WHITEFISH
URBAN CORRIDOR STUDY OF U.S. 93

APPENDIX D:
Screening Considerations Used for Assessments of Corridor Improvement Options

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GOALS AND OBJECTIVES TO SUPPORT THE CORRIDOR VISION

A set of goals and associated objectives were developed to support the vision for the US 93 corridor. These goals and objectives provided the basis for identifying the screening considerations used in the evaluation of improvement options and strategies for the corridor.

GOAL 1:
CAPACITY AND TRAFFIC OPERATIONS
Preserve the role of US 93 as regional transportation route while ensuring its future performance and level of service as an urban principal arterial.

OBJECTIVES

- Provide adequate connectivity to the regional and local transportation network.
- Provide adequate capacity and an acceptable Level of Service to the year 2030 or beyond.
- Minimize congestion and delays for vehicles at intersections.
- Provide a design that manages truck traffic through the community in a safe and efficient manner and accommodates large vehicle movements at key intersections.
- Reduce the number of driveway access points existing along the corridor where traffic conflicts are possible.
- Accommodate multimodal transportation opportunities within the corridor.

GOAL 2:
SAFETY CONSIDERATIONS
Design improvements that provide a safe roadway and transportation environment for all facility users and those abutting the roadway.

OBJECTIVES

- Provide a design that addresses conditions at identified high crash locations in the corridor.
- Provide a design that reduces opportunities for traffic conflicts within the corridor.
- Provide a design that manages truck traffic through the community in a safe and efficient manner.
- Reduce the number of driveway access points existing along the corridor where traffic conflicts are possible.
- Provide a design that presents a safe and accessible pedestrian environment for all users regardless of age or ability.

- Provide roadway design treatments to accommodate bicyclists in a safe manner consistent with guidance from the City of Whitefish's Bicycle and Pedestrian Master Plan.

GOAL 3:
CONSISTENCY WITH APPLICABLE GEOMETRIC DESIGN CRITERIA
Ensure improvements are consistent with MDT's geometric design criteria for urban principal arterials wherever practicable.

OBJECTIVES

- Eliminate deficient roadway features through the application of basic design controls and geometric design criteria appropriate for the corridor and its setting.
- Seek a design exception if the proposed corridor design includes elements which do not meet MDT geometric design criteria for urban principal arterials.

GOAL 4:
AVOID OR MINIMIZE ADVERSE ENVIRONMENTAL EFFECTS
Provide transportation solutions that avoid or minimize adverse impacts to the natural, cultural and social environment in the corridor where practicable.

OBJECTIVES

- Avoid/Minimize impacts to wildlife or fisheries habitat , including Threatened or Endangered Species.
- Avoid/Minimize impacts to Wetlands, Waters of the US, floodplains, and City of Whitefish "critical areas."
- Ensure conformity with Air Quality standards.
- Avoid/Minimize potential Noise impacts
- Avoid/Minimize involvement with Hazardous Materials Sites.
- Avoid/Minimize effects to important cultural sites and Section 4(f) properties.
- Avoid/Minimize socio-economic impacts.
- Attempt to minimize Right-of-Way (ROW) and utilities impacts.
- Ensure reasonable access to properties adjoining the highway.

GOAL 5:
FEASIBILITY/AFFORDABILITY
Ensure corridor improvements are feasible to implement, represent a reasonable expenditure of limited public funds, and are acceptable to the community.

OBJECTIVES

- Ensure improvements are feasible to be implemented by MDT and FHWA.
- Ensure improvements can be constructed while maintaining traffic operations.
- Ensure relative construction and maintenance costs are in line with likely availability of funding.
- Ensure improvement strategy has a reasonable degree of public and political support.

GOAL 6:
COMPATIBILITY WITH LOCAL PLANS AND COMMUNITY IDEALS
Provide transportation improvements in the corridor that are compatible with local land use and transportation plans and that are sensitive to aspects of the community valued by Whitefish's residents while maintaining mobility along the arterial.

OBJECTIVES

- Design transportation improvements within the corridor to consider the recommendations made in local plans.
- Accommodate pedestrians and bicyclists in a safe manner consistent with the City of Whitefish's Bicycle and Pedestrian Master Plan.
- Attempt to balance transportation improvements with the preservation of Whitefish's unique "character" and quality of life.
- Identify opportunities to enhance the continuity of the adjoining street network and improve local mobility.
- Consider context sensitive solutions (CSS) to enhance the appearance of the corridor.

