

Community Excellence Awards 2021 Application Form

Please complete and return the application form by May 21, 2021. All questions are required to be answered by typing directly in this form. If you have any questions, contact awards@ubcm.ca.

SECTION 1: Applicant Information	AP- <i>(For administrative use only)</i>
Local Government or First Nation: City of Nanaimo	Complete Mailing Address: 455 Wallace Street, Nanaimo, BC V9R 5J6
Contact Person: Bill Sims	Position: General Manager, Engineering & Public Works
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SECTION 2: Category. Please select one:
<input type="checkbox"/> Excellence in Governance. <i>Governance processes or policies that are outcomes-based and consensus oriented; support and encourage citizen participation in civic decision-making; are efficient, equitable and inclusive, open and transparent; and exemplify best practices in accountability, effectiveness, and long term thinking.</i>
<input type="checkbox"/> Excellence in Service Delivery. <i>Projects/programs that provide effective services in a proactive manner, demonstrate benefit to the community, and utilize performance measures, benchmarks and standards to ensure sustainable service delivery.</i>
<input type="checkbox"/> Excellence in Asset Management. <i>Projects/programs that demonstrate a comprehensive system of asset management policies and practices, meeting and/or exceeding accepted best practices.</i>
<input checked="" type="checkbox"/> Excellence in Sustainability. <i>Projects/programs that incorporate a long-term sustainability lens by considering cultural, social, economic and environmental issues in planning, policy and practice.</i>

SECTION 3: Project/Program Details



Municipal Finance
Authority of BC



URBAN
S Y S T E M S

1. Name of the Project/Program:

Nanaimo's Complete Streets Engineering Standards and Design Guidelines

2. Project/Program Summary. Please provide a summary of your project/program in 150 words or less.

Nanaimo developed Complete Streets Engineering Standards and Design Guidelines in parallel to applying them on a major corridor project, showcasing sustainable urban transportation design. The Complete Streets Standards set a high bar for street design, improving equity and greatly enhancing safety for all street users – especially the vulnerable. Nanaimo Council adopted Complete Streets design principles into Bylaw in its Engineering Standards in November 2020, leading in British Columbia. The new Standards will govern future street design, demonstrate benefits immediately through implementation, and provide examples of built infrastructure that other North American cities can draw upon to improve sustainability and livability. We believe Nanaimo to be the first to implement a true Dutch-style design in Canada and the first City in North America to include it in Engineering Standards documents.

Nanaimo is proud to contribute to the evolution of safer streets for all users across British Columbia, Canada and North America.

3. Demonstrating Excellence. Please describe how your project/program demonstrates excellence in meeting the purposes of local government in BC and provides promising practices for others to follow.

While there are many examples of complete street design guidelines, we believe Nanaimo to be the first municipality to embrace separated active transportation facilities and raised local intersections in detailed Engineering Standards. Other municipalities and developers are building amazing and notable Complete Streets themed projects. Nanaimo's new standards ensures that these principles are not an isolated project, but a City wide standard that will be incorporated in all new street construction.

Immediately implementing newly adopted standards on the Metral Drive project demonstrate how Complete Streets can contribute to community well-being. Complete Streets provide a safe environment for people to choose active and healthier travel options while enhancing the streetscape. Metral Drive had varying levels of pedestrian facilities from sidewalks to gravel shoulders and cycling infrastructure was nonexistent. Using the Complete Streets Standards to develop the Metral Drive Complete Street Project provides people, regardless of their age, income or physical ability, with safe active travel options. The corridor connects one of the City's longest multi-use trails, the E&N Trail to the Woodgrove Centre, one of Nanaimo's key mobility and economic hubs.

While the Complete Streets Guidelines recommend best practice levels of space and separation, they also include retrofit guidance and speaks to how similar outcomes can be achieved for lower costs or in constrained right-of-ways.

The Engineering Standards and the Metral Drive project include many best practices, but most innovative is the adoption of Dutch design principles prioritizing active modes through design with continuous sidewalks and bike paths across local roads. While this

old design technique is often used in Europe, we believe it has not been fully implemented in Canada.

