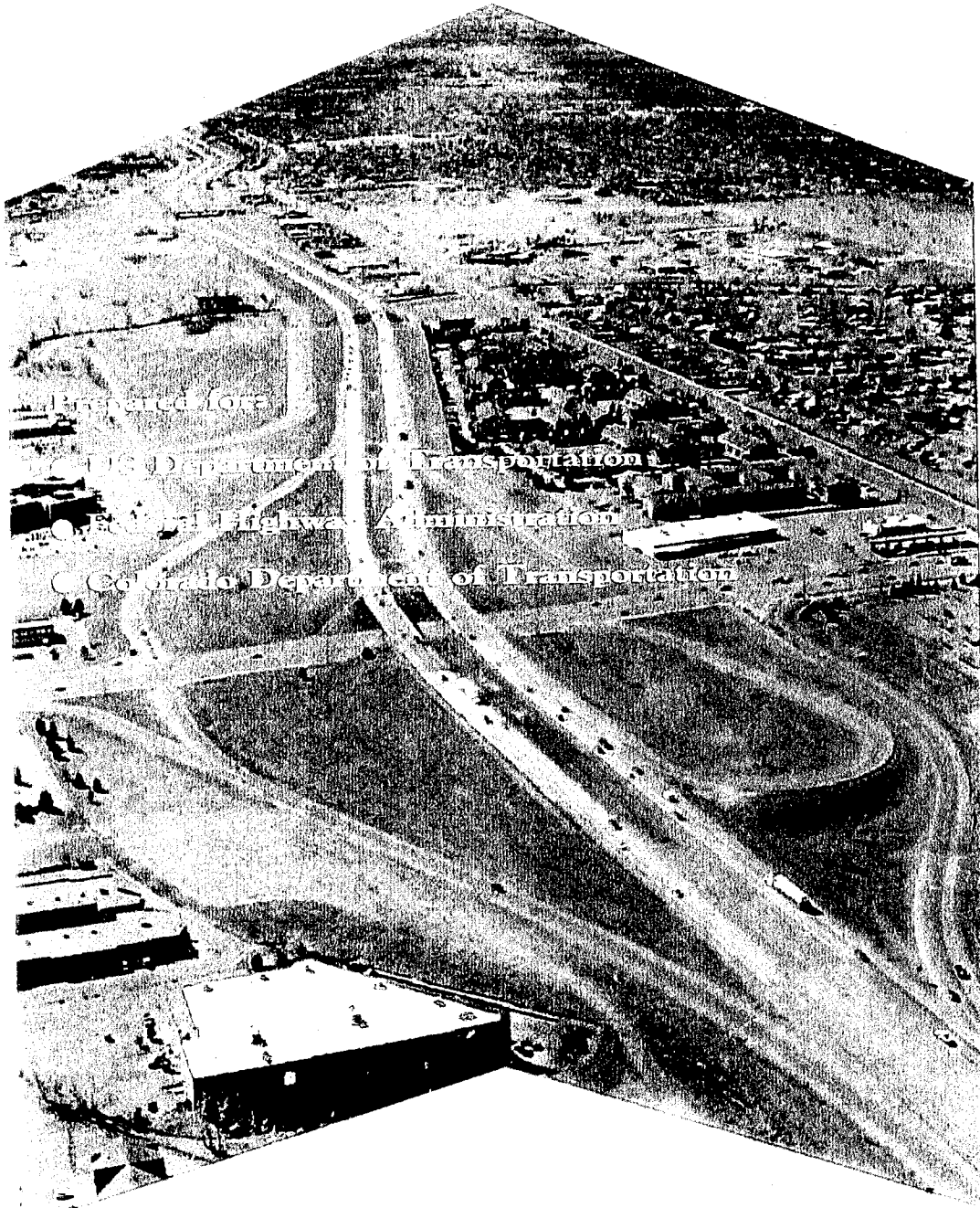


FINDING OF NO SIGNIFICANT IMPACT

I-225 Widening From North of Parker Road to North of 6th Avenue



MARCH 2001

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CENTENNIAL ENGINEERING, INC

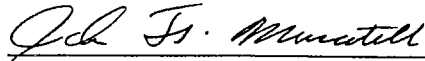
Project Number NH 2254-058

FINDING OF NO SIGNIFICANT IMPACT
NH 2254-058
I-225 WIDENING FROM NORTH OF PARKER ROAD TO NORTH OF 6th AVENUE
ARAPAHOE COUNTY

