

#### Infrastructure Projects

- Airports
- Bikeways
- Bridges
- Drainage
   Control Facilities
- Control Facilities
- Librorie
- Parks
- Recreation Centers
- Police Station
- Fire Station
- Lifeguard Stations
- Street Improvements
- Sheet Lights
- Traffic Successols
- Linities
   Undergrounding
- Water Facilitie
- Sewer Fricilitie
- Worer Placines
- Sewer Pipelines

# Coastal Rail Trail Project Working Group

Meeting #4

October 23, 2013

### Agenda

- Review Project Goals/Benefits
- Review Potential Alignments
  - Facility Types
- Review Evaluation Matrix
- Discuss Alternatives to Move Forward
- Public Comment
- Next Steps



# Project Goals/Benefits



## Guiding Principles for Bike Plan

- Safety and convenience
- Connect neighborhoods/regions
- Enhance neighborhood character
- Economic development
- Quality of life and public health
- Transportation choices and more people choosing to ride



#### Coastal Rail Trail — Goals

- Locate within railroad ROW
- Provide direct north-south connection
- Connect to existing/planned trails
- Maximize safety
- Preserve primary use of the SDNR
- Preserve existing access to beaches



#### Coastal Rail Trail — Goals

- Protect wetlands and environmentally sensitive habitats
- Meet state and federal standards and intent of ADA
- Provide separate treadways for pedestrians and wheeled users
- Design road crossings to maximize safety and convenience



### Everyday People, Everyday Trips

**No Way** 

Interested,
but Concerned
(potential bikeway users)



**Anywhere, Anytime** 



# Potential Alignments



#### Average Daily Traffic of Major Roadways

Street	ADT
Gilman Drive	15900
N Torrey Pines Road	23200
Genesee Avenue	34900
Gilman Drive	15900
La Jolla Colony Drive	8500
Palmilla Drive	20000
Lebon Drive	10700
La Jolla Village Drive	40200
Eastgate Mall	5200
Regents Road	10000-13600

Source: City of SD ADT Counts, 2010



#### Baseline Alternative: URS





#### Baseline: Rose Canyon West Segment





#### Baseline: Rose Canyon East Segment





#### Baseline: Nobel Dr. & Judicial Dr.



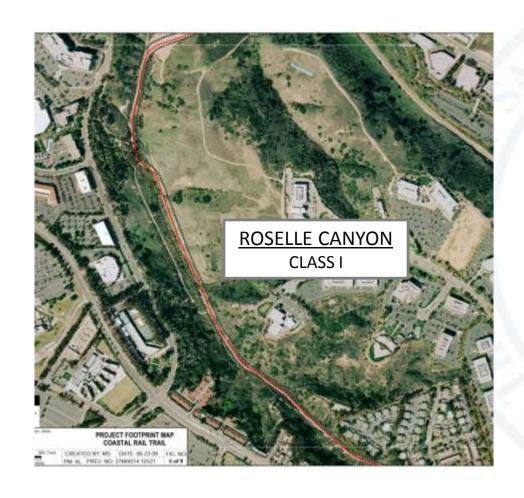


#### Baseline: Judicial Dr. & Eastgate Mall



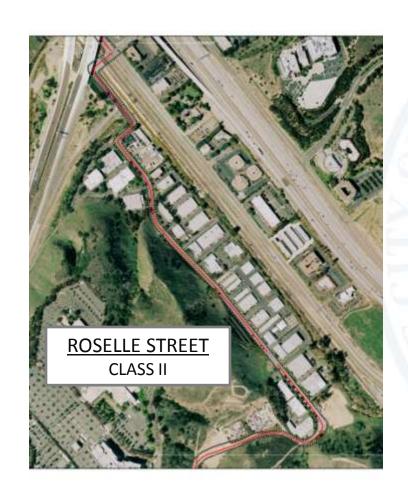


#### Baseline: Roselle Canyon





#### Baseline: Roselle Street





#### Baseline: Sorrento Valley Rd. South





#### Baseline: Sorrento Valley Rd. Mid





#### Baseline: Sorrento Valley Rd. North





#### Alternative 1





#### Alternative 1: Gilman Drive





#### Alternative 1: Gilman Dr. & La Jolla Village Dr.





Alternative 1: North Torrey Pines Rd.





