



## **Alternatives Pre-Screening**

Alternative	Reasonable cost?	Reasonable timeframe for construction?	Work within existing ROW?	Meet project goals?	Meet TMP goals?	Recommendation Moving Forward (into full screening)
Location: Mineral Avenue and Jackass Hill Road/ Long Avenue intersection						
1A: Right turn lane modifications with ped refuge	Yes	Yes	Yes	Yes	Yes	Move forward
1B: Right turn slip lanes	Maybe	Yes	Maybe	Yes	Yes	Move forward
1C: Protected intersection	Yes	Yes	Yes	Yes	Yes	Move forward
1D: Signalization modifications	Yes	Yes	Yes	Yes	Yes	Move forward
Location: Mineral Avenue						
2A: Buffered bike lane with two lanes in each direction	Yes	Yes	Yes	Yes	Yes	Move forward
2B: Protected bike lane with two travel lanes	Yes	Yes	Yes	Yes	Yes	Move forward
2C: Three lanes westbound and buffered bike lane (with median modifications)	No	Yes	Yes	Yes	Yes	Do not move forward
2D: Three lanes westbound with trail improvements (no on-street facility) and expanded sidewalk eastbound	Yes	Yes	Yes	No	Yes	Do not move forward
Location: Mineral Avenue Trail						
7A: East of Jackass Hill: Spot improvements and reinforce soft surface trail	Yes	Yes	Yes	No	Yes	Do not move forward
7B: East of Jackass Hill: Pave trail	Yes	Yes	Yes	Yes	Yes	Move forward
7C: East of Jackass Hill: New paved trail adjacent to existing soft surface trail	Yes	Yes	Yes	Yes	Yes	Move forward
7D: East of Jackass Hill: Pave trail with designated space for bikes/peds	Maybe	Yes	Yes	Yes	Yes	Move forward
7E: West of Jackass Hill: Expand sidewalk with designated space for bikes/peds	Maybe	Yes	Yes	Yes	Yes	Move forward
7F: West of Jackass Hill: Expand sidewalk	Yes	Yes	Yes	Yes	Yes	Move forward

Alternative	Reasonable cost?	Reasonable timeframe for construction?	Work within existing ROW?	Meet project goals?	Meet TMP goals?	Recommendation Moving Forward (into full screening)
Location: Jackass Hill Road						
3A: Buffered bike lane with one lane in each direction	Yes	Yes	Yes	Yes	Yes	Move forward
3B: Protected bike lane with one lane in each direction	Yes	Yes	Yes	Yes	Yes	Move forward
3C: Bidirectional bike lane (cycle track) with protection on the west side of the street	Maybe	Yes	Yes	Yes	Yes	Move forward
3D: Northbound (uphill) protected bike lane and southbound (downhill) would stay on-street	Yes	Yes	Yes	No	Yes	Do not move forward
3E: Expanded attached multiuse path on both sides of the street	No	Yes	Yes	Yes	Yes	Do not move forward
Location: Jackass Hill Road and Jamison Way/Curtice Court intersection						
6A: Traffic circle or mini-roundabout	Maybe	Yes	Yes	Yes	Yes	Move forward
6B: New curb and gutter for curb extensions	No	Yes	Yes	Yes	Yes	Do not move forward
6C: Center medians on Jackass Hill	Yes	Yes	Yes	Yes	Yes	Move forward
Location: High Line Canal Trail Crossing of Jackass Hill Road						
5A: Pedestrian activated signal/RRFB	Yes	Yes	Yes	Yes	Yes	Move forward
5B: Enhanced striping and signing	Yes	Yes	Yes	No	Yes	Do not move forward
5C: Raised pedestrian crossing	Maybe	Yes	Yes	Yes	Yes	Move forward
5D: Center refuge for pedestrians	Yes	Yes	Yes	Yes	Yes	Move forward
Location: High Line Canal Trail Crossing of Mineral Avenue						
4A: Realignment of crossing on west leg of intersection	Yes	Yes	Yes	Yes	Yes	Move forward
4B: Keep crossing on the east leg of the intersection	Yes	Yes	Yes	Yes	Yes	Move forward
4C: Hybrid crossing	Yes	Modified	Modified	Yes	Yes	Move forward
4D: Underpass under Mineral Ave	No	No	Maybe	Yes	Yes	Do not move forward





