

## Malletts Bay Transportation Scoping Study Project Evaluation Matrix: West Lakeshore Drive Bicycle & Pedestrian Improvements

		Alt. 1 No Build	Score	Alt. 2 Shared Use Lanes	Score	Alt. 3 Bike Lanes (both sides of road)	Score	Alt. 4 Shared Use Path (south side of road)	Score	Alt. 4A Alt. 4 + Section at Water Elevation	Score	Alt. 4B Alt. 4 + Overlook Area	Score	Alt. 4C Alt. 4 + North side path at western end	Score
Costs	Engineering Design*	\$0		\$10,000		\$80,000		\$230,000		\$510,000		\$400,000		\$510,000	
	Roadway/Path Construction	\$0		\$20,000		\$510,000		\$1,300,000		\$1,550,000		\$1,420,000		\$1,600,000	
	Stormwater Improvements (Meets Standards)	\$0		\$0		\$1,000,000		\$1,000,000		\$1,000,000		\$1,000,000		\$1,000,000	
	Stormwater Improvements (Exceeds Standards)	\$0		\$0		\$2,600,000		\$2,600,000		\$2,600,000		\$2,600,000		\$2,600,000	
	Retaining Wall, Railing & Stairs Construction	\$0		\$0		\$0		\$0		\$50,000		\$1,780,000		\$0	
	Resident (Construction) Engineering	\$0		\$0		\$40,000		\$130,000		\$160,000		\$130,000		\$160,000	
	Water line Relocation Cost	\$0	0	\$0	0	\$0	0	\$2,500,000	-1	\$2,500,000	-1	\$2,500,000	-1	\$2,500,000	-1
	Total (Meets Standards, Not including ROW)	\$0	0	\$30,000	3	\$1,630,000	1	\$5,160,000	-1	\$5,770,000	-1	\$7,230,000	-3	\$5,770,000	-1
Total (Exceeds Standards, Not including ROW)	\$0		\$30,000		\$3,230,000		\$6,760,000		\$7,370,000		\$8,830,000		\$7,370,000		
Engineering	Typical Section	11' travel lanes 1-3' paved shoulder 5' sidewalk		11' travel lanes 1-3' paved shoulder 5' sidewalk		11' travel lanes 5' bike lanes		11' travel lanes 1-3' paved shoulders 10' paved shared use path		11' travel lanes 1-3' paved shoulders 10' paved shared use path		11' travel lanes 1-3' paved shoulders 10' paved shared use path		11' travel lanes 1-3' paved shoulders 10' paved shared use path	
	Bicycle Access	-		Shared use lanes		5' bike lanes		Adds shared use path		Adds shared use path		Adds shared use path		Adds shared use path	
	Overall Safety	-	0	Slight improvement for cyclists (Heightened driver awareness)	1	Improved for cyclists (Striped lane for bicyclists)	1	Improved for Path Users (Bicyclists and pedestrians are given more room and separated from vehicles)	3	Improved for Path Users (Bicyclists and pedestrians are given more room and separated from vehicles)	3	Improved for Path Users (Bicyclists and pedestrians are given more room and separated from vehicles)	3	Improved for Path Users (Bicyclists and pedestrians are given more room and separated from vehicles)	3
	ROW Impacts	-	0	No	1	No	1	Moderate	-1	High	-3	Moderate	-1	Moderate	-1