4. Category Criteria.

A. Please describe how your project/program meets the objectives of the category you have applied under. Refer to Section 3 of the Program & Application Guide.

Nanaimo Council have placed into Bylaw a progressive set of new Engineering Standards that will improve cultural, social, economic, and environmental sustainability in the City. Through providing documentation and built examples for other cities to learn from, Nanaimo can dramatically advance urban design of Canadian cities, and is continuing the journey towards roads safe for all ages and abilities.

Embracing active transportation is an important step for municipalities in reaching their environmental and mobility-shift goals. Applying Complete Streets Guidelines and Engineering Standards speaks to how Nanaimo is advancing sustainability through planning and policy. The Metral Drive project illustrates how municipalities can take these plans and policies and put them into practice.

B. In many cases projects may meet the criteria of more than one category. If applicable, please describe how your project meets the criteria of one or more other categories.

SECTION 4: Program Criteria

5. Leadership. Describe the extent to which your local government acted as a local or regional leader in the development or implementation of the project/program.

Social Sustainability:

Like many North American cities, Nanaimo sprawled significantly in the post-war years, into single-family neighbourhoods. For decades planning and design focussed around the automobile, with four lane roadways bordered by narrow sidewalks or paved shoulders. These streets make it easy to drive, but uncomfortable and sometimes impossible to walk along, given Nanaimo's topography and only the most fearless cyclists would consider cycling.

As early as 2014, the Nanaimo Transportation Master Plan signaled a massive shift from auto-mobile dependence to pedestrians and cyclists: people-scaled streets. Since then, the City has accelerated building out its network of pedestrian and cycling facilities, but needed a standard for safety, consistency and applicability across the variety of streets.

The ability to move freely and safely around the City no matter your mode of transportation should be a minimum requirement, not localized exceptions. Those that cannot afford to own a vehicle must negotiate incomplete networks or infrequent transit services. The Complete Streets Standards and the Metral Drive project seek to provide

equitable streets and alternative transportation choices where previously there were none. While just a start, on Metral Drive at least, people will not feel excluded simply because they use a certain mode of transportation.

With the recent release of the Province of British Columbia's Active Transportation Strategy, the need to provide people with the ability to safely travel in a healthy way was further brought to the forefront of planning policy and design needs. By providing complete networks for pedestrians, cyclists, other micro-mobility modes, greater access to transit, and reduced friction for those with mobility impairments, the City will enable the community to make healthier transportation choices where previously the lack of infrastructure and risk to safety would force people into their cars. No matter their age or ability, the designs will separate and protect the most vulnerable.

Nanaimo's new Complete Streets Standards ensure that the most vulnerable street users are prioritized, providing design solutions such as the raised intersections across local streets, protected intersections for cyclists to safely make two-stage turns from raised bike paths behind a treed boulevard. The guidelines recommend these facilities for all streets where motor vehicle traffic volumes or speeds are high enough to be unsafe for shared use. On local streets where speeds are lower, shared use by cyclists is permitted, and sidewalks continue across the local street to prioritize pedestrians.

Raised intersections naturally calm vehicle traffic and demonstrate priority of non-vehicle users. Those with mobility challenges benefit from raised intersections without the need to negotiate awkward curb ramps, or travel across wide-throated intersections. The visually impaired benefit from tactile surface warning devices where they cross bike paths or vehicle lanes improving their ability to negotiate the urban environment safely.

Environmental Sustainability:

In 2019 The City of Nanaimo declared a climate emergency, and set a mandate that decisions be viewed through the lens of reducing atmospheric carbon. Transportation in the Nanaimo region accounts for 63% of community emissions, and as such, present one of the biggest opportunities for reduction.

Mitigating transportation related emissions is a difficult task in the short term. As the active transportation network is built out, the new standards will begin to enable the community to consider active modes of transportation as an alternative to the motor vehicle for everyone regardless of age or ability, reducing community emissions.

