Use effective visuals to present key results
- ◆ Do not just summarize the data, explain what it means
- ◆ Document compliance with key regulatory requirements
- ◆ Provide an overview of major project issues
- ◆ Systematically review data to ensure internal consistency



Example

Techniques to note:

- Summarizes steps
- Gives status of each step

Table 14-1. Status of the Informal Endangered Species Act Consultation Process for the WDC Project

Step	Status
Develop species list; USFWS concurs with list.	Completed. Initial species list reviewed in June 2010. List updated yearly during EIS process. ↓
Identify threatened or endangered species and/or critical habitat.	Completed. Conducted field surveys and literature reviews of the ecosystem impact analysis area. ↓
If species or critical habitat are identified, prepare a Biological Assessment.	Completed. A Biological Assessment is required only if the preferred alternative could affect federally listed species. No threatened or endangered species are in areas that could be affected by the project alternatives. ↓
Make determination to USFWS if the preferred alternative is likely to adversely affect species or critical habitat.	No-effect determination submitted to the Utah Department of Transportation (UDOT). USFWS does not require consultation if there is a no-effect determination. ↓
USFWS concurs with determination of no adverse impacts or starts the formal consultation process.	Not required. USFWS does not have to concur with no-effect determinations. ↓
Start the formal consultation process.	Not required.

Every Day Counts



- ◆ Use clear, concise writing
- ◆ Prepare effective summaries, technical reports and other documentation
- ◆ Choose a flexible, easy-to-use document format
- ◆ Summarize information and use pictures and graphics
- ◆ Separate technical information into appendices or incorporate by reference
- ◆ Include only the most relevant information in the document
- ◆ Make the level of detail on a topic related to its relative importance and degree of harm to the project
- ◆ Incorporate by reference when possible and appropriate



 Environmental Topics ▾

 Disciplines ▾

 The Center ▾

 Research ▾

 Resources ▾

 Meetings & Events

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NEPA Process

Recent Developments

Filter by Discipline ▾

- NCHRP Study Provides Guidance for Managing Legal Risks in Project Delivery **NEW**
- ~~GAO Report Finds Little Government Wide Data on NEPA Analyses Exist~~
- **AASHTO Report Provides Examples of Quality NEPA Documents**
- ~~FHWA Newsletter Discusses New NEPA Categorical Exclusions~~
- CEQ Issues Handbook to Integrate NEPA and California Review Processes
- FTA Issues Guidance on Implementation of Categorical Exclusions for Transit Projects
- Materials from FHWA Webinar on New Categorical Exclusions Posted
- TRB Announces Webinar on Potential Uses of Social Media in the NEPA Process
- Rule Establishes New CEs for Operational Right-of-Way, Limited Federal Funds
- DOT Inspector General Urges FRA To Modernize Project Delivery Procedures
- NCHRP Study Examines NEPA Compliance for Projects with Alternative Funding
- Mukilteo Project's Final EIS Wins FTA Award
- FHWA Develops Template for Categorical Exclusion Assignment MOUs
- Study Evaluates Use of Social Media in NEPA Process

«View Recent Developments Archive

Overview

Recent Developments **NEW**

Research, Documents & Reports

Case Studies

Organizations & Training

Related Center Tools & Information

- ▶ Case Law Updates (CLUE)
- ▶ Current Topics & Events
- ▶ Practitioner's Handbooks
- ▶ Programmatic Agreements Library (PAL)
- ▶ Transportation & Environment Research Ideas (TERI)
- ▶ Webinars

NEW - items posted in the last 7 days

Steps to a quality document

- ◆ Prepare an annotated outline
- ◆ Identify specific roles
- ◆ Use a technical editor – don't rely on spell check
- ◆ Conduct stringent quality review by the district before submission
- ◆ Consult with SEMO throughout
- ◆ Provide to SEMO for review and approval

Next Steps

- ◆ **Compile resources on web site**
- ◆ **Develop guidance**
- ◆ **Update manuals**
- ◆ **Provide training**



For More Information

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Questions & Answers