Impacts	Agricultural Lands	-	0	No	0	Potential	-1	Potential	-1	Potential	-1	Potential	-1	Potential	-1
	Archaeological	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Historic	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Hazardous Materials	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Floodplains	-	0	No	0	No	0	No	0	Yes	-3	Potential	-1	No	0
	Shoreland	-	0	No	0	No	0	No	0	Yes	-3	Potential	-1	No	0
	Fish & Wildlife	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Rare, Threatened & Endangered Species	-	0	No	0	No	0	No	0	Potential	-1	Potential	-1	No	0
	Public Lands - Sect. 4(f)	-	0	Yes	-3	Yes	-3	Yes	-3	Yes	-3	Yes	-3	Yes	-3
	LWCP - Sect. 6(f)	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Managed Lands	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Noise	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Wetlands	-	0	No	0	No	0	Yes	-3	Yes	-3	Yes	-3	Yes	-3
New Impervious Surfaces	-	0	No	0	Yes - 13% New	-1	Yes - 17% New	-1	Yes - 21% New	-3	Yes - 24% New	-3	Yes 24% New	-3	
Stormwater Accommodations	None	-3	Moderate (Narrow green belt for bioswales)	1	Low (Narrowed greenbelt does not accommodate bioswales)	-1	Moderate (Narrow green belt for bioswales)	1	Moderate (Narrow green belt for bioswales)	1	Moderate (Narrow green belt for bioswales)	1	Moderate (Narrow green belt for bioswales)	1	
Local & Regional	Aesthetics	-	0	No impacts	0	Minimal	0	Improved	1	Improved w/ water views	3	Improved w/ Water Views	3	Improved	1
	Community Character	-	0	No impacts	0	Minimal	0	Improved	3	Improved	3	Improved	3	Improved	3
	Economic Impacts	-	0	No impacts	0	Minimal	0	Positive	3	Positive	3	Positive	3	Positive	3
	Conformance to Reg. Transp. Plan	-	0	Potential	-1	Yes	3	Yes	3	Yes	3	Yes	3	Yes	3
	Compliance With Current Zoning	-	0	Yes	3	Yes	3	Yes	3	No*	-3	No*	-3	Yes	3
	Satisfies Purpose & Need	No	-3	No	-3	Partial	1	Yes	3	Yes	3	Yes	3	Yes	3
Permits	Act 250	-	0	No	0	No	0	Potential	-1	Potential	-1	Potential	-1	Potential	-1
	Section 404 - Wetlands (USACOE)	-	0	No	0	No	0	Yes	-1	Yes	-1	Yes	-1	Yes	-1
	Section 401 Water Quality Certification	-	0	No	0	No	0	Yes	-1	Yes	-1	Yes	-1	Yes	-1
	State Wetlands Permit	-	0	No	0	Yes	-1	Yes	-1	Yes	-1	Yes	-1	Yes	-1
	Stream Alteration Permit	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Construction Phase Storm Water Discharge Permit (General Permit 3-9020)	-	0	No	0	Yes	-1	Yes	-1	Yes	-1	Yes	-1	Yes	-1
	Operational Phase Storm Water Discharge Permit (General Permit 3-9015)	-	0	No	0	Yes	-1	Yes	-1	Yes	-1	Yes	-1	Yes	-1
	Lakes & Ponds	-	0	No	0	No	0	No	0	Potential	-1	Potential	-1	No	0
	Rare, Threatened, and Endangered Species	-	0	No	0	No	0	No	0	No	0	No	0	No	0
	Section 1111 Permit	-	0	No	0	No	0	No	0	No	0	No	0	No	0

\* - Engineering Design costs include those costs associated with engineering and design for bike/pe, water line and stormwater (Meets Standards) improvements

\* - Not compliant with current zoning as written. May be approved after Town review

**Malletts Bay Transportation Scoping Study Project  
Evaluation Matrix: Lakeshore Drive / Blakely Road Intersection Improvements**

		Alt. 1 No Build Alternative	Score	Alt. 2A Operational Modifications @ Blakely & Lakeshore	Score	Alt. 2B Operational & Geometric Modifications @ Blakely & Lakeshore	Score	Alt. 3 Roundabout @ Blakely & Lakeshore	Score	Alt. 4A Dead End E Lakeshore and New Connector Road	Score	Alt. 4B Dead End E Lakeshore with No Connector Road	Score
<b>Costs</b>	Engineering Design*	\$0		\$40,000		\$50,000		\$280,000		\$240,000		\$80,000	
	Roadway / Signal Construction	\$0		\$65,000		\$130,000		\$2,500,000		\$1,900,000		\$280,000	
	Stormwater Improvements (Meets Standards)	\$0		\$300,000		\$300,000		\$300,000		\$500,000		\$500,000	
	Stormwater Improvements (Exceeds Standards)	\$0		\$700,000		\$700,000		\$700,000		\$1,100,000		\$1,000,000	
	Resident (Construction) Engineering	\$0		\$15,000		\$20,000		\$230,000		\$200,000		\$70,000	
	Total (Meets Standards, Not Including ROW)	\$0	0	\$420,000	1	\$500,000	1	\$3,310,000	-1	\$2,840,000	-1	\$930,000	1
	Total (Exceeds Standards, Not Including ROW)	\$0		\$820,000		\$900,000		\$3,710,000		\$3,440,000		\$1,430,000	
<b>Engineering</b>	Alignment / Traffic Signal Changes	-		New pedestrian signals, video detection, and controller		Convert Blakely Road left turn lane to left/through lane; Addition of 250' northbound travel lane; Changes to existing signal at Blakely & Lakeshore Drive		Single lane roundabout at E/W Lakeshore Drive		Dead end E Lakeshore Drive; Construct new road segment; Signalize Laker Lane intersection		Dead end E Lakeshore Drive; Construct left turn lanes on NB Blakely Road and WB Williams Road	
	<b>Traffic - 2037 PM Peak Levels of Service</b>												
	Blakely Road & Lakeshore Drive												
	Overall	LOS F	-3	LOS C	1	LOS C	1	LOS B	3	LOS A	3	LOS A	3
	Blakely Rd NB through	LOS F	-3	LOS D	0	LOS C	1	LOS B	3	LOS A	3	LOS A	3
	W Lakeshore Dr SB left	LOS D	0	LOS E	-3	LOS E	-3	LOS A	3	No left turn	3	No left turn	3
	Blakely Road & Laker Lane												
	Laker Lane left/right	LOS F		LOS F		LOS F		LOS F		Signalized: LOS B		LOS F	
	Blakely Road & Williams Road												
	Williams Road left/right	LOS D		LOS D		LOS D		LOS D		Additional lanes: LOS D		LOS D	
	Blakely Road & US 2/7 & Severance Road												
	Overall	LOS D		LOS D		LOS D		LOS D		LOS D		LOS E	
	<b>Traffic - 2037 PM Peak Volume to Capacity Ratio</b>												
	Blakely Road & E/W Lakeshore Drive												
	Overall	0.97	-3	0.95	-3	0.78	1	0.91	-3	0.81	-1	0.81	-1
	Blakely Rd NB through	1.30	-3	0.94	-3	0.73	1	0.85	-1	0.78	1	0.78	1
	W Lakeshore Dr SB left	0.81	-1	0.86	-1	0.88	-1	0.71	1	No left turn	3	No left turn	3
	Blakely Road & Laker Lane												
	Laker Lane left/right (AM peak)	1.27		1.27		1.27		1.27		0.86		1.27	
	Blakely Road & Williams Road												
Williams Road left/right	0.44		0.44		0.44		0.44		0.44		0.46		
Bicycle Safety	-	0	No change	0	No change	0	Slight Improvement (High visibility crossing at major approach)	-1	Slight Improvement (Possible facilities on new connector road)	-1	Slight Improvement (Eliminate approach from intersection)	-1	