#### Alternative 1: John Hopkins Dr. & Tower Rd.





Alternative 1: Sorrento Valley Rd.





#### Alternative 2





"Working together to engineer a better tomorrow."

#### Alternative 2: Gilman Drive South



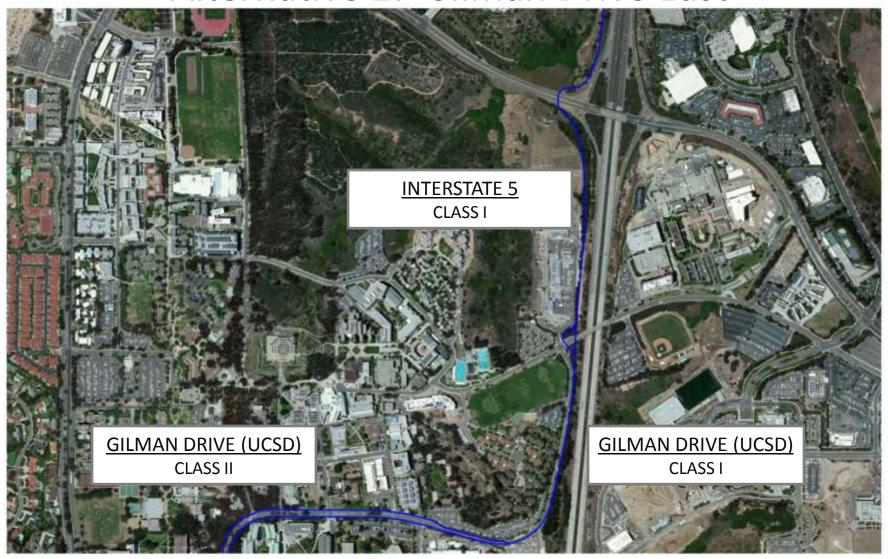


#### Alternative 2: Gilman Drive North





#### Alternative 2: Gilman Drive East





Alternative 2: Caltrans I-5 segment





#### Alternative 2: Sorrento Valley Rd.





#### Alternative 4





#### Alternative 4: La Jolla Colony Dr.

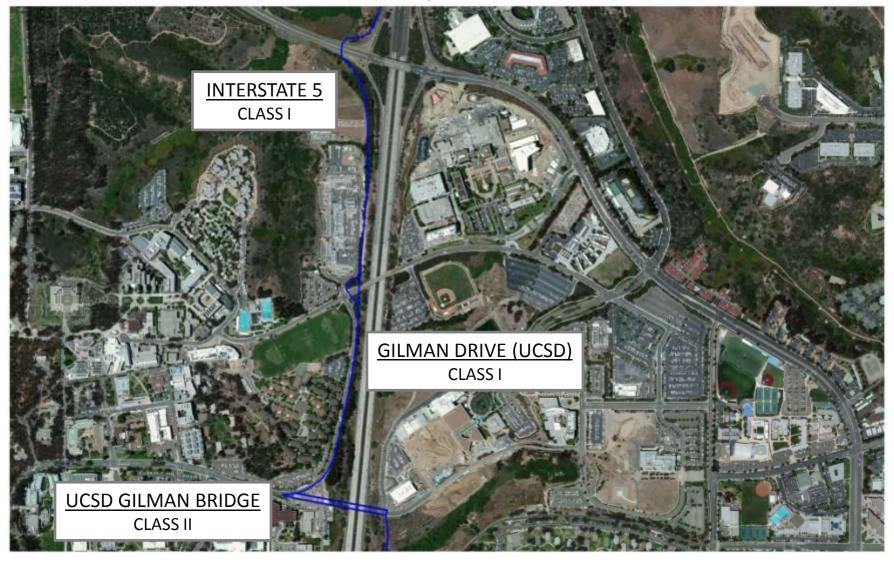




# Alternative 4: Palmilla Dr., Lebon Dr. & La Jolla Village Dr.



# Alternative 4: Gilman Dr. East & Caltrans I-5 segment



Alternative 4: Caltrans I-5 segment (cont.)