## **Alternatives Screening Results**

Location: Mineral Avenue and Jackass Hill Road/Long Avenue intersection

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
1A	Right turn lane (RTL) modifications	- Extend southbound RTL - Remove bike lane west of Jackass Hill/adjust lane widths - Bicyclists off/on-ramps for all bike lane connection to intersections (westbound east of Jackass, southbound north of Mineral, northbound at both north and south of Mineral)	POOR No pedestrian improvement	GOOD Physical and time separation from vehicles	GOOD Direct benefit of extending southbound RTL	GOOD Extended right turn lane improves operations	FAIR Improvements for vehicles and bicyclists	GOOD No additional ROW anticipated	N/A	GOOD Transportation Master Plan (TMP) recommendations (#22 for auto projects intersection operation improvements; ped and bicycle focus AND #37 for active transportation projects bicycle intersection improvements)
18	Right turn slip lanes	- Southbound channelized RTL - Westbound channelized RTL - Raised pedestrian crossings for channelized RTLs - Bicyclists off-ramps for all bike lane connection to intersections (westbound east of Jackass, southbound north of Mineral, northbound at both north and south of Mineral)	FAIR Raised pedestrian crossings add physical separation	GOOD Physical and time separation from vehicles	GOOD Direct benefit of channelizing RTLs	FAIR RTLs already exist and not anticipated to impact operations much	FAIR Improvements for vehicles and pedestrians	FAIR Some additional right-of-way (ROW) anticipated from agency partners	N/A	FAIR TMP recommendations (#22 for auto projects intersection operation improvements; ped and bicycle focus)
1C (Recommended)	Protected intersection	-Full protection on all legs of intersection	GOOD Added physical and time separation from vehicles	GOOD Physical and time separation from vehicles	FAIR Indirect safety improvement of slowing turning speeds	FAIR Operations not anticipated to change	GOOD Enhanced improvements for all modes	GOOD No additional ROW anticipated	N/A	GOOD TMP recommendations (#22 for auto projects intersection operation improvements; ped and bicycle focus AND #37 for active transportation projects bicycle intersection improvements)
1D	Signal improvements	- Protected right signalization with RTLs - Separate movements for northbound lefts/southbound rights - Bike signals with detection - Leading pedestrian interval (LPI)	FAIR Time separation improvement with LPI	FAIR Bicycle signal provides time separation from vehicles	GOOD Direct benefit of signal timing improvements	GOOD Signalization improves operations	FAIR Improvements for vehicles and bicyclists	GOOD No additional ROW anticipated	N/A	FAIR TMP recommendations (#22 for auto projects intersection operation improvements; ped and bicycle focus)

Location: Mineral Avenue - Between Jackass Hill and High Line Canal Trail (HLC) crossing at Peninsula

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
2A	Buffered bike lane with two lanes in each direction	- Bike lanes continue through intersections	POOR No safety improvements anticipated	FAIR Improvement from existing facility	FAIR Indirect safety improvement more space between bike facility	FAIR Operations not anticipated to change	FAIR Improvements for vehicles and bicyclists	GOOD No additional ROW anticipated	FAIR Ability to maintain with small increase in resources with additional striping	FAIR TMP Recommendations for protected bike lanes
2B (Recommended)	Protected bike lane with two travel lanes in each direction	- Bike lanes continue through intersections	FAIR Additional physical barrier provides additional protection from vehicles	GOOD Physical separation from vehicles	FAIR Indirect safety improvement more space between bike facility	FAIR Operations not anticipated to change	FAIR Improvements for vehicles and bicyclists	GOOD No additional ROW anticipated	POOR Large increase in resources required to buy equipment to maintain facility	GOOD TMP Recommendations for protected bike lanes