SCREENING CONSIDERATIONS USED FOR ASSESSMENTS OF CORRIDOR IMPROVEMENT OPTIONS

CAPACITY CONSIDERATIONS			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Preserve the role of US 93 as regional transportation route while recognizing the need for the portion of US 93 within the corridor to adequately function as an urban principal arterial.	Provide adequate connectivity to the regional and local transportation network.	Does the option provide new and desirable connections to local street network?	Trip length and travel time. Provides new and desirable connections to local street network.
	Provide adequate capacity and an acceptable Level of Service (LOS C or higher) in the year 2030 or beyond.	V/C, LOS, average travel time and delay, other measures of effectiveness	V/C, LOS, average travel time and delay, other measures of effectiveness
	Minimize congestion and delays for vehicles at intersections.	Does the option have potential to reduce congestion and delay for facility users?	V/C ratios, LOS, and travel time and delay. Changes in traffic volumes, VMT, and vehicle hours of travel.
	Provide a design that manages truck traffic through the community in a safe and efficient manner and accommodates large vehicle movements at key intersections.	Would the option change the manner in which trucks are accommodated on US 93?	Would the option improve traffic flows for trucks through the City? Would key intersections be designed to better accommodate truck traffic and turning movements?
	Reduce the number of driveway access points existing along the corridor where possible.	Could the option reduce the number of driveway intersections along corridor?	Number of driveway access points combined or eliminated in corridor.
	Accommodate multimodal transportation opportunities within the corridor.	Would the option potentially support increased multimodal transportation facilities?	Would the option potentially support increased multimodal transportation facilities?

SAFETY CONSIDERATIONS			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Design improvements that provide a safe roadway and transportation environment for facility users and those abutting the roadway.	Provide a design that addresses identified safety and design deficiencies.	Does the option meet MDT's geometric design criteria for urban principal arterials?	Does the option meet MDT's geometric design criteria for urban principal arterials?
	Provide a design that addresses identified high crash locations in the corridor.	Does the option address identified common factors identified in crash analysis?	Number of locations benefited
	Provide a design that reduces opportunities for traffic conflicts within the corridor.	Does the option have the potential to reduce traffic conflicts?	Number of locations benefited
	Provide a design that manages truck traffic through the community in a safe and efficient manner.	Would the option change the manner in which trucks are accommodated on US 93?	Would the option improve traffic flows for trucks and improve overall safety?
	Reduce the number of driveway access points existing along the corridor where possible.	Does the option have the potential to reduce the number of driveway access points along the corridor?	Number of driveway access points combined or eliminated in corridor
	Provide a design that presents a safe and accessible pedestrian environment for all users regardless of age or ability.	Does the option include improvements to enhance safety for pedestrians? Does the option include improvements to enhance mobility for pedestrians?	Does the option include improvements to enhance safety for pedestrians? Does the option include improvements to enhance mobility for pedestrians?
	Provide roadway design treatments to accommodate bicyclists in a safe manner consistent with guidance from the City's Pedestrian and Bicycle Trails Master Plan.	Does the design option include features that enhance safety for bicyclists?	Does the design option include features that enhance safety for bicyclists?

CONSISTENCY WITH APPLICABLE GEOMETRIC DESIGN CRITERIA			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Ensure improvements are consistent with current MDT geometric design criteria for Urban Principal Arterials wherever practicable.	Eliminate or reduce the number of existing non-standard features or other physical deficiencies associated with the facility.	Does the option meet MDT's geometric design criteria for Urban Principal Arterials?	Does the option meet MDT's geometric design criteria for Urban Principal Arterials?

POTENTIAL ENVIRONMENTAL EFFECTS			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Provide transportation solutions that minimize impacts to the natural, cultural and social environment in the corridor where practicable.	Minimize impact to Wildlife/Fisheries Habitat.	Would wildlife or fisheries habitat be affected?	Number of streams affected. Potential acres of habitat loss.
	Minimize impact to Wetlands and Waters of the US.	Are wetlands or Waters of the US affected?	Estimated acres of wetlands impacted. Number of waters crossed. Estimated length of affected bank areas.
	Minimize impact to Floodplains.	Would FEMA-designated 100-year floodplains be crossed or encroached upon?	Estimated length of transverse or longitudinal floodplain encroachment
	Minimize impacts to Whitefish "critical areas."	Would City of Whitefish "critical areas" including storm water conveyances, streams, wetlands, lakes, or areas with steep slopes be affected?	Estimated acres of wetlands impacted. Affects areas with high groundwater, streams, lakes, or areas with steep slopes or geologic hazards.
	Ensure conformity with Air Quality standards.	Is there a potential to increase pollutant emissions?	Peak hour vehicle miles of travel/emissions
	Minimize potential Noise impacts to sensitive receptors.	Are noise sensitive receptors present?	Number of sensitive receptors
	Minimize encroachment on Hazardous Materials Sites.	Are Hazardous Materials Sites affected?	Number of sites and area impacted
	Minimize impact to Cultural Resources.	Are cultural resources affected?	Number of sites potentially impacted
	Minimize impact to Section 4(f) Resources.	Are 4(f) Resources affected?	Number of sites potentially impacted
	Minimize socio–economic impacts.	Would the option likely cause notable socio-economic effects? Loss of on-street parking?	Number of businesses directly affected, Number of on-street parking spaces lost?
	Minimize Right-of-Way (ROW) impacts.	Would new right-of-way be required?	Acres of potential ROW impact; Number of potential displacements.

FEASIBILITY AND AFFORDABILITY			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Ensure corridor improvements are feasible to implement and, represent a reasonable expenditure of limited public funds.	Ensure improvements are feasible to implement by MDT and FHWA.	Relative expense and ease of procedural requirements for MDT/FHWA to advance the option trough a future NEPA process. Does a precedent exist for similar strategies?	Would the option be less expensive or procedurally less difficult for MDT/FHWA to advance through a future NEPA process than other options? Does a precedent exist for similar strategies? Estimated Construction Cost.
	Ensure improvements can be constructed while maintaining traffic operations.	Could the option be constructed under traffic?	Could the option be constructed under traffic?
	Ensure relative construction and maintenance costs are in line with likely availability of funding.	Is the option potentially fundable by FHWA/MDT? What is the relative cost of the option?	Estimated Construction Cost, Estimated Maintenance Costs, Would construction cost be reasonable as compared to other MDT projects?
	Ensure improvement strategy has a reasonable degree of public and political support.	Does the option include components or design features that would likely result in agency or public opposition or generate controversy?	Compatibility with local land use and transportation plans; Citizens Advisory Committee/Public response to alternative; Strategy would not face insurmountable opposition.

COMPATIBILITY WITH LOCAL PLANS AND COMMUNITY IDEALS			
GOAL	OBJECTIVES	First Level Screening Criteria	Second Level Screening Criteria
Provide transportation improvements in the corridor that are compatible with local land use and transportation plans and that are sensitive to aspects of the community valued by Whitefish's residents.	Design transportation improvements within the corridor to consider the recommendations in local plans.	Would the option be compatible with or support recommendations from local plans?	Extent to which the option is compatible with recommendations from local plans.
	Accommodate pedestrians and bicyclists in a manner consistent with the City of Whitefish's Pedestrian and Bicycle Trails Master Plan.	Would the option be consistent with the City of Whitefish's Pedestrian and Bicycle Trails Master Plan?	Does the option provide desired trail connections or enhance trail components?
	Balance transportation improvements with the preservation of Whitefish's unique "character" and quality of life.	Would enhancements be consistent with features recommended in local plans or desired by the City of Whitefish and local residents?	Would enhancements be consistent with features recommended in local plans or desired by the City of Whitefish and local residents?
	Identify opportunities to enhance the continuity of the adjoining street network and improve local mobility.	Does the option provide new and desirable connections to local street network?	Degree to which the option makes new and desirable connections to the local street network
	Consider context sensitive solutions (CSS) to enhance the appearance of the corridor.	Does the option have the potential to enhance the appearance of the corridor?	Would enhancements be consistent with features recommended in local plans or desired by the City of Whitefish and local residents?