SUBMITTED PURSUANT TO:
42 U.S.C. 4332 (2) (c) AND 23 U.S.C. 128(a)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
COLORADO DEPARTMENT OF TRANSPORTATION

SUBMITTED BY:



JOHN F. MUSCATELL
REGION 6 DIRECTOR
COLORADO DEPARTMENT OF TRANSPORTATION

MARCH 28, 2001

DATE

APPROVED BY:

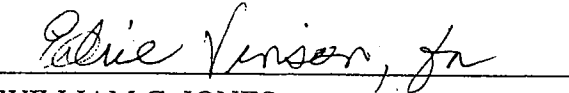


JOHN M. UNBEWUST
CHIEF ENGINEER
COLORADO DEPARTMENT OF TRANSPORTATION

3-29-01

DATE

ADOPTED BY:



WILLIAM C. JONES
DIVISION ADMINISTRATOR, COLORADO DIVISION
FEDERAL HIGHWAY ADMINISTRATION

5-3-01

DATE

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Appendix A: Public Notices

Appendix B: Public Hearing Transcripts and Comment Letters Received

Project Description

The Colorado Department of Transportation (CDOT) Region 6 proposes to make multiple improvements to U.S. Interstate Highway 225 from just north of Parker Road to just north of 6th Avenue in the City of Aurora and Arapahoe County, Colorado.

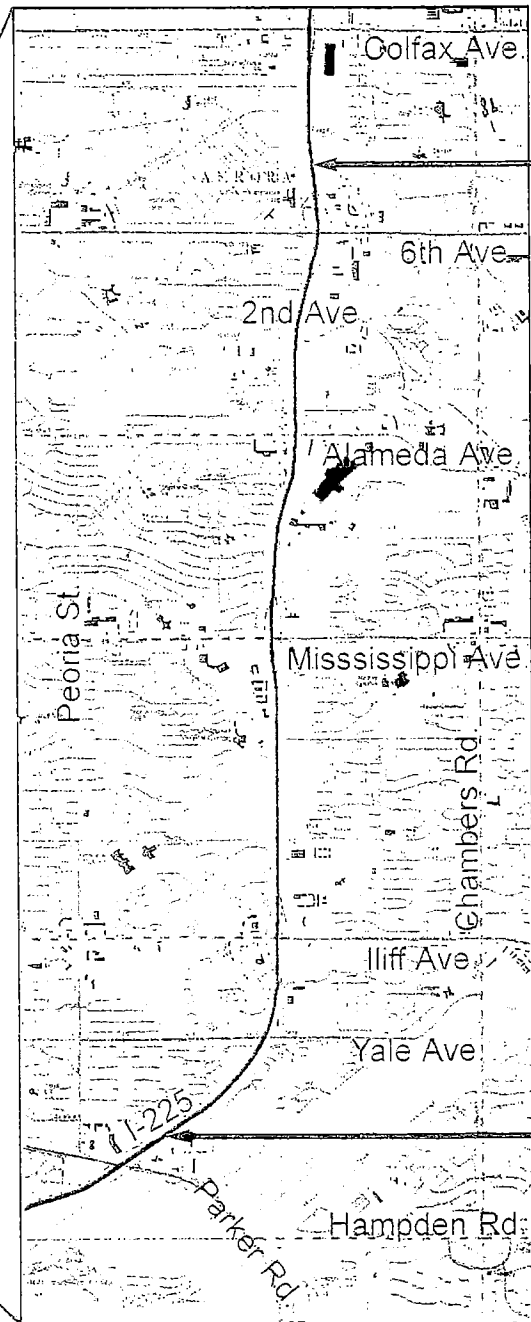
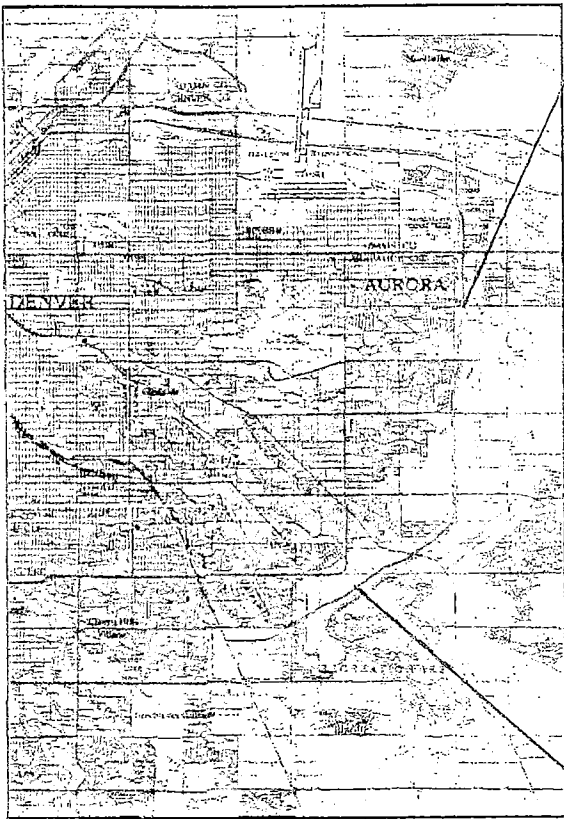
The estimated total project cost is \$134.5 million, based on year 2000 dollars. Approximately \$40 million for design and construction has been funded in the Denver Regional Council of Governments (DRCOG) Transportation Improvement Plan (TIP) for fiscal years 2001-2006. CDOT has also requested Federal Discretionary Funds which would allow construction to begin in fiscal year 2002. Although the project is in the fiscally constrained Regional Transportation Plan, the project's estimated cost in that plan is insufficient to meet the current total project cost. Based on the phasing sequence outlined below, there is sufficient funding to construct the first two phases. However, the Regional Transportation Plan will have to be amended to reflect schedule and cost allocation.

