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C-470 Corridor Environmental Assessment

Kipling Parkway To I-25

Arapahoe, Douglas, And Jefferson Counties, Colorado

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Submitted by:

Pamela Hutton

2-1-06

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

Date

Concurred by:

Craig Siracusa

2-6-06

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

Date

Approved by:

Ronald H. Nicol

2/9/06

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

Date

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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