

Comparative Analysis Ranking Results

Arterial Options

Option	Regional Mobility			Local Access/Deficiencies			Pedestrian/Bicycle Mobility			Community Values										Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Road Study	Compatible with Harnish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comprehensive Plans	Integration with Local Road System	Pedestrian/ Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required/ Property Tax Impacts	Estimated Capital Cost	Environmental Impacts	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/ Visual	Investment Attraction	Pedestrian/ Bicycle/ Traffic	Preliminary Point Subtotal	Preliminary Ranking
No-Action	○	◐	◐	N/A	○	○	N/A	N/A	●	N/A	●	●	●	○	●	●	●	◐	◐	○	2.7	
Six Lanes	●	●	●	N/A	◐	●	N/A	N/A	◐	N/A	◐	◐	◐	●	◐	●	◐	◐	●	●	4.1	1
Eight Lanes	●	◐	◐	N/A	○	●	N/A	N/A	○	N/A	○	○	○	◐	◐	◐	○	○	●	●	3.0	3
Six Lanes, Two dedicated HOV/Shuttle/ Bus	◐	◐	◐	N/A	◐	●	N/A	N/A	◐	N/A	◐	◐	◐	◐	◐	●	◐	◐	◐	●	3.6	2

Note:

○ Low

◐ Medium

● High

N/A Criteria not applicable to option

^a Assuming designed to applicable standards

Comparative Analysis Ranking Results																						
Intersection Options																						
Option	Regional Mobility			Local Access/Deficiencies				Pedestrian/Bicycle Mobility			Community Values									Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Harnish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required/Property Tax Impacts	Environmental Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
ALGONQUIN ROAD & RANDALL ROAD																						
No-Action	○	N/A	N/A	○	◐	○	●	N/A	◐	N/A	●	●	●	○	●	●	●	●	○	○	2.3	7
Modified Diamond (Tight, SPU)	●	N/A	N/A	●	◐	●	○	N/A	◐	N/A	○	◐	○	◐	○	○	○	○	◐	●	3.6	2
Continuous Flow Intersection	◐	N/A	N/A	◐	◐	●	◐	N/A	○	N/A	○	●	◐	○	◐	○	○	◐	●	◐	2.7	5
Parallel Flow Intersection	◐	N/A	N/A	◐	◐	●	◐	N/A	○	N/A	○	●	◐	◐	◐	◐	○	◐	●	◐	2.7	5
Modern Roundabout	◐	N/A	N/A	○	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	○	◐	◐	◐	◐	◐	4.2 ^b	1 ^b
Grade-Separated Turning Movements	◐	N/A	N/A	●	◐	●	○	N/A	◐	N/A	○	◐	○	◐	○	○	○	○	◐	●	3.2	3
Additional Turn Lanes	◐	N/A	N/A	○	●	●	●	N/A	◐	N/A	◐	●	●	●	●	●	◐	●	●	○	3.1	4
MILLER ROAD & RANDALL ROAD																						
No-Action	○	N/A	N/A	○	●	○	●	N/A	●	N/A	●	●	●	○	●	●	●	●	○	○	2.8	4
Additional Turn Lanes	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	◐	◐	◐	●	◐	●	●	●	◐	◐	3.4	2
Modified Diamond Interchange	●	N/A	N/A	●	○	●	○	N/A	○	N/A	○	◐	○	○	○	○	○	○	●	●	3.1	3
Modern Roundabout	◐	N/A	N/A	◐	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	4.1 ^b	1 ^b
BUNKER HILL ROAD & RANDALL ROAD																						
No-Action	○	N/A	N/A	◐	●	○	●	N/A	◐	N/A	●	●	●	◐	●	●	●	●	○	◐	3.0	3
Add Turn Lanes	◐	N/A	N/A	●	●	●	●	N/A	◐	N/A	◐	●	◐	◐	◐	●	●	●	●	◐	3.6	2
Modern Roundabout	◐	N/A	N/A	◐	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	○	◐	◐	◐	◐	◐	4.3 ^b	1 ^b

Comparative Analysis Ranking Results

Intersection Options

Option	Regional Mobility			Local Access/Deficiencies				Pedestrian/Bicycle Mobility			Community Values									Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Harmish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required/Property Tax Impacts	Environmental Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
STONEGATE ROAD & RANDALL ROAD																						
No-Action	●	N/A	N/A	○	●	●	●	N/A	○	N/A	●	●	●	◐	●	●	●	●	◐	○	3.1	5
Right-in Right-out Facility	◐	N/A	N/A	◐	●	●	◐	N/A	○	N/A	●	●	●	●	●	●	●	●	◐	●	3.6	3
Install a Traffic Signal / Add Turn Lanes	◐	N/A	N/A	●	●	●	●	N/A	◐	N/A	◐	●	◐	◐	◐	●	◐	●	●	◐	3.6	3
Modern Roundabout	◐	N/A	N/A	◐	●	●	●	N/A	●	N/A	◐	●	◐	◐	◐	●	◐	●	●	●	4.3 ^b	1 ^b
Eliminate Access	●	N/A	N/A	●	●	○	○	N/A	○	N/A	●	●	●	◐	●	●	●	●	○	●	3.7	2
ACORN LANE / POLARIS DRIVE & RANDALL ROAD																						
No-Action	○	N/A	N/A	○	◐	●	●	N/A	◐	N/A	●	●	●	◐	●	●	●	●	○	◐	3.0	3
Auxillary Lane Connecting to Algonquin Road	◐	N/A	N/A	○	◐	●	◐	N/A	○	N/A	○	●	◐	◐	◐	●	◐	●	●	◐	2.7	5
Modified Diamond Interchange	●	N/A	N/A	●	◐	●	○	N/A	◐	N/A	○	◐	○	○	○	○	○	○	●	○	2.8	4
Modern Roundabout	◐	N/A	N/A	◐	◐	●	◐	N/A	●	N/A	◐	●	◐	◐	◐	●	◐	●	●	●	4.1 ^b	1 ^b
Eliminate Access	●	N/A	N/A	●	●	○	○	N/A	○	N/A	●	●	●	◐	●	●	●	●	○	●	3.7 ^b	2 ^b

Comparative Analysis Ranking Results

Intersection Options

Option	Regional Mobility			Local Access/Deficiencies				Pedestrian/Bicycle Mobility			Community Values									Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Harnish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required/Property Tax Impacts	Environmental Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
VILLAGE ROAD & RANDALL ROAD																						
No-Action	○	N/A	N/A	◐	●	●	●	N/A	○	N/A	●	●	●	○	●	●	●	●	○	○	2.3	4
Install a Traffic Signal / Add Turn Lanes	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	●	●	◐	◐	◐	●	●	◐	●	◐	3.4	3
Modern Roundabout	◐	N/A	N/A	○	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	3.6 ^b	2 ^b
Continuous Green-T	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	●	●	◐		◐	●	●	◐	●	◐		
Close Access/Divert Carlemon traffic to Angela Lane	●	N/A	N/A	●	●	○	◐	N/A	○	N/A	●	●	●	◐	●	●	●	●	◐	●	3.8	1
ANGELA LANE & RANDALL ROAD																						
No-Action	●	N/A	N/A	○	●	●	●	N/A	○	N/A	●	●	●	◐	●	●	●	●	○	●	3.9	2
Install a Traffic Signal / Add Turn Lanes	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	◐	●	◐	◐	◐	●	◐	◐	●	◐	3.3	5
Convert to Full Access/Add Turn Lanes	●	N/A	N/A	○	●	●	●	N/A	○	N/A	◐	●	●	◐	◐	●	●	●	◐	◐	3.4	4
Modern Roundabout	◐	N/A	N/A	◐	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	4.2 ^b	1 ^b
Continuous Green-T	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	◐	●	◐		◐	●	◐	◐	●	◐		
Eliminate Access	●	N/A	N/A	●	●	○	○	N/A	○	N/A	●	●	●	◐	●	●	●	●	○	●	3.7	3

Comparative Analysis Ranking Results

Intersection Options

Option	Regional Mobility			Local Access/Deficiencies			Pedestrian/Bicycle Mobility			Community Values										Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Hamish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required/Property Tax Impacts	Environmental Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
ALEXANDRA BOULEVARD & RANDALL ROAD																						
No-Action	●	N/A	N/A	◐	●	●	●	N/A	○	N/A	●	●	●	◐	●	●	●	●	○	○	3.2	4
Install a Traffic Signal / Add Turn Lanes	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	●	●	◐	◐	◐	●	●	◐	●	◐	3.4	3
Modern Roundabout	◐	N/A	N/A	○	◐	◐	◐	N/A	◐	N/A	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	3.6 ^b	2 ^b
Continuous Green-T	◐	N/A	N/A	◐	◐	●	●	N/A	◐	N/A	●	●	◐		◐	●	●	◐	●	◐		
Close Access/ Divert Carlemont traffic to Angela Lane	●	N/A	N/A	●	●	○	◐	N/A	○	N/A	●	●	●	◐	●	●	●	●	◐	●	3.8	1

Note:

- Low
- ◐ Medium
- High

N/A Criteria not applicable to option

a Assuming designed to applicable standards

b Light gray indicates that the option is eliminated in Level 2, Comparative Analysis. The options were evaluated in more detail using 2030 traffic volume projections after scoring high in the second screening level. The projected traffic volumes along Randall Road exceed the capacity of a multi-lane roundabout. Elimination of access is not feasible at the Acorn Lane/Polaris Drive intersection with Randall Road because out of direction travel for diverted trips would be high and would contribute to additional traffic at the adjacent intersections of Miller Road and Algonquin Road.

Comparative Analysis Ranking Results

Pedestrian Options

Option	Regional Mobility			Local Access/Deficiencies				Pedestrian/Bicycle Mobility			Community Values									Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Harnish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required	Environment Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
PEDESTRIAN-BICYCLE (NORTH-SOUTH) OPTIONS																						
No-Action	●	●	●	●	●	◐	●	○	●	◐	●	●	●	○	●	●	●	◐	○	◐	3.9	2
Dedicated Bike Lanes along Randall	◐	○	○	●	●	◐	●	◐	●	●	○	◐	◐	●	●	●	●	●	●	◐	3.5	3
Bike Lane in the Median	◐	○	○	◐	○	◐	●	◐	○	●	●	◐	◐	○	◐	●	●	●	●	◐	2.9	4
Sidewalks along both sides of Randall	●	◐	○	●	◐	◐	●	●	●	●	◐	◐	◐	●	●	●	●	●	●	●	4.3	1
PEDESTRIAN-BICYCLE (EAST/WEST) OPTIONS																						
No-Action	◐	N/A	N/A	◐	◐	◐	●	◐	◐	◐	●	●	●	○	●	●	●	●	○	◐	3.3	8
Convert Woods Creek Culvert into Underpass	●	N/A	N/A	●	◐	◐	●	●	●	●	◐	◐	◐	◐	○	●	●	●	◐	●	4.5	1
Grade-Separated Crossing @ Miller Road	●	N/A	N/A	●	◐	◐	●	●	●	●	○	◐	○	◐	○	◐	●	○	●	●	4.3	3
Grade-Separated Crossing @ Parks	●	N/A	N/A	●	◐	◐	●	●	●	●	○	◐	○	◐	○	●	●	○	●	●	4.4	2
Grade-Separated Crossing @ Algon. Library/School	●	N/A	N/A	●	◐	◐	●	●	●	●	○	●	○	●	○	○	○	○	●	●	4.3	3
Grade-Separated Crossing @ Ackman Road	●	N/A	N/A	●	◐	◐	●	●	●	◐	○	●	○	◐	○	◐	◐	○	●	●	4.2	6
Grade-Separated Crossing @ Angela Lane	●	N/A	N/A	●	◐	◐	●	●	●	●	○	●	○	◐	○	◐	◐	○	●	●	4.3	3

Continued on following page

Comparative Analysis Ranking Results

Pedestrian Options

Option	Regional Mobility			Local Access/Deficiencies				Pedestrian/Bicycle Mobility			Community Values									Safety ^a	Ranking	
	Arterial Operations	Compatible with Rakow Rd. Study	Compatible with Harnish Rd. Study	Intersection Operations	Ease of Maintenance	Compatibility to Comp Plans	Integration with Local Road System	Pedestrian/Bicycle Use	Difficulty of Crossing	Connectivity	ROW Required	Environment Impacts	Estimated Capital Cost	Local Agency Support	Ease of Construction	Potential Relocations	Parking Impacts	Aesthetics/Visual	Investment Attraction	Pedestrian/Bicycle/Traffic	Preliminary Point Subtotal	Preliminary Ranking
Improve existing Bunker Hill Pedestrian Crossing	●	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.6	7
Pedestrian Signalization @ all Signals	○	N/A	N/A	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.0	14
Remove Pedestrian Signalization @ all Signals	●	N/A	N/A	●	●	●	●	○	○	○	●	●	●	●	●	●	●	●	○	○	3.2	10
Minimize Crossing Distances	●	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.2	10
Install Hawk Signals near Stonegate	●	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.2	10
Install Hawk Signals near Lowes	●	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.2	10
Install Hawk Signals near Parks	●	N/A	N/A	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3.3	8

Note:

- Low
- Medium
- High

N/A Criteria not applicable to option

a Assuming designed to applicable standards