The proposed project location is shown in Figure 1. The proposed improvements include:

- Widening and total reconstruction of I-225, increasing from four to six through-lanes, and adding auxiliary lanes between interchanges.
- Lanes will be added to the outside of the existing outermost lanes, and there will be a depressed median 25.7 meters (84.2 feet) wide. An 11 meter (36.2 foot) portion of the median is reserved for mass transit or High Occupancy Vehicle (HOV) lanes. All travel lanes will be 3.6 meters (12 feet) wide, as will inside and outside shoulders. All interchanges will accommodate 2020 design traffic volumes.
- Space for future widening and a future transit envelope will be preserved in the median.
- Interchange improvements at Iliff Avenue, Mississippi Avenue, Alameda Avenue, and 6th Avenue as well as reconstruction of overpass bridges at Yale Avenue and 2nd Avenue.
- Other project elements as described in the *I-225 Widening Environmental Assessment*, dated July, 2000, including lighting, drainage system, noise abatement, wetlands and signing.

The anticipated construction phasing sequence is:

Phase 1 - The first phase will replace the existing deficient I-225 structures over Iliff Avenue with wider and longer structures. These will accommodate widening of I-225 and a possible future median transit system. This phase will also reconstruct all ramps, except in the southeast quadrant. A portion of I-225 will be reconstructed from each side



Scale
1 Mile



Figure 1

Project Location Map

of the structures to accommodate the future rise in the I-225 profile. The estimated construction cost is \$16.5 million, and the project could be advertised in late 2001.

Phase 2 - the second phase of the project will reconstruct the I-225/6th Avenue interchange. The work will include replacement of substandard bridge structures at 6th Avenue and 2nd Avenue, ramps, and the drainage system. The new wider bridge structures will allow additional lanes on I-225 and also provide space in the median for a future transit system. I-225 will be lowered to provide standard vertical clearance on 6th Avenue. The estimated construction cost is \$16.5 million. The project could be advertised in late 2001.