## Location: Mineral Avenue Trail

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
7B	East of Jackass Hill: Pave trail	Paved trail	FAIR Improvement from existing facility	FAIR Improvement from existing facility	FAIR Indirect safety improvement of improving trail to prevent people from walking in roadway	FAIR Operations not anticipated to be impacted	FAIR Improvements for pedestrians and bicyclists	GOOD No additional ROW anticipated	FAIR Would require maintenance of paved facility	FAIR General support for bike/ped improvements
7C	East of Jackass Hill: New paved trail adjacent to existing soft surface trail	Paved trail adjacent to soft surface trail	FAIR Improvement from existing facility	FAIR Improvement from existing facility	FAIR Indirect safety improvement of improving trail to prevent people from walking in roadway	FAIR Operations not anticipated to be impacted	FAIR Improvements for pedestrians and bicyclists	FAIR Some additional ROW anticipated from agency partners	FAIR Would require maintenance of paved facility	FAIR General support for bike/ped improvements
7D (Recommended)	lwith decignated chace for	Paved trail with path for bicyclists and a sidewalk for pedestrians	GOOD Designated pedestrian facility	GOOD Designated bicycle facility	FAIR Indirect safety improvement of improving trail to prevent people from walking in roadway	FAIR Operations not anticipated to be impacted	FAIR Improvements for pedestrians and bicyclists	FAIR Some additional ROW anticipated from agency partners	FAIR Small increase in resources required to maintain paved and larger facility	FAIR General support for bike/ped improvements
7E (Recommended)	leidowalk with decimated	Paved trail with path for bicyclists and a sidewalk for pedestrians	GOOD Designated pedestrian facility	GOOD Designated bicycle facility	FAIR Indirect safety improvement of improving trail to prevent people from walking in roadway	FAIR Operations not anticipated to be impacted	FAIR Improvements for pedestrians and bicyclists	FAIR Some additional ROW anticipated from agency partners	FAIR Small increase in resources required to maintain larger facility	GOOD TMP recommendations (#82 for active transportation projects shared use path)
7F	West of Jackass Hill: Expand sidewalk into roadway	Expand sidewalk	FAIR Improvement from existing facility	FAIR Improvement from existing facility	FAIR Indirect safety improvement of improving trail to prevent people from biking in roadway	FAIR Operations not anticipated to be impacted	FAIR Improvements for pedestrians and bicyclists	GOOD No additional ROW anticipated	FAIR Small increase in resources required to maintain larger facility	GOOD TMP recommendations (#82 for active transportation projects shared use path)

## **Location: Jackass**

**Hill Road** 

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
3A	Buffered bike lane with one lane in each direction	- 11-foot lanes, potentially 10-foot - Bike lanes continue through intersections	POOR No safety improvements anticipated	FAIR Improvement from existing facility	FAIR Indirect safety improvement with slowing speeds from narrowed lanes	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and vehicles	GOOD No additional ROW anticipated	FAIR Ability to maintain with small increase in resources with additional striping	FAIR TMP recommendations (#18 for active transportation projects protected bike lane)
3B (Recommended)	Protected bike lane with one lane in each direction	- 11-foot lanes, potentially 10-foot - Bike lanes continue through intersections	FAIR Additional physical barrier provides additional protection from vehicles		FAIR Indirect safety improvement with slowing speeds from narrowed lanes	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and vehicles	GOOD No additional ROW anticipated	POOR Large increase in resources required to buy equipment to maintain facility	GOOD TMP recommendations (#18 for active transportation projects protected bike lane)
3C	Bidirectional bike lane (cycle track) with protection on the west side of the street	- 11-foot lanes, potentially 10-foot - Bike lanes continue through intersections	FAIR Additional physical barrier provides additional protection from vehicles	GOOD Physical separation from vehicles	FAIR Indirect safety improvement with slowing speeds from narrowed lanes	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and vehicles	GOOD No additional ROW anticipated	required to buy equipment	GOOD TMP recommendations (#18 for active transportation projects protected bike lane)

