




Sinclair – Cadboro Bay Intersection


Intersection Design Discussion

A decorative graphic at the bottom of the slide consisting of several overlapping, rounded, light green shapes that resemble rolling hills or a stylized landscape.



Agenda

- Short introductions
 - Where we're at with the Sinclair Road design
 - Why is a mini-roundabout being considered?
 - Difference between a mini-roundabout and a normal roundabout.
 - Examples of mini-roundabouts
 - Differences between a mini-roundabout and an all way stop intersection.
 - Operation of a mini-roundabout from a pedestrian perspective
 - From a cyclist perspective
 - From driver perspective
 - Overall
 - Virtual walk through
 - Discussion
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Where we're at with Sinclair Road design

- The conceptual design for Sinclair Road has been forwarded to consultants for detailed design development.
 - Based on received comments from public engagement and additional investigations completed recently, we've decided to revisit intersection design at Sinclair and Cadboro Bay
 - Observations and traffic modelling indicates the intersection is over-capacity during peak times. Especially on Cadboro Bay Rd.
 - Traffic modelling indicates that an installation of a traffic signal could improve capacity of this intersection significantly, but will increase speeds through the village, which contradicts LAP and overall vision for the village.
 - A mini-roundabout will operate significantly better than all way stop presently and into the future. Reducing delays to transit, goods, and general traffic. In addition encouraging slower speeds through the village
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Why is a mini-roundabout being considered?

- Safety
 - Eliminates high-speed conflict between downhill cyclists and drivers changing into the right-turn lane to the grocery store/ park (EB Cadboro Bay Rd)
 - Greatly reduces the width of the road and crosswalks
 - Efficiency
 - Improves capacity
 - Reduces delays
 - Highlight the Village and Beach
 - Creates a gateway for residents and visitors to Cadboro Bay
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Differences between a mini- and a normal roundabout.

- Mini-roundabout is smaller and well suited to urban areas where space is limited.
 - Central Island and splitter islands are fully traversable to allow over-sized vehicles full access.
 - Designed for lower traffic speeds – 20 km/hr.
 - Has lower cost compared to a normal roundabout.
 - Fits better into existing intersection footprint.
 - Requires less property acquisitions due to its smaller size.
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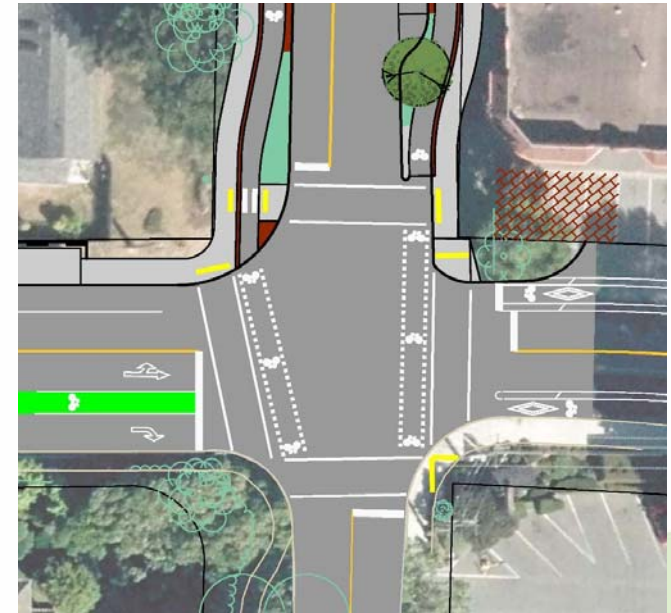
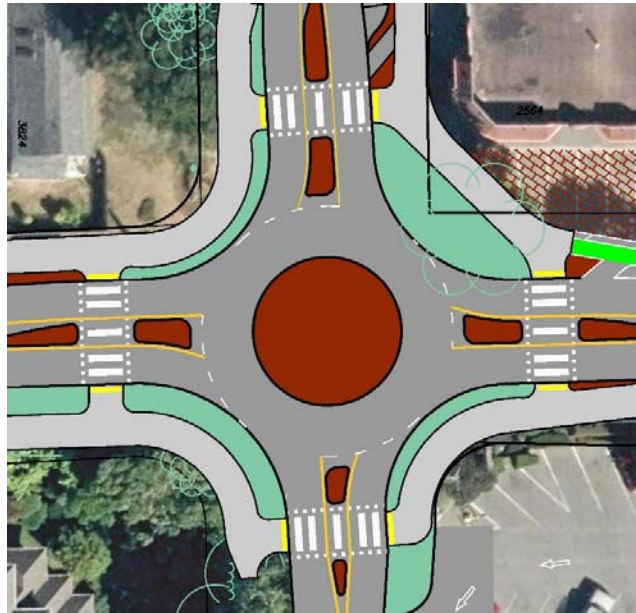
Examples of a mini-roundabout