Phase 3 - the third phase will replace the two remaining deficient bridge structures and provide other necessary improvements. The existing drainage system will be reconstructed, and utilities along I-225 from Parker Road to 6th Avenue will be relocated. The third phase may also require minor right-of-way acquisition. The estimated construction cost is \$27 million, and the project could be advertised in early 2003.

Phase 4 - the fourth phase of this reconstruction project will replace and widen all remaining roadway from Parker Road to 6th Avenue. Other improvements will include sound barriers, lighting, remaining utilities and drainage work. The estimated construction cost is \$58.5 million, and the project could be advertised in early 2004.

The nature and timing of each phase are dependent on availability of funding.

Coordination Process

The proposed action has been coordinated with all the appropriate federal, state and local agencies in order to comply with the National Environmental Policy Act (NEPA) and the CDOT Procedures for Public Involvement and Participation in the Project Development and Environmental Analysis Process. The notice of availability of the EA was published in the Rocky Mountain News and the Denver Post on November 2 and 5, 2000, and the Aurora Sentinel on November 9, 2000. It was also sent to the project mailing list of interested people (see Appendix A).

An Open House/Public Hearing was held on November 29, 2000 at the Doubletree Hotel at Iliff Avenue and I-225. 24 individuals signed the attendance sheet for the hearing. A transcript of comments given to the court recorder is included in Appendix B. Only one comment was received at the public hearing which required no response. No formal presentation was given. There were no public comment letters received during the public comment period.

The majority of verbal comments and questions received at the Open House had to do with the funding and schedule for construction and future transit in the corridor. Several people expressed general support for the proposed project.

A second public meeting was held on January 11, 2001, at the Holiday Inn at Parker Road and I-225, to present proposed design changes to the I-225/Iliff interchange

resulting from a value engineering study of the I-225 corridor. 28 people signed the attendance roster for the meeting. A copy of written comments and transcript of comments given to the court recorder are also included in Appendix B. No formal presentation was given, and no public comment letters were received during the public comment period.

Responses to Comments

The majority of verbal questions raised at the two public hearings were answered by the CDOT and Consultant personnel attending the informal open houses. Responses to written comments are provided here:

1. A comment was made to the court recorder at the Public Hearing on November 29, 2000, about the need to replace funding lost because of Amendment 23 and the need to reduce construction time.

Response: CDOT has requested additional funding to supplement funding allocated in the Transportation Improvement Plan (TIP). If funding became available, all construction could be completed by the end of 2006.

This was the only recorded comment from the November 29, 2000 public hearing. No comment letters were received during the meeting or in the public comment period.

The following comments were received at the second public hearing held January 11, 2001:

2. A concern was raised about the excessive noise at night from the construction at the Parker Road interchange.

Response: The Parker Road construction is not part of this project, but the issue of construction noise will be addressed. The City of Aurora noise ordinance will be followed and night construction will not be allowed.

3. A concern was raised about the possible elimination of the 2nd Avenue overpass.

Response: It was decided by CDOT with input from the City of Aurora, that the overpass would not be eliminated.

4. A concern was raised about the location of light rail stations along I-25.

Response: The location of these stations is not part of this project.

5. Concerns about the RTD light rail alignment and City of Aurora bus service were raised.

Response: The alignment and bus service are not part of this project.

5. Mr. Tom Tobiassen, representing Bicycle Aurora raised the following concerns:

- a. Planning for wide and easily maintained pedestrian and bicycle paths to carry traffic on cross streets should be a priority. Crosswalks should be safe with traffic control signals and crosswalks at free right turns should not be permitted. All intersections with crosswalks should be signed "NO RIGHT TURN ON RED WHEN PEDESTRIANS ARE PRESENT"

Response: Eight-foot wide bike and pedestrian paths are planned for all cross streets along the project. Crosswalks are necessary in some locations where there are free right turns and no signal control. Proper signing will be used at all intersections.

- b. Use a road surface to reduce noise.

Response: The I-225 pavement will be concrete, and CDOT will consider surface textures that will maximize safety and minimize noise.

- c. Keep traffic speeds at 55 mph or lower.

Response: The posted speed will be 55 mph.

- d. Incorporate technology for monitoring traffic and speed.

Response: Fiber optic cables for traffic monitoring are already in place along I-225.

- e. Provide police departments with infrastructure for issuing speeding tickets automatically or provide cable routes for the future.

Response: Cables are in place.

- f. Keep 2nd Avenue underpass open during construction for pedestrians and bicyclists using the High Line Canal trail.

Response: The trail will be kept open.

6. A concern was raised about the location of the light rail stations around the 4th-6th Avenue area.

Response: Light rail stations are not part of this project.

7. A comment was made that continuous lanes for all ramps would be desirable.

Response: Continuous auxiliary lanes are being provided between all interchanges.

Changes to the Environmental Assessment

Three changes to the text in the *Environmental Assessment* should be noted:

- Section 2.2.2 Interchange and Structure Configurations – A Value Engineering Study was performed by an independent consultant, resulting in changes to the design of the Iliff Avenue interchange. Pages 7, 10 (Figure 5) , and 11 through 13 should be supplemented as follows:

To accommodate traffic making the westbound to southbound movement from Iliff Avenue to I-225, the proposed double left turns have been replaced with a second loop ramp in the northwest quadrant of the interchange. This change requires shifting mainline I-225 approximately 18.3 meters (60 feet) to the east, with a reduction in the radius of the loop ramp in the southwest quadrant. The northbound I-225 off-ramp will still be aligned with Abilene Street. The changes to the design of the Iliff interchange will significantly improve traffic operations and safety on Iliff Avenue and I-225.

Approximately 0.62 hectare (1.52 acres) of additional right of way will be required for the new loop ramp in the northwest quadrant. In the southeast quadrant, the right of way acquisition will be reduced by 0.38 hectare (0.95 acres) by reducing the loop ramp radius.

The changes to the design resulting from the Value Engineering Study will increase the estimated cost by approximately \$1,000,000, but will result in a significant functional enhancement and improved traffic operations and safety.

Figure 5 has been revised to show the changes to the design of the Iliff Avenue Interchange and Figure 15 has been revised to show level of service with the new loop ramp. Also Figure 29 was revised to show the new ramp alignment.

- Section 3.18.2 Wetlands Impacts of the Preferred Alternative – The following is an amendment to that section:

AMENDMENT TO I-225 WETLAND FINDING (Project NH 2254-058)

November 28, 2000

Reductions to permanent wetland impacts and reductions to offsite wetland mitigation needs have been identified and described below for the I-225 widening and reconstruction project between Parker Road and 6th Avenue.

Reduced Wetland Impact

Permanent impact to jurisdictional wetland I225-5 was originally projected to be 520 square meters (m²)(5,600 square feet (ft²)) due to the construction of a sound wall in this area. More detailed soundwall designs in this area, however, have enabled a substantial reduction in wetland impacts. Permanent impact to wetland I225-5 is now expected to be 75 m² (805 ft²), representing an 86% decrease (445 m² (4,790 ft²)) (Table 1). Consequently, the projected area of total permanent wetland impact has been reduced from 0.13 hectare (0.33 acre) to 0.088 hectare (0.22 acre).

Table 1. Previous and Current Permanent Impact Projections for Wetland I225-5, near 6th Avenue and I-225 Interchange.

Wetland ID	Previous Impact m ² (ft ²)	Current Impact m ² (ft ²)	Impact Reduction m ² (ft ²)
I225-5	520 (5,600)	75 (805)	445 (4,790)
TOTAL	1,327 (14,280)	882 (9,490)	445 (4,790)

Reduced Offsite Mitigation

Additional wetland mitigation has been identified onsite, reducing the need for offsite wetland mitigation. Previously, 189.1 m² (2,035 ft²) of wetland mitigation was identified by enlarging wetland I225-4 along its western side to the edge of the existing ROW. Another 161.6 m² (1,740 ft²) of wetland mitigation area has recently been made available by expanding the northwest corner of wetland I225-5. Total on-site wetland mitigation now believed to be available totals 350.7 m² (3,775 ft²). Combined with the reduction in wetland impact, this reduces the total amount of offsite wetland mitigation needed to 531 m² (5,720 ft²) (Table 2).

Table 2. Previous and Current Offsite Wetland Mitigation Needs for the I-225 Environmental Assessment.

