

Appendix B: Alternatives Analysis

ALTERNATIVE ANALYSIS
May 2010

PROJECT NAME: Parks Highway MP 44-52.3

PROJECT NUMBER: IM-0A4-1(23)/57178

ALTERNATIVES				
	No Build	Full Access Control	Preferred 4-lane	CTWLTL
# Lanes	2	4	4	5
Median	No	Yes	Yes	No
Frontage Roads	Existing	Full Both	Partial	Existing
Interchanges	none	yes	none	none
Design Speed	N/A	60	60	50
Access Control	N/A	Limited	Partial Limited	By Permit
COSTS				
Design ¹	0	18,300,000	15,000,000	10,700,000
ROW ²	0	50,000,000	16,000,000	10,000,000
Utility ³	0	10,000,000	8,000,000	6,000,000
Construction	0	128,700,000	102,000,000	74,800,000
*Total Cost ⁴	0	207,000,000	141,000,000	101,500,000

* Current Year Dollars

¹ Design Engineering estimated at 15%.

² Includes acquisition-related administrative cost factor of 10%.

³ Utility-Related Preliminary and Construction Engineering costs are included

⁴ Includes 4.24% ICAP.

ALTERNATIVE ANALYSIS
May 2010

PROJECT NAME: Parks Highway MP 44-52.3

PROJECT NUMBER: IM-0A4-1(23)/57178

ALTERNATIVE DESCRIPTION: This No Build alternative would not upgrade the existing highway from Lucas Road to Big Lake Road.

No Build	
FUNCTIONAL CLASSIFICATION	RURAL/URBAN INTERSTATE
LENGTH	8.3 miles
DESIGN SPEED	N/A
TRAFFIC (ADT)	CONSTRUCTION: (2013) DESIGN: (2033)
	21,725 37,014
PROP. TYPICAL SECTION	Existing 2 lane Existing Frontage Existing 10' Multi-Use Pathway
PROPOSED RIGHT-OF-WAY	200 to 300 ft
ACCESS CONTROL	Driveways by Permit
PRELIMINARY WETLANDS	None
PARCELS IMPACTED	None
BRIDGE STRUCTURES	None
COST ESTIMATE	\$ 0

ALTERNATIVE ANALYSIS
May 2010

PROJECT NAME: Parks Highway MP 44-52.3

PROJECT NUMBER: IM-0A4-1(23)/57178

ALTERNATIVE DESCRIPTION: The full access control alternative would upgrade the existing highway from Church Road to Big Lake Road to a 4-lane divided highway with 2-lane, 2-way frontage roads on each side. Grade separated interchanges at two major intersections would be constructed for highway access. The one mile section of roadway from Lucus Road to Church Road would be constructed to match the existing 5 lane section that currently runs thru Wasilla and ends near Deskas Street.

Full Access Control	
FUNCTIONAL CLASSIFICATION	
RURAL/URBAN INTERSTATE	
LENGTH	
8.3 miles	
DESIGN SPEED	
60 mph West of Church Road	
TRAFFIC (ADT)	CONSTRUCTION: (2013) DESIGN: (2033)
	21,725 37,014
PROP. TYPICAL SECTION	
4 lane w/TWCLTL (1 mile) 4 lane w/grass median (7.3 miles) Continuous frontage on both sides Rehab existing 10' Multi-use Pathway	
PROPOSED RIGHT-OF-WAY	
Approximately 400 ft	
ACCESS CONTROL	
Limited Interchange spacing 3-4 miles	
PRELIMINARY WETLANDS (NWI)	
4 acres +	
PARCELS IMPACTED	
200	
BRIDGE STRUCTURES	
ARRC & Little Meadow Creek	
COST ESTIMATE	
\$ 207,000,000	

ALTERNATIVE ANALYSIS
May 2010

PROJECT NAME: Parks Highway MP 44-52.3

PROJECT NUMBER: IM-0A4-1(23)/57178

ALTERNATIVE DESCRIPTION: This alternative would upgrade the existing highway west of Church Road to a 4-lane divided highway with at-grade intersections spaced every ½-mile. Approximately 4 miles of existing frontage roads will be improved, driveways will be consolidated, and at-grade intersections will be placed at planned locations where conflicts can be minimized to reduce crash rates. Approaches for 11 cross streets will be improved in this design. The one mile section of roadway from Lucus Road to Church Road would be constructed to match the existing 5 lane section that currently runs thru Wasilla and ends near Deskas Street.

Preferred, 4-Lane Divided	
FUNCTIONAL CLASSIFICATION	RURAL/URBAN INTERSTATE
LENGTH	8.3 miles
DESIGN SPEED	60 mph West of Church Road
TRAFFIC (ADT)	CONSTRUCTION: (2013) DESIGN: (2033)
	21,725 37,014
PROP. TYPICAL SECTION	4 lane w/TWCLTL (1 mile) 4 lane w/grass median (7.3 miles) Reconstruct existing Partial Frontage Rehab existing 10' Multi-use Pathway
PROPOSED RIGHT-OF-WAY	Approximately 300 ft
ACCESS CONTROL	Partial Limited ½ mile grid intersection spacing
PRELIMINARY WETLANDS (Delineated)	4.0 acres
PARCELS IMPACTED	152
BRIDGE STRUCTURES	ARRC & Little Meadow Creek
COST ESTIMATE	\$ 141,000,000

ALTERNATIVE ANALYSIS
May 2010

PROJECT NAME: Parks Highway MP 44-52.3

PROJECT NUMBER: IM-0A4-1(23)/57178

ALTERNATIVE DESCRIPTION: This alternative would upgrade the existing highway from Lucus Road to Big Lake Road to a 5-lane section matching the existing section in Wasilla.

5-Lane, TWCLTL	
FUNCTIONAL CLASSIFICATION	RURAL/URBAN INTERSTATE
LENGTH	8.3 miles
DESIGN SPEED	50 mph
TRAFFIC (ADT)	CONSTRUCTION: (2013) DESIGN: (2033)
	21,725 37,014
PROP. TYPICAL SECTION	4 lane (2 each direction) w/TWCLTL Rehab existing 10' Multi-Use Pathway
PROPOSED RIGHT-OF-WAY	Varies to 300 ft
ACCESS CONTROL	Driveways by Permit Center TWLTL full length
PRELIMINARY WETLANDS	None
PARCELS IMPACTED	25
BRIDGE STRUCTURES	ARRC & Little Meadow Creek
COST ESTIMATE	\$ 101,500,000