- 6. Financial management and planning.** Describe the degree to which the project and/or organization has implemented financial best practices that support long-term financial planning, value for money, financial sustainability and/or economic development.

Economic Sustainability:

When developing the Complete Streets Standards, careful attention ensured that the principles adopted are economically neutral to future city capital or development-built projects. The implementation of the Metral Drive project allowed the city to test the cost-benefit of design principles on a real-life project while refining the Guidelines and Standards. The results indicate that the raised local intersection is cost neutral, but that the safety benefits are enormous. Thus, the overall cost to society is significantly reduced. In other cases it was shown that the long term asset renewal costs for the city would be reduced. For example moving the bike facilities off-street means a facility with

full-depth pavement structure to withstand commercial traffic is replaced with one that has a much shallower, and more economic structure because it only carries low impact cyclists. Economically, Complete Streets can be less costly to construct and maintain for some components. Of course, a complete street often requires more space to make it complete.

Complete Streets can support economic vitality by enabling people on lower incomes without access to a motor vehicle improved access to employment opportunities. The Metral Drive project in particular, will connect the E&N Trail to the Woodgrove Centre, Nanaimo's largest mall, enabling a large part of the population to access the mall along a route separated from traffic.

Nanaimo's Official Community Plan contains a number of Mobility Hubs throughout the City that are essentially activity centres that attract people. The new Engineering Standards create special Mobility Street cross sections to emphasize people-friendly streetscapes. Complete Streets, when matched with land use, create attractive streets with space for the adjacent land use to spill out into the street, helping support a vibrant economy and a vibrant street life.

7. Partnerships and collaboration. Describe the breadth and depth of community and/or regional partnerships that supported the project/program and the extent to which internal and/or external collaboration was evident.

A critical part of a complete street is access to transit. The Regional District of Nanaimo operates the transit system in Nanaimo. Throughout the development of the Complete Streets Standards and the design of the Metral Drive project, collaboration with the Regional District was critical to integrating transit into our Complete Streets Standards.

Internally, collaboration was significant as several internal design workshops ensured all city departments had a voice in the development of the Complete Streets Guidelines. Specific attention was paid to emergency services and ensuring that while making the streets more comfortable for active transportation users, emergency services were not impeded.

Extensive engagement with the development community as the standards and guidelines evolved helped ensure acceptance.

8. Innovation and promising practices. Describe the degree to which the project/program demonstrated creativity and innovation, and contributed to increased efficiency or effectiveness.

The new Complete Streets Standards, Guideline, and Metral Drive design include many best practices, but most innovative is the adoption of Dutch design principles prioritising active modes of transportation through design with continuous sidewalks and bike paths across local streets. While this old design technique is often used in Europe, we believe it has not been fully implemented in Canada.

The raised intersection makes an appearance in the Transportation Association of Canada Traffic Calming Guideline, but is not featured in the Geometric Design Guideline. It is featured in the BC Road Safety Toolkit in schematic form, but we have yet to discover an example where this has been implemented.

Nanaimo's new Engineering Standards now document and illustrate how the design can work in Canada and the application on Metral Drive will provide a real-world example to show it is possible.

The benefits are unquestionable, indeed when the advantages and disadvantages are considered, it is hard to understand why local roads are designed without raised intersections. When comparing traditional curb return intersections to raised intersections, the raised intersection is far superior for:

- Pedestrians: Raised continuous sidewalk emphasizes priority for pedestrians over turning traffic. The vehicle has to cross the pedestrian space, not the other way around.
- Mobility Impaired Pedestrians: Raised continuous sidewalks remove barriers. People in wheelchairs or mobility devices do not have to negotiate curb ramps and have the same priority as pedestrians.
- Visually Impaired Pedestrians: Raised continuous sidewalks remove barriers. Visually impaired individuals do not negotiate the road, but instead, drivers negotiate the sidewalk.
- Cyclists: If provided, continuous bike paths emphasize priority for cyclists over turning traffic. The vehicle has to cross the bike path.
- Intersection Safety: The narrow entry and exit from the local road and need to cross the raised bike path and sidewalk slow traffic considerably reducing the likelihood and severity of any collisions.
- Neighbourhood Safety: Vehicle speeds are reduced entering and exiting a neighbourhood indicating to the driver that conditions are different and encouraging them to reduce their speed on the local road, benefitting the local neighbourhood.
- Motor Vehicles: While drivers may add a few seconds to their journey, given the need to negotiate the turn at a slower speed, they also benefit by the reduced likelihood and severity of a collision with a pedestrian, cyclist, or any other motor vehicle.

9. Public engagement and communications. Describe the extent to which public engagement was foundational to the success of the project/program, including the use of communication tools such as social media.

Over the course of some twenty-four months, significant public consultation was a hallmark in the development of the Complete Streets Standards. Some of the work included best practice reviews, a SWOT analysis, multiple open houses, engagement events at local malls and public surveys. Specific consultation targeted key stakeholders such as the Canadian National Institute for the Blind, cycling groups, schools and developers. Also, multiple meeting with consulting engineers within the development community lead to understanding the impacts on implementing these standards on a City wide approach to future developments.

Internal design workshops ensured that all City departments had a voice in the development of the Complete Street Guidelines. One of the most significant components of the guideline and that which has sparked most interest to date, is the inclusion of Dutch-style raised intersections. These are featured at local streets where there should be no need for drivers to enter or exit a neighbourhood at speed. Rather than traditional curb returns, they feature driveway-style letdowns and continuous raised sidewalks and bike paths. While facing some resistance at first, the concept quickly

gained support of the City team and through discussions with emergency services, all concerns were allayed. This component specifically has been extremely well received in the planning and design community through social media.

Emergency Services were engaged and involved in development of the Complete Streets Standards, ensuring passage of large emergency vehicles.

10. Transferability. Describe the degree to which the process or outcomes of the project, or other learnings, could be conveyed to other UBCM members.

Nanaimo's Complete Streets Guidelines and Engineering Standards are immediately transferable across North America. Nanaimo intentionally undertook the development of the Guidelines, Engineering Standards and the Metral Drive Complete Streets pilot project simultaneously to demonstrate how complete street principles can be applied in real situations. This allowed the guideline and standards to be tested and refined on a real project, while still in development. This was invaluable in understanding the constraints municipalities face, forcing Nanaimo to make decisions with respect to design ideas, and helping inform the retrofit section of the Guidelines, given the constraints along the corridor. The project will provide a finished example of the type of street the standards are striving to create, providing a showcase project for the guideline and sustainable transportation, particularly with respect to the Dutch-style raised intersections featured along the corridor. For the rest of Canada, and even North America, the work will provide design guidance and a built example, and is already drawing eyes to Canada and the City of Nanaimo. The safety benefits of these new standards, specifically the raised intersections, are considerable and the downsides negligible. If we are serious about the journey to safer roads, we need to build infrastructure that prioritizes and protects our most vulnerable road users.

The protected intersection and raised intersection designs in Nanaimo's Manual of Engineering Standards and Specifications aim to inspire other cities. The Transportation Association of Canada (TAC) awarded Nanaimo the 2020 Sustainable Urban Transportation Award and TAC is considering it's inclusion in a future update of their Geometric Design Guideline.

If Nanaimo can demonstrate Complete Streets work in a Canadian context, if we can demonstrate the desire for such facilities in communities across Canada, then we can inspire others in Canada to use this design and positively contribute to road safety and accessibility for decades to come.

SECTION 5: Additional Information

11. Please share any other information you think may help support your submission.

There is a further, serendipitous connection to the Netherlands: Many of the side streets featuring Dutch-style raised intersections are named for Dutch towns, in honour of the close relationship between the Canadians who liberated Holland and the Dutch people. Bergen-Op-Zoom, Arnhem Terrace, Tulip Place and Amