

PROJECT DESCRIPTION	Facility type	Estimated Costs	estimated length in km	cost per metre	Funding Source	COMMUNITY COMMENTS & QUESTIONS
WINDSOR LOOP PROJECTS						
W1 –Wyandotte Street East Location Isabelle Place to Strabane Avenue (Parking Impacts to be reviewed) Parking impacts to be reviewed / Alternative Route: Riverside Drive Vista phased construction.	BIKE LANES	\$105,000	3.56	\$29.49	Bikeways Development	Estimated timing for this project? If parking impacts are a problem, what is the estimated timing for the alternative on Riverside Drive?
W2 – Cabana Road Phase 1 (2016/2017) - Provincial Road to Howard Avenue Phase 2 (2018) – Howard Avenue to Dougall Avenue Phase 3 (2019/2020) – Dougall Avenue to Dominion Boulevard Phase 4 (2021) – Dominion Boulevard to Glenwood Avenue/Geraedts Drive Phase 5A (2022/2023) – Provincial Road to Walker Road Phase 5B (2023) – Glenwood Avenue to Huron Church Road	BIKE LANES		1.4		CR234/2015 \$46,360,000 (Engineering cost estimate for complete works)	See timing for different phases. Provincial Road to Howard Avenue to be completed 2017. Total project completed 2023. NOTE: Bike lane cost (min.) 1.4km @ \$29.15/m = \$30,316. Likely higher due to painted buffer.
W3 – Rhodes Drive/Deziel Drive Deziel Drive at Mannheim Way to Rhodes Drive at Jefferson Boulevard (Original concept in the Windsor Loop was shown north of EC Row Expressway Crossing CN Railway poses a concern) Walker Business Park Trail Rehab of multi-use trail adjacent to EC Row Expressway with multi-use trail connection to Deziel Drive	MULTI USE TRAIL	\$1,200,000	3.5	\$342.86	Bikeways Development	Why does the trail continue past Central or Manliem Way? Will it cross the RR tracks and link up with the EC Row Ave E trail? What side will the trail be on?
W4 – Connection on Fazio Drive to Grand Marais Rd. West Facility Type: Bike lanes/sharrows/signed route	SIGNED ROUTE	\$2,000			Bikeways Development	This is a high traffic intersection. Some directional paint would improve use and safety.
Rt. Hon. Herb Gray Parkway - City Connections completed in 2016 Fourth Street Right-of-Way Location: Spring Garden Road to Parkway - Facility Type: Unpaved Multi-Use Trail Pulford Street Location: South Windsor Arena to Parkway - Facility Type: Multi-Use Trail Beals Street Right-of-Way Location: Oakwood Community Centre to Parkway - Facility Type: Unpaved Multi-Use Trail Rodzlik Park	MULTI USE TRAIL				Bikeways Development - \$36,000 COMPLETED IN 2016	COMPLETED
SIGNAGE FOR LOOP COSTS INCLUDED? USE FEDERAL FUNDING? - THIS WOULD BE A GOOD PROJECT TO INVOLVE THE PUBLIC						
COMMUNITY CONNECTOR PROJECTS						
C1 – Bridge Plaza – Perimeter Road Facility Type – Multi-Use Trail	MULTI USE TRAIL					Not sure exactly where this runs. Much construction in this area over next few years and increasing traffic. Are the trails being funded by the bridge project? Found a note about a multi use trail being built on Ojibway Parkway from Morton to Weaver in the Bridge Plaza paperwork - follow-up on Lasalle connection?
C2a – Broadway St. Ojibway Parkway to Matchette Rd. Facility Type: Multi-Use Trail	MULTI USE TRAIL	\$270,000	0.7	\$385.71	Bikeways Development	This will be a recreational route on low traffic street. What side will the trail be placed on? How will the trail end at Ojibway Pkwy?
C2b – Matchette Road Broadway Street to Armanda Street Facility Type: Paved Shoulders	PAVED SHOULDERS	\$9,000	0.032	\$281.25	Bikeways Development	Difficult intersection Where will the shoulders go? What kind of signage and directional paint is planned for cyclists crossing? Will need directional paint and good signage to be safe
C2c – Armanda Street Matchette Road to Malden Road Facility Type: Paved Shoulders	PAVED SHOULDERS	\$300,000	1.17	\$256.41	Bikeways Development	This is a necessary connection but a low traffic street.

