

C-470 CORRIDOR ENVIRONMENTAL ASSESSMENT

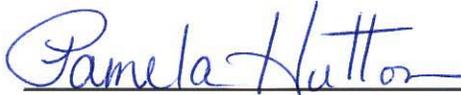
KIPLING PARKWAY TO I-25

ARAPAHOE, DOUGLAS, AND JEFFERSON COUNTIES, COLORADO

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Submitted by:



Pamela A. Hutton, P.E.
Region 6 Transportation Director
Colorado Department of Transportation

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Date

Concurred by:

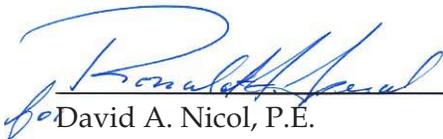


Craig Siracusa, P.E.
Chief Engineer
Colorado Department of Transportation

2-6-06

Date

Approved by:



David A. Nicol, P.E.
Division Administrator, Colorado Division
Federal Highway Administration

2/9/06

Date

C-470 Corridor Environmental Assessment

Kipling Parkway to I-25

Prepared for:

Federal Highway Administration



Colorado Department of Transportation



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LIST OF ACRONYMS

A

ADT – Average Daily Traffic
AMI – Area Median Income
APE – Area of Potential Effect
AT&SF RR – Atchison, Topeka and Santa Fe Railroad

B

BMPs – Best Management Practices

C

CDOT – Colorado Department of Transportation
CDOW – Colorado Division of Wildlife
CDPHE – Colorado Department of Public Health and Environment
CEQ – Council on Environmental Quality
CERCLA – Comprehensive Environmental Response Compensation and Liability Act
CLOMR – Conditional Letter of Map Revision
CNHP – Colorado Natural Heritage Program
CDPS – Colorado Discharge Permit System
CTE – Colorado Tolling Enterprise
COLA – Colorado Department of Local Affairs
CWA – Clean Water Act

D

D&RG RR – Denver and Rio Grande Railroad
DOT – Department of Transportation
DRCOG – Denver Regional Council of Governments

E

EA – Environmental Assessment
EDR – Environmental Data Resources, Inc
EIS – Environmental Impact Statement
EL – Express Lanes (tolled)
ELFS – Express Lanes Feasibility Study

EO – Executive Order

EPA – Environmental Protection Agency
ESA – Endangered Species Act
EWG – Executive Working Group

F

FAIC – Financial Analysis and Implementation Committee
FEIS – Final Environmental Impact Statement
FEMA – Federal Emergency Management Agency
F&F – Fluor & Flatiron Infrastructure, Inc.
FHWA – Federal Highway Administration
FONSI – Finding of No Significant Impact
FWPCA – Federal Water Pollution Control Act

G

GIS – Geographic Information Systems
GPL – General Purpose Lanes
GPS – Global Positioning System

H

HAP – Hazardous Air Pollutant
HCM – Highway Capacity Manual
HHS – Health and Human Services
HOA – Home Owners Association
HOV – High-Occupancy Vehicle

I

IGA – Intergovernmental Agreement
IMP – Incident Management Plan
ITS – Intelligent Transportation System

L

LRT – Light Rail Transit
LOS – Level of Service

M

MBTA – Migratory Bird Treaty Act
MESA – Modified Environmental Site Assessment
MPO – Metropolitan Planning Organization
MS4 – Municipal Separate Storm Sewer System
MSA – Metropolitan Statistical Area
MSAT – Mobile Source Air Toxin

N

NAAQS – National Ambient Air Quality Standards
NAC – Noise Abatement Criteria
NEPA – National Environmental Policy Act
NPDES – National Pollutant Discharge Elimination System
NRCS – Natural Resources Conservation Service
NRHP – National Register of Historic Places
NWI – National Wetland Inventory

O

OAHP – Office of Archaeology and Historic Preservation
OMB – Office of Management and Budget
OPS – Oil and Public Safety

P

PAH – Polyaromatic Hydrocarbons
PDO – Property Damage Only
PMSA – Primary Metropolitan Statistical Area
PMT – Project Management Team

R

RCRA – Resource Conservation and Recovery Act
RFCP – Request for Comparable Proposals
ROD – Record of Decision
ROW – Right of Way
RTA – Regional Transportation Authority
RTD – Regional Transportation District
RTP – Regional Transportation Plan

S

SHPO – State Historic Preservation Officer
SIP – State Implementation Plan
STIP – Statewide Transportation Improvement Plan
SWMP – Stormwater Management Plan

T

TABOR – Taxpayer’s Bill of Rights
TCM – Transportation Control Measure
TDM – Travel Demand Management
TIP – Transportation Improvement Program
TMDL – Total Maximum Daily Load
TSM – Transportation System Management
TSS – Total Suspended Solids
TWG – Technical Working Group

U

UDFCD – Urban Drainage and Flood Control District
USACE – United States Army Corps of Engineers
USFWS – United States Fish and Wildlife Service
USGS – United States Geological Survey

V

VHT – Vehicle Hours of Travel
VMS – Variable Message Sign
VMT – Vehicle Miles of Travel
VPD – Vehicles Per Day

W

WQCD – Water Quality Control Division
WQCV – Water Quality Capture Volume

GLOSSARY

Access – entry to or exit from a roadway.

Accident rates – measure of the number and frequency of accidents for the volume of traffic on a roadway section.

Auxiliary lane – additional lane, usually between interchanges, to improve traffic flow of on- and off-ramp vehicular traffic.

Braided ramps – a method of providing direct access to a roadway which separates on- and off-ramp traffic to produce more efficient ingress and egress. The term “braided” refers to the visual appearance of the ramps from an aerial view.

CDOT noise abatement criteria – absolute noise levels specified in CDOT’s formal adopted policy that determine when abatement measures will be considered.

Collector-distributor – a one-way road parallel to the main traffic lanes providing access to or from more than one ramp; collects traffic from on-ramps or the main lanes, and distributes traffic to off-ramps or back to the main lanes; minimizes the number of interactions with thru traffic, which can increase capacity and safety.

Colorado Tolling Enterprise – the non-profit, business enterprise established by the Colorado State Legislature for the purpose of tolling roadways to provide an alternative mechanism for funding roadway improvements in the state.

Congestion – state of overcrowding on a roadway, making movement slow or difficult. Defined by the C-470 EA as level of service E or worse.

Delay – the difference in travel times between congested and non-congested traffic conditions.

Environmental justice – a 1994 Presidential Executive Order directed every Federal agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on “minority populations and low-income populations.”

General purpose lanes – open to all vehicles.

High-occupancy vehicle – vehicles with more than some minimum number of occupants. Usually used in terms of having access to a designated lane for such vehicles, promoting the use of carpools and reducing the number of vehicles on a roadway.

Hot-spot analysis – air quality analysis at an individual intersection.

Impact footprint – the limit of disturbance of a particular alternative.

ITS – a broad range of wireless and wire line communications-based information and electronics technologies, which when integrated into the transportation system’s infrastructure, and in vehicles themselves, relieve congestion, improve safety and enhance productivity.

Level of service – the standard used to evaluate traffic operating conditions of the transportation system. The scale varies from A (best) to F (worst).

Managed lanes – a congestion management strategy that seeks to manage congestion rather than solve it by adding capacity alone. Managed lanes are tolled lanes in which the cost of tolls is adjusted to reflect the level of congestion on the highway. During peak periods of heavy congestion, toll prices would be the highest in response to facility demand. During off-peak periods of lighter congestion, the toll would be lowered to reflect less demand.

Mobility enhancements – consisting of strategies to either reduce demand placed on, or maximize the capacity of, the existing facility.

Mode choice – range of transportation options available to the traveler, including private auto, bus, rail transit, and others.

No-Action Alternative – a future scenario in which the subject facility is left in its existing condition. The No-Action Alternative may include safety and maintenance improvements that are required to maintain roadway operation.

Noise attenuation – reduction of noise levels by use of a noise barrier.

Peak hour – a continuous 60 minute period that experiences the highest volume of the day. Urban roadways typically experience these peaks in volumes once during the morning and evening commute hours.

Reversible lanes concept – reversing the direction of flow in a dedicated roadway to accommodate the reversal of peak-hour traffic volumes in the AM and PM periods.

Right-of-way – real property and rights therein used for the construction, operation, or maintenance of a transportation or related facility funded under title 23 of the United States Code.

Riparian habitat – habitats located along or near a waterway.

Slip ramps – a method of ingress and egress between two parallel roadways in which a travel lane transitions horizontally from one roadway to the other, seemingly allowing vehicles to “slip” from one to the other.

T-Ramps – a method of providing direct access from the express lane to a cross street so that the express lane traffic is separated from the general purpose lane traffic. The “T” ramps will be developed on the inside portion of the express lanes, allowing for the use of a common retaining wall in developing the ramp. This will reduce the structure cost and minimize roadway width in the ramp area. The term “T-ramp” refers to the visual appearance of the ramps from an aerial view.

Travel demand management – a general term for strategies that reduce the peak hour demand for a facility by either shifting modes, shifting travel times, or increasing the number of occupants per vehicle.

Travel demand modeling – forecasting the future traffic demand on a roadway using future land use and demographics to generate the number of trips to be handled by a particular roadway network.

Value Express Lanes – see managed lanes