Location: Jackass Hill Road and Jamison Way/Curtice Court

intersection

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
6A (Recommended)	Traffic circle or mini- roundabout	-Marked crosswalks at all legs	FAIR Indirect improvement - Vehicle speeds are reduced	FAIR Indirect improvement - Vehicle speeds are reduced	GOOD No left turning movements and yielding condition into intersection	I (Ingrafione not anticinated	FAIR Improvements for vehicles and pedestrians	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements
6C	Center medians on Jackass Hill	- Marked crosswalks at all legs - Lefts restricted	FAIR Mixed improvement (allows separation/navigating directions separately but positions users in the middle of roadway with speeds/sight distance concerns)	POOR No safety improvements	POOR No safety improvements anticipated	POOR Would reduce turning movements	FAIR Improvements for vehicles and pedestrians	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements

Location: High Line Canal Trail Crossing of Jackass Hill Road

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
5A (Recommended)	Pedestrian activated signal/Rectangular Rapid Flashing Beacon (RRFB)	No additional details	GOOD Signal/RRFB requires drivers to yield, adding time separation and creating a defined space for pedestrians.	GOOD Signal/RRFB requires drivers to yield, adding time separation and creating a defined space for bicyclists.	FAIR Indirect safety improvement with improved crossing facility	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and pedestrians	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements
5C	Raised pedestrian crossing	No additional details	FAIR Added physical separation, indirect improvement (drivers slow)	FAIR Added physical separation, indirect improvement (drivers slow)	FAIR Indirect safety improvement with improved crossing facility	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and pedestrians	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements
5D	Center refuge for pedestrians	No additional details	FAIR Mixed improvement (added physical separation allows navigation of directions separately but positions users in the middle of roadway with speeds/sight distance concerns)	FAIR Mixed improvement (added physical separation allows navigation of directions separately but positions users in the middle of roadway with speeds/sight distance concerns)	FAIR Indirect safety improvement with improved crossing facility	FAIR Operations not anticipated to be impacted	FAIR Improvements for bicyclists and pedestrians	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements

Location: High Line Canal Trail Crossing of Mineral Avenue

Alternative ID	Draft Alternatives	Alternative detail	Safety potential - peds	Safety potential - bikes	Safety potential - vehicles	Future traffic conditions	Mode improvement	Right-of-way	Ease of maintenance (segment only)	Local plans
4A	0	- Requires additional crossing across Peninsula in addition to Mineral	POOR Mixed safety improvements anticipateddecreases crossing distance across Mineral but would require two roadway crossings (across Peninsula and then Mineral)	POOR Mixed safety improvements anticipateddecreases crossing distance across Mineral but would require two roadway crossings (across Peninsula and then Mineral)	GOOD	POOR Would add additional cycle for pedestrian crossing	POOR Improvements for vehicles	FAIR Some additional ROW anticipated from agency partners	N/A	FAIR General support for bike/ped improvements
4B (Recommended)	Signal improvements	- Bicycle and pedestrian detection - Push buttons to the right of trail users	FAIR Detection and push buttons to the right of trail users will reduce trail users crossing against the light	users will reduce trail	FAIR Bicyclists and pedestrians crossing with light	FAIR Operations not anticipated to be impacted	POOR Improvements for vehicles	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements
4C	Hybrid crossing	<ul> <li>- Dual phased crossing at current location across Mineral</li> <li>- Median on east side of intersection</li> <li>- Northbound lefts still allowed</li> </ul>	FAIR Added physical separation (median across east leg)	FAIR Added physical separation (median across east leg)	GOOD Separation of vehicle turning movements from trail users	POOR Would require Mineral cycle to be hybrid	POOR Improvements for vehicles	GOOD No additional ROW anticipated	N/A	FAIR General support for bike/ped improvements