### Alternative 4: Sorrento Valley Rd.





#### Alternative 5





### Alternative 5: La Jolla Colony Dr.

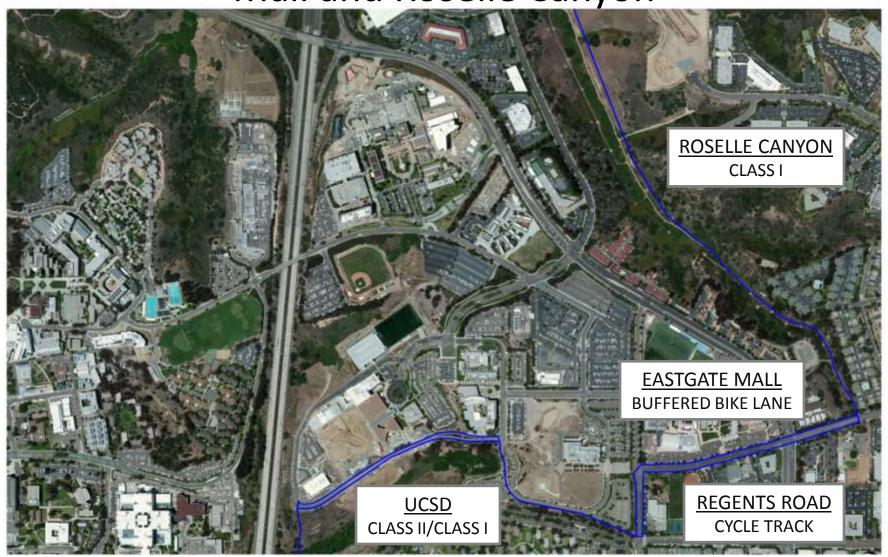




# Alternative 5: Palmilla Dr., Lebon Dr. & La Jolla Village Dr.



Alternative 5: Medical Center, Eastgate Mall and Roselle Canyon

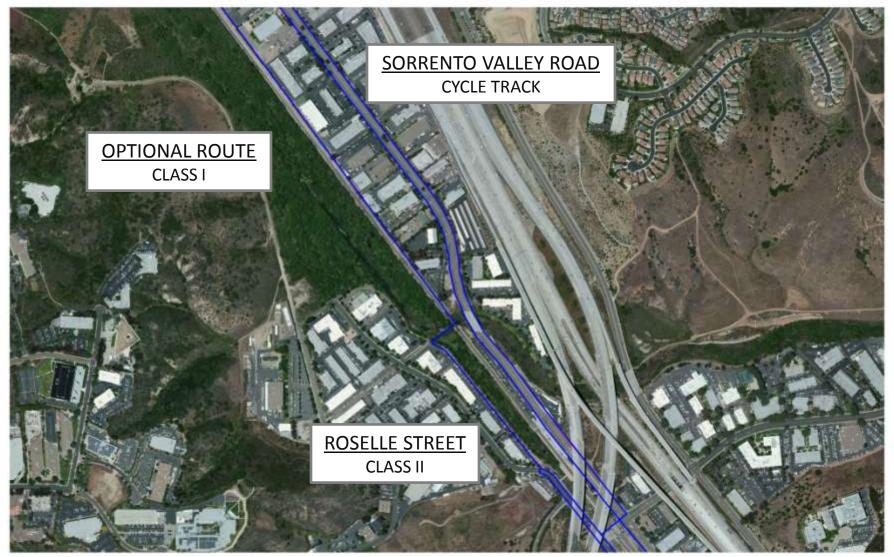


#### Alternative 5: Roselle St.





### Alternative 5: Sorrento Valley Rd.





### Alternative 6





"Working together to engineer a better tomorrow."