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COMMUNITY CONNECTOR PROJECTS (cont'd)						
C2d – Malden Road Armanda Street to Rt. Hon. Herb Gray Parkway Trails Facility Type: Paved Shoulders	PAVED SHOULDERS	\$120,000	0.57	\$210.53	Bikeways Development	This is a very important link with high traffic, numerous trucks. Paved shoulders alone would increase traffic speed and without high visibility (buffered) bike lanes, cyclists would not adopt it due to safety concerns. At a minimum, bike lanes should be added. Would add \$16,600 to the cost
C2e - Matchette Road Broadway Street to Carmichael Road (Malden Park entrance) Facility Type: Paved Shoulders	PAVED SHOULDERS	\$360,000	1.4	\$257.14	Bikeways Development	This is a critical link and will be well used if perceived as safe. Malden experiences heavy traffic, high speeds. Paved shoulders alone would increase traffic speed and without high visibility (buffered, at a minimum) bike lanes, Concern that cyclists would not adopt it due to safety concerns. Bike lane should be designed to be a complete segment, without breaks.
C3 - Teedle Bridge Connecting multi-use trail north of Esplanade Drive to multi-use trail east of Hawthorne Crescent	BRIDGE	\$280,000			Bikeways Development	With the addition of the Penang bridge just north, why is this needed? Is this a high cycle traffic area? There may be enough room to add bike lanes to Tecumseh.
C4 - Giles Boulevard Ontario Street – Lincoln Road to Gladstone Avenue Giles Boulevard – Gladstone Avenue to Janette Facility Type: Bike lanes in conjunction with planned watermain in 2017 from Parent Avenue to McDougall Street	BIKE LANES	\$70,000	2.53	\$27.67	Bikeways Development	Good connections to existing bike lanes and east-west link. Concern that there may not be enough room to add a bike lane?
C5a – Pillette Road – South National Street to Seminole Street Facility Type: Bike Lanes	BIKE LANES	\$10,000	0.34	\$29.41	Bikeways Development	Connects to existing multi-use trail
C5b – Seminole Road – Pillette Road to St. Luke Road Facility Type: Bike Lanes	BIKE LANES	\$55,000	1.97	\$27.92	Bikeways Development	Good east-west connection
C5c – St. Luke Road – Seminole Road to Richmond Street Facility Type: Bike Lanes	BIKE LANES	\$27,000	0.94	\$28.72	Bikeways Development	Good connection. Is the street wide enough for a bike lane? Road is in terrible condition, reconstruction or mill and pave planned? ROW looks to be quite wide, how about a separated bike lane beside the road?
C5d – Richmond Street Richmond Street - St. Luke to Walker Road (245.7m) Walker Road – Richmond Street to Richmond Street (58.7m) Richmond Street – Walker Road to Lincoln Road (663.2m) Lincoln Road – Richmond Street to Riverside Drive East (COMPLETED)	BIKE LANES	\$27,000	0.97	\$27.84	Bikeways Development	Richmond to Richmond on Walker -intersections MUST have additional signage and on-road directional paint added.
C6 – Bridge connecting Penang Lane multi-use trail to the WFCU Center	BRIDGE	\$300,000			Bikeways Development	2 high cost bridges quite close (800m) to each other. Are these both necessary for cycling or needed infrastructure that can be charged to bikeways development?
C7 – Connection Bruce Avenue to Jackson Park, along rail corridor Facility Type: Multi-Use Trail	MULTI USE TRAIL	\$160,000	0.41	\$390.24	Bikeways Development	Will this trail connect all the way to the Bruce Avenue bike lane north of Tecumseh? Would like to see intersection signage and/or directional paint at both Dougall and Tecumseh intersections.
C8 – Randolph Avenue Randolph Avenue - Northwood Street to Ojibway Street (South Cameron Woodlot) Original route was Glenwood Avenue - Northwood Street to Ojibway Street (South Cameron Woodlot)	SIGNED ROUTE	\$2,000			Bikeways Development	Quiet street, good for signed route.
C9 - Randolph Avenue – Kenora Street (north of South Cameron Woodlot) to Totten Street	SIGNED ROUTE	\$2,000			Bikeways Development	Quiet street, good for signed route.

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COMMUNITY CONNECTOR PROJECTS (cont'd)						
C9a – Totten Road – Campbell Avenue to Huron Church Road Facility Type: Paved Shoulders/sharrows Modified route in order to connect to bike lanes on Prince Road and Campbell Avenue Original route on Totten Road was Randolph Avenue to California Avenue to connect to future bike lanes on California Avenue Facility Type: Paved shoulders in conjunction with proposed planned watermain on Totten Rd. from Betts Avenue to Mark Avenue	PAVED SHOULDERS	\$640,000	1.49	\$429.53	Bikeways Development	This would be a critical cycling transportation route if adopted by cyclists Will both sides have a paved shoulder added? The north side seems wide enough to easily add a shoulder but the south looks undersized. Entire road to be shifted? Paved shoulders alone would increase traffic speed and without high visibility (buffered, at a minimum) bike lanes. Concern that cyclists would not adopt it due to safety concerns. Why is the cost of this project so much higher than the average of \$260/m for other paved shoulder projects?
C10 – Sandwich St. – Ojibway Parkway to Prince Road Rerouted around the new Bridge Plaza Perimeter Road to include cycling facilities and potential future access to the bridge at no cost to the City. Facility Type – Multi-Use Trail	MULTI USE TRAIL	\$266,000	0.87	\$305.75	Bikeways Development	This road is an average of 12m wide, more than enough for on-road bike lanes. Change from trail to bike lanes? (the cost of bike lanes = +/- \$11,950)? Savings of \$254,048 that could be used for higher priority projects.
C11 - Pillette Road Plymouth Road to Adstoll Ave. (746m) Adstoll - Pillette to Rivard (798m) Rivard - Adstoll to Rose (256m) Rose - Rivard to Jefferson (548m) Roseville Garden - Jefferson to Thornberry (226m)	BIKE LANES	\$80,000	2.58	\$31.01	Bikeways Development	Good to have bike lanes in this area. Connects to multi use trail on west end.
Windsor Loop and Community connections TOTAL (excludes Cabana Rd Project W2 - dealt with via CR 234/15)		\$4,285,000	24.432			
Decision Number: CR628/2016 That \$2,479,000 BE ALLOCATED to the Dougall/CN portion of the Central Box area which INCLUDES the Geo-technical/Engineering and design portion and the drainage works, property acquisitions and utility impacts	Engineering, design, drainage works, property acquisition,	\$2,479,000				This figure is very high for the bikeways development portion, unless there are some major property acquisitions or engineering/design for the roadway will also be charged. Can we assume that the funds not spent on the listed activities will be rolled over to continue to fund Central Box bikeways development?
GRAND TOTAL		\$6,764,000				
NOTE - AVERAGE COST FOR BIKE LANES	\$29.15	per linear metre				
AVERAGE COST FOR PAVED SHOULDER	\$286.97	per linear metre				
AVERAGE COST FOR MULTI USE TRAIL	\$356.14	per linear metre				
CRITICAL PROJECT NOT INCLUDED						
AMBASSADOR BRIDGE CONNECTIONS - Riverside Dr. W from Vista Pl. to start of Sandwich St (past Rosedale) - University Ave W. from Huron Church to Sandwich St - Huron Church Rd - connect Riverside and University bike lanes - Include cycling infrastructure as part of new roundabout design	BIKE LANES					Under the Ambassador bridge is possibly the highest density of cyclists found in Windsor. There is no cycling infrastructure available to the cyclist as they leave the Waterfront trail. The connection of nearby bike lanes, addition of directional paint & signage at intersections and integration with the new Sandwich St roundabout would cost far less than C3 or C6 (above) which were identified as low priority by the community.
MCDougall - COST TO ADD BIKE LANES - \$41,685 UNIVERSITY - COST TO ADD BIKE LANES - \$26,818	BIKE LANES		1430 909	\$29.15		Completing these 2 bike lanes would connect existing bike lanes and provide a corridor to bring cyclists to the downtown area. Manage pinch points rather than ending the bike lane and beginning again when the road widens.