Previous Off-site Mitigation Needs m ² (ft ²)	Current Off-site Mitigation Needs m ² (ft ²)	Reduction in Off-site Mitigation Needs m ² (ft ²)
1,141 (12,280)	531 (5,720)	609 (6,560)

- Section 3.12.6 Noise Mitigation should be supplemented as follows:

Add the following: While no formal analysis was conducted, the existing wood noise wall adjacent to the Aurora Hill neighborhood (north of Mississippi Avenue on the west side of I-225) will be replaced with a concrete wall as part of the project.

Figures 20, 21 and 22 in the EA were revised and included in this FONSI to show new limits of the proposed noise walls, as determined in the final Noise Technical Report dated November, 2000. The following are the major changes:

- Figure 20 shows a revised southern limit of the noise wall at Yale Avenue. The wall terminates at the north right-of-way line of Yale Avenue and does not turn back along the north side of Yale Avenue. The northern end of the wall is to be moved back by approximately 107 meters (350 feet) to the southeast corner of the Doubletree Hotel parking lot.
- The noise wall on Figure 21 is shortened by approximately 70 meters (230 feet) on the south end.
- The short wall along the shoulder of I-225, just south of the 6th Avenue bridge was eliminated. The wall along the I-225 right-of-way line just south of 6th Avenue was shortened by approximately 61 meters (200 feet) to end at the south edge of the Skate City building. Also, the overlap of the two walls in the middle of the Figure has been shortened by approximately 76 meters (250 feet), so that there is a total of 30.5 meters (100 feet) of overlap.

Tables 18, 19, 20 and 21 from the EA had minor changes and are included as part of this FONSI. The revisions were minor and did not cause any changes in the location of walls. The revisions included changing categories of receptors from C to B, and from residential to commercial. Also Table 20 had minor changes due to the previously mentioned reduction in wall lengths.

Impacts from the realignment of I-225 to the east through the Iliff Avenue interchange were analyzed for noise impacts, particularly near the Fairfield Inn south of Iliff Avenue. The STAMINA 2.0 model was used to predict noise levels at the façade of the Fairfield Inn facing I-225 for existing, initial mainline and ramp design, and the mainline and ramp design proposed by the Value Engineering study. The predicted noise levels are shown in the Table 1, below. All of the noise levels listed in Table 1 equal or exceed CDOT's 66 dB(A) noise impact criteria for the outdoor activities at a hotel. Therefore, the Fairfield Inn is considered "impacted" by noise from the proposed project.

Table 1

Conditions	Predicted One-hour Leq dB(A)
Existing	66.8
Initial 2020 Design	69.7
VE 2020 Design	69.6

However, per CDOT's noise policy (*Noise Analysis and Abatement Guidelines, February 1995*), noise mitigation is NOT considered for receptors where there is no outdoor use. There are no active, outdoor use areas at this facility (i.e. there is no pool, and the rooms do not have balconies or operable windows). The study did, however, show a slight drop in

the noise level from the initial design alternative. This is due to the ramp alignment being moved further away from the hotel.

Other hotels in the area (Comfort Inn and Motel 6) are located farther from the project, and the ramp in the northeast quadrant near these other hotels remained in the same location for both alternatives.

Selection of the Preferred Alternative

Based on the *I-225 Widening from North of Parker Road to North of 6th Avenue Environmental Assessment*, the Public Hearing transcripts and summary of comments, the Federal Highway Administration (FHWA) has determined that the alternative as described in Section 2.2 on Pages 5 to 15 of the *I-225 Widening from North of Parker Road to North of 6th Avenue Environmental Assessment* and amended in this FONSI is the preferred alternative.

Finding of No Significant Impact

The FHWA has determined that the alternative described in Section 2.2, Pages 5 to 15 of the *I-225 Widening from North of Parker Road to North of 6th Avenue Environmental Assessment* (EA) and amended in this FONSI will have no significant impact on the human environment. This Finding of No Significant Impact is based on this EA, which has been independently evaluated by the FHWA and determined to adequately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. The FHWA takes full responsibility for the accuracy, scope and content of the EA