# Alternative 6: Rose Canyon South & Regents Rd.

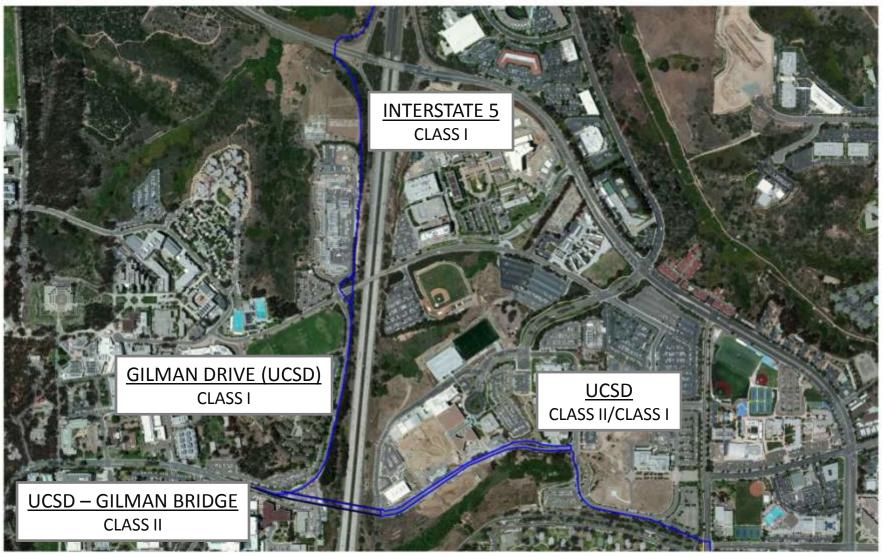


### Alternative 6: Regents Rd.





## Alternative 6: Medical Center & Gilman Dr. East

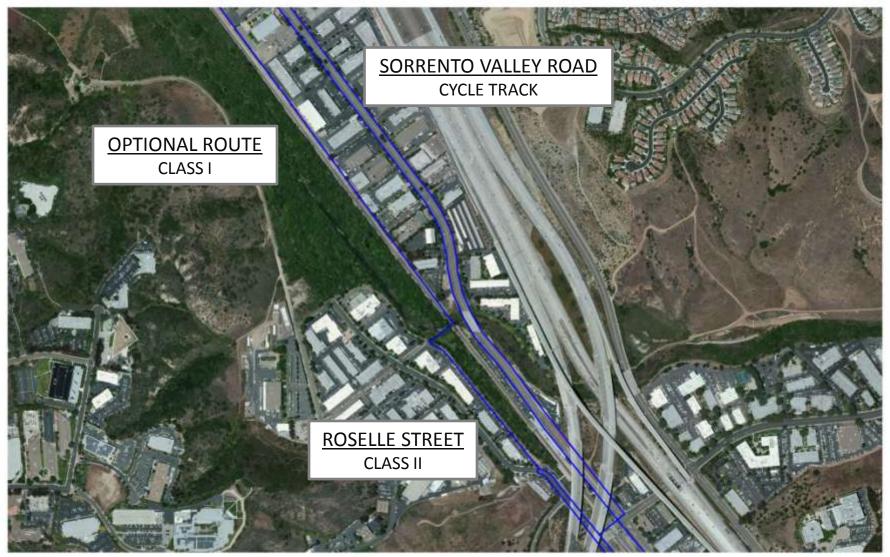


### Alternative 6: Caltrans I-5 segment





### Alternative 6: Sorrento Valley Rd.





### Alternative 7





"Working together to engineer a better tomorrow."

Alternative 7: Rose Canyon South & Regents Rd.



### Alternative 7: Regents Rd.





# Alternative 7: Regents Rd., Eastgate Mall & Roselle Canyon



#### Alternative 7: Roselle St.





### Alternative 7: Sorrento Valley Rd.





## **Evaluation Matrix**



### User Experience

			% of total miles Mileage on Class 1 Mult-use path			Mileage on a separated path with bikes only allowed, or a cycle track along the edge of total miles of total miles			% of total miles Mieage on an enhanced buffered bike lane or bike boulevard on a low volume street			Mileage on a standard Class 2 bike lane on roadways			% of total miles			Estimated % of total miles <8% pathway stope Mileage of total route less than 8% slope			% of total miles with views Routes that include overlooks, broad views of canyons or urban areas			% of total miles shared with existing trail users alwords impacts to current carryon users (hikers, pagers & walkers) drectly using the			
Route ID		8: - 8		UE1			UE2	<u> </u>		UE3			UE4			UE5	0:		UE6	4		UE7			UE8	UE Sum	UE Ave
Weight	12	S 3	2.00			1.50			1.50			1.00	S /	-	2,00			1.50			1.00			1.50		-	
Value 1	Jotal Mi	Mi 0.00	1 0%	0.00	Mi 3.88	0.75 78%	0.88	Mi 0.18	0.5 4%	0.03	Mi 0.90	0.5	0.09	Mi 0.00	-1 0%	0.00	Mi 2.50	1 50%	0.76	Mi 1.53	0.5 31%	0.15	Mi 0.0	-0.5 0%	0.00	1.91	0.48
2	4-30	0.41	9%		3.12	72%		0.00	0%	0.00	0.80		0.09	0.00	0%	0.00	1.48	34%	0.76	0.85	20%			0%	0.00	1.70	0.48
4	4519	0.80	19%		3.45	79%	Participation of the Participa	0.00	0%	0.00	0.09	2%		0.00	0%	0.00	1.10	25%	0.31	0.47	11%		A STATE OF THE PARTY OF	0%	0.00	1.71	0.43
5	692	2.17	35%		2.46	39%		0.39	6%	0.05	1.26		0.10	0.00	0%	0.00	1.49	24%	0.36	1.23	20%			21%	-0.16	1.58	0.43
6	5.23	1.83	35%		2.84	54%		0.00	0%	0.00	0.56	11%		0.00	0%	0.00	1.55	30%	0.44	1.00	19%			21%	-0.16	1.75	0.44
7	15.00	2.52	49%		1.43	28%		0.39	8%	0.06	0.80	15%		0.00	0%	0.00	1.74	34%	0.51	1.76	34%	0.17	2.4	47%	-0.35	1.76	0.44
BASE	5.54	4.37	66%		0.00	0%		1.48		0.17	0.80	12%		0.00	0%	0.00	1.37	21%	0.31	4.62	70%			52%	-0.39	1.81	0.45
CROW		7.07	00/6	1.02	0.00	0/0	0.00	4.70	22/0	4.11	0.00	12/0	0.00	0.00	0/0	0.00	2.01	21/0	0.01	7.02	7070	0.00	- T	3276	0.00	1.01	0.40



## Connectivity

		Distance of regional commuter route from north to south firrough the study area		Ability to connect parks, schools, retail & jobs in a linear fashion		Proximity of route to employment, school, retail densifies	2	Connectivity to existing or programmed trails, walkways, or bike facilities		# of potential riders utilizing transit stops within Connectivity to public transit services (LRT/BRT/Commuter Rail/Bus)			
Route ID		As the crowfles / Alt miles	Co1	a of destinations within 1/8 mile or route centerine	Co2	# of destinations within 1/2 mile of route centerine	Co3	of cornections along the route within 1/8 rile	Co4	# of potential riders utilizing transit stops within 1/4 mile of centerline	Co5	Co Sum	Co Ave
Weight		2.00		2.00		1.00		1.50		1.00			
Value	Total Mi			1		1		1		11	v		
1	4.96	0.80	1.60	149	2.25	415	0.89	9	1.21	3550	0.60	6.56	1.31
2	4.32	0.92	1.84	146	2.21	534	1.15	9	1.21	11589	1.96	8.37	1.67
4	4.35	0.91	1.83	122	1.84	496	1.07	10	1.35	6551	1.11	7.20	1.4
5 6	0.27	0.63 0.76	1.27 1.52	154 165	2.33	547 546	1.18	13 12	1.75	3950 8494	0.67	7.19 8.25	1.6
7	5 14	0.76	1.55	110	1.66	410	0.88	12 13 11	1.62	4946	0.84	6.55	1.03
		0.77				410		-12		7570			
BASE	655	0.60	1.20	80	1.21	303	0.65	13	1.75	2257	0.38	5.19	1.04



Safety

miles separated miles with access with 0.5 miles ng Street Lights  of Utility Mantenance Usage cof Utility Mantenance Usage				Routes that can be easily serviced, repaired and maintained			Limited or no conflicts with rall or utility maintenance uses		Routes that are highly visible, well lit, and with limited hiding places			Access for emergency and police vehicles (on path or adjacent to route)			sers. Ability to separate bike / pedestrian uses on high demand trail segments		Low overall miles next to adive traffic larks with no barrier separation		Percent of total miles of roadway with limited driveways		Limited number of moderate volume intersections to cross		Limited number of wide/high volume intersections to cross	
Route ID SF1 by SF2 by SF3 sc SF4 sc SF5 sc SF6 by Sc SF7 sc SF8 sc SF9	SF Sum SFA	25	% of total miles that are easily serviced by maint, vehicles	% of total miles that are easily serviced b maint, vehicles	SF8	SFB SFB	% of Mies of Utility Maintenance Usage	\$F7	% of Ex St Ughts compared to 1 every 2001	# of Existing Street Lights	SF6	% of total miles with access w/i 0.5 miles		SF5	% of high demand miles w/o separated users	SF4	% of total miles separated	SF3	# of driveways	SF2	# of int	SF1	# of Int	Route ID
Weight 2.00 1.50 1.00 2.00 1.00 Mi 0.50 0.50 Mi 0.50					M	50	0.50		0.50			0.50	Mi		1.00		2.00				0 /9			
Value -0.5 .0.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.12	40 24			4.70			0.25	V	04	0.40		4.70	8		4.50		0.00		0.01	100000000000000000000000000000000000000	F 00		
1 5 -5.00 4 -0.81 43 0.82 78% 1.56 4.78 96% 0.48 91 69% 0.35 4.73 95% 0.48 2 2 -2.00 1 -0.20 31 0.59 82% 1.63 4.05 94% 0.47 44 39% 0.19 3.86 89% 0.45	-2.12 -0.3 1.13 0.1																				4			
0 0.00 3 -0.61 31 0.59 98% 1.96 3.86 89% 0.44 49 43% 0.21 3.67 84% 0.42	3.02 0.4																				3			
0 0.00 5 -1.01 84 1.60 74% 1.47 5.44 87% 0.43 77 47% 0.23 5.44 87% 0.43	3.17 0.4									77														
0 0.00 3 -0.61 38 0.72 89% 1.79 4.37 84% 0.42 61 44% 0.22 4.12 79% 0.39	2.94 0.4									61				Ī		1.79		0.72	38					
0 0.00 5 -1.01 75 1.43 77% 1.54 4.48 87% 0.44 86 63% 0.32 4.42 86% 0.43	3.14 0.4				4.42											1.54	77%	1.43	75					. 7.
BASE 0 0.00 5 -1.01 65 1.24 66% 1.32 5.48 83% 0.41 140 80% 0.40 5.24 79% 0.39 1.00 3.71 52.43		).39 2.75	79% 0.39	5.24 799	5.24			0.40	80%	140	0.41	83%	5.48			1.32	66%	1.24		-1.01		0.00		BASE

### **Environmental**

		Avoids drect biological impacts of sensitive habitat		Avoids indirect biological impacts resulting from noise, proximity, shading, etc.		Mies w/ WQ/Sedimentation Issues Addressed Improves or lessens water quality issues or sedimentation issues		Opporturities for environmental education			Limited amounts of new impervious surfaces that avoid runoff		Ability to visually buffer adjacent uses or restricts users to the plattway			Avoidance of light spil over into natural areas			
Route ID		total AC of impact	E1	total AC wif 100ft	E2	Mies w/ WQ/Sedimentation issues Addressed	E3	# of Environmental Education Opportunities	E4		Miles new paving	E5	# of Residences whistel access from the trail	E6		# of miles within OS Canyons	E7	E Sum	E Ave
Weight		2.00		1.00		1.00		1.00		Mi	0.50		0.50		M	0.50	2	, ,	
Value	Total Mi	-1		-0.50		0.50		0.50			-1					-1.00			
1	4,96	1.2	-0.60	43.7	-0.35	0.0	0.00	2	0.50	0.18	4%	-0.02			0.10	2%	-0.01	-0.47	-0.08
2	13%	0.8	-0.40	46.8	-0.37	0.0	0.00	2	0.50	0.48		-0.06			1.39	32%	-0.16	-0.49	-0.08
4	4.35	2.6	-1.30	52.0	-0.41	0.0	0.00	1	0.25	1.10	25%	-0.13			1.39	32%	-0.16	-1.75	-0.29
	53.47	5.0	-2.49	72.6	-0.58	1.3	0.55	2	0.50	2.27	36%	-0.18			1.30	21%	-0.10	-2.30	-0.38
5																			
6	5.23	4.9	-2.42	65.1	-0.52	1.1	0.47	2	0.50	1.50	29%	-0.14	- 7		2.42	46%	-0.23	-2.34	-0.39
	5.23 5.14	4.9 4.6 9.2	-2.42 -2.27 -4.54	65.1 63.3 96.2	-0.52 -0.50 -0.77	2.4 3.4	1.02 1.45	2 3	0.50	2.66 3.76	52%	-0.14 -0.26 -0.28			2.42 2.33 4.27	45% 64%	-0.23 -0.32	-2.34 -1.73 -3.71	-0.39 -0.29 -0.62



### Community

	Retains on-street parking resources		Does not require ROW/Eas ament acquisition		it-based Community Opportunities to support teal-based community events & group activities			existing setting Keeps open space, natural, community, visual and landform character intact		Balances regional uses with boal concerns, users and residential interests			Public visibility or prominence of the pathway to non-users to encourage use and to improve overall security			
Route ID	# of parking spaces lost	Cm1	ROW/Easement AC needed	Cm2	# of mies supporting trail-based Community Events	Cm3		% of Trail w/contrast to existing setting	Cm4	% of Trail whigh, moderate, low or none	Cm5		% of Trail with public visibility	Cm6	Cm Sum	Cm Ave
Weight	1.00		1.50		0.50		Mi	2.00		1,50		Mi	0.50			
Value	-1.00		-1.00					-0.50					0.50			
1	49	-0.78	1				0.10	2%	-0.02			3.97	80%	0.20	-2.43	-0.61
. 2	19	-0.30	0.25	-0.46			0.38	9%	-0.09			2.96	69%	0.17	-0.68	-0.17
4	72	-1.15	0.75	-1.37			0.38	9%	-0.09			2.91	67%	0.17	-2.44	-0.61
5	72	-1.15	0.75	-1.37			1.30	21%	-0.21			4.75	76%	0.19	-2.54	-0.63
6	82	-1.31	0.5	-0.91			0.45	9%	-0.09			2.92	56%	0.14	-2.17	-0.54
BASE	82 63	-1.31 -1.00	0.5	-0.91 -3.65			1.37 2.00	27% 30%	-0.27 -0.30			4.02 4.86	78% 73%	0.20	-2.29 -4.77	-0.57 -1.19
DASE	63	-1.00	0.82	-3.05	1		2.00	30%	-0.50		V 6	4.00	/370	0.18	-4.//	-1.19



### Costs & Total Score

				Low total project costs relative to previously assessed alignment			Low cost per mile relative to a Class 1 on unconstrained flat terrain			Low maintenance and repair costs		Low costs to the City through Non-City funding sources						
Route ID				Alternative \$ / BASE \$	Cs1		Std SmilAlt Smi	Cs2		% of Trail wii Street ROW	Cs3	% of project total costs from grants	Ce4	Cs Sum	Os Ave	Sum Total	Ave Total	
Weight				1.50		\$ 2,640,00			Mi	2.00		1.00						
Value	Total Mi			1.00			1.00			1.00								
1	4.96	5	12,957,447	82%	0.27	\$ 2,612,38		1.26	4.78	96%				3.47	1.16	6.92	1.96	
2	4.32	\$	12,796,880	81%	0.29	\$ 2,962,24	1 89%	1.11	3.84	89%	1.78			3.18	1.06	13.23	3.07	1
4	4,35	\$	15,791,814	100%	0.01	\$ 3,630,30				75%				2.41	0.80	10.15	2.20	5 2
5	6.27	5	11,194,436	71%	0.44	\$ 1,785,39				64%				3.57	1.19	10.67	2.46	
6	5.23	5	17,604,482	111%	-0.16	\$ 3,366,05				71%				2.24	0.75	10.66	2.32	4
1	5.14	\$	9,883,789	62%	0.57	\$ 1,922,91				48%				3.25	1.08	10.67	2.42	3
BASE	3 98	\$	15,860,645	100%	0.00	\$ 2,388,65	1 111%	1.38	2.88	43%	0.87		1	2.25	0.75	3.52	0.82	



### Recommendation

- Move alternatives 2, 5, and 7 forward for further review
- Eliminate alternatives 1, 4, 6 and base alternative from further consideration









## **Next Steps**

MEETING	TOPIC	DATE
PWG Meeting #1	Evaluation Criteria	February 27, 2013
PWG Meeting #2	Finalize Evaluation Criteria Review Draft Alternatives	April 10, 2013
Public Workshop #1	Present/Seek Input on Draft Alternatives	May 29, 2013
PWG Meeting #3	Discuss Workshop #1 Results Refine Draft Alternatives	July 31, 2013
PWG Meeting #4	Refine Draft Alternatives	October 23, 2013
Public Workshop #2	Present/Seek Input on Draft Alternatives	December 2013 (tent.)
PWG Meeting #5	Discuss and Provide Input on Preferred Alternative	Early 2014



### **Public Comment**