Examples of a mini-roundabout




Differences between a mini-roundabout and an all way stop intersection.






Operation of a mini-roundabout from a pedestrian perspective

- Shorter crossings, but less direct route
 - Crossing one direction of traffic at the time
 - Good visibility and easy to navigate through
 - Refuge islands in the middle of the road are providing extra protection
 - Possible conflict with cyclists on the multiuse sidewalk
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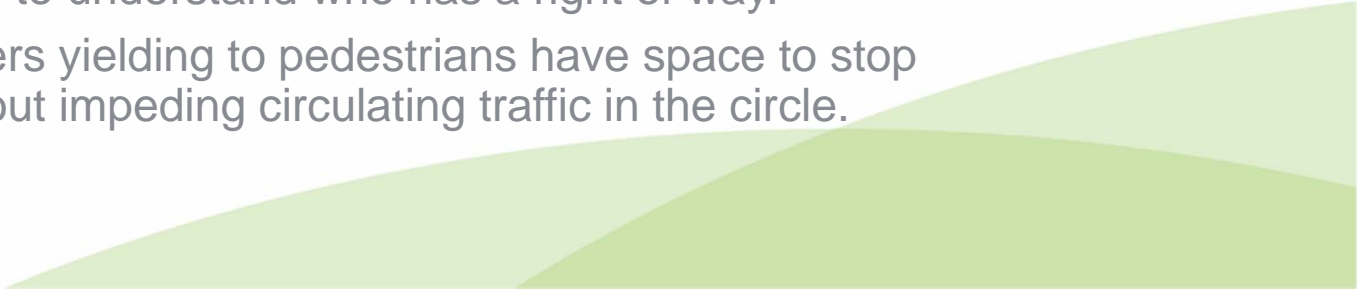


Operation of a mini-roundabout from a cyclist perspective

- Shorter crossings, but less direct route
 - Smooth connection to cycling facility outside mini-roundabout
 - Crossing of one direction of traffic at the time
 - Possibility to choose an appropriate level of cycling comfort (on the road with traffic or on the multiuse sidewalk)
 - Limited conflict points
 - Better visibility at mini-roundabout vs. all way stop
 - Possible conflict with cyclists on the multiuse sidewalk
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Operation of a mini-roundabout from a driver perspective

- Increased traffic safety:
 - Less conflict points
 - No head-on collisions
 - Decrease in injury crashes
 - Decrease in delays.
 - Providing calming effect.
 - Environmental benefits, such as reduction of idling and in fuel consumption
 - Better visibility.
 - Easy to understand who has a right of way.
 - Drivers yielding to pedestrians have space to stop without impeding circulating traffic in the circle.
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Overall comparison between a mini-roundabout and an all way stop

Mini-Roundabout	All Way Stop
Aesthetically provides a very unique village feel and brings attention to the village core.	More cost effective
Welcoming feeling for community gatherings	Users are familiar with this type of intersection
Continuous flow of slowly moving vehicles without interruptions	Fits in the existing right of way. No property acquisitions are required
Opens up intersection and provides unobstructed views	BUT...
Shortens average delay and queuing during peak hours	Increases average delay
BUT...	Longer queues during pick hours
Roundabouts are more expensive to build	Creates busy intersection feel
Will have to replace some mature trees	Constantly stopping and accelerating vehicles contribute to increased idling
Requires property acquisition	Reduces parking by 3 in front of Weidu Market and Madison and Muse
Reduces parking by 4 in front of Weidu Market and Madison and Muse. Reduces parking by 1 in front of Peppers Market	



Virtual walk through

All Way Stop Design

Vs

Mini-Roundabout Design



Questions / Discussion