Pedestrian Safety	-	0	Decreased (Flashing Don't Walk Phase is concurrent with moving vehicles)	-1	Decreased (Flashing Don't Walk Phase is concurrent with moving vehicles)	-1	Improved (High visibility crossing at major approach)	3	Improved (Removal of intersection approach at E Lakeshore Dr, proposed 5' sidewalk on new connector road)	3	Improved (Fewer intersection approaches, Expanded Bayside park and trails)	3	
Vehicle Safety	-	0	No change	0	No change	0	Improved (Fewer conflict points, slower vehicle speeds)	3	Improved (Fewer intersection approaches)	3	Improved (Fewer intersection approaches)	3	
Utility Impacts	-	0	No impacts	0	No impacts	0	Yes	-3	Yes	-3	Yes	-3	
ROW Impacts	-	0	No impacts	0	Minimal	-1	Yes	-3	Yes	-3	Yes	-3	
<b>Impacts</b>	Agricultural Lands	-	0	No	0	Potential	-1	Potential	-1	Yes	-3	Yes	-3
	Archaeological	-	0	No	0	No	1	No	1	No	1	No	1
	Historic	-	0	No	0	No	1	No	1	No	1	No	1
	Hazardous Materials	-	0	No	0	No	1	No	1	No	1	No	1
	Floodplains	-	0	No	0	No	1	No	1	No	1	No	1
	Fish & Wildlife	-	0	No	0	No	1	No	1	No	1	No	1
	Rare, Threatened & Endangered Species	-	0	No	0	No	1	No	1	Potential	-1	Potential	-1
	Public Lands - Sect. 4(f)	-	0	No	0	Potential	-1	Potential	-1	No	1	No	1
	LWCP - Sect. 6(f)	-	0	No	0	Potential	-1	Potential	-1	No	1	No	1
	Managed Lands	-	0	No	0	No	1	No	1	No	1	No	1
	Noise	-	0	No	0	No	1	No	1	No	1	No	1
	Wetlands	-	0	No	0	No	1	No	1	No	1	No	1
	New Impervious Surfaces	-	0	No	0	Yes - 20% New	-3	Yes - 16% New	-1	Yes - 33% New	-3	No - 5% Less Impervious	3
Stormwater Accommodations	None	-3	Minimal (No new areas to use for stormwater infiltration)	0	Minimal (No new areas to use for stormwater infiltration)	0	Moderate (Center and splitter islands can be used for stormwater treatment)	1	High (Opportunities for treatment along new connector road on sandy soils)	3	High (Removed impervious area and opportunities for treatment in expanded park)	3	
<b>Local &amp; Regional</b>	Aesthetics	-	0	No Change	0	No Change	0	Improved	3	Improved	3	Improved	3
	Community Character	-	0	No Change	0	No Change	0	Improved	3	Slight Improvement	1	Decrease (Cut-thru Traffic)	-3
	Economic Impacts	-	0	No Change	0	No Change	0	Slight Improvement	1	Slight Improvement	1	Slight Improvement	1
	Conformance to Req. Transp. Plan	-	0	Yes	1	Yes	1	Yes	1	Yes	1	Yes	1
	Satisfies Purpose & Need	No	-3	Yes	3	Yes	3	Yes	3	Yes	3	Yes	3
<b>Permits</b>	Act 250	-	0	No	1	No	1	No	1	No	1	No	1
	Section 404 - Wetlands (USACOE)	-	0	No	1	No	1	No	1	No	1	No	1
	Section 401 Water Quality Certification	-	0	No	1	No	1	No	1	No	1	No	1
	State Wetlands Permit	-	0	No	1	No	1	No	1	No	1	No	1
	Stream Alteration Permit	-	0	No	1	No	1	No	1	No	1	No	1
	Construction Phase Storm Water Discharge Permit (General Permit 3-9020)	-	0	No	1	No	1	Yes	-1	Yes	-1	Yes	-1
	Operational Phase Storm Water Discharge Permit (General Permit 3-9015)	-	0	No	1	No	1	Yes	-1	Yes	-1	No	1
	Lakes & Ponds	-	0	No	1	No	1	No	1	No	1	No	1
	Rare, Threatened, and Endangered Species	-	0	No	1	No	1	No	1	No	1	No	1
	Section 1111 Permit	-	0	No	1	No	1	No	1	No	1	No	1

\* - Engineering Design costs include those costs associated engineering and design for both intersection and stormwater (Meets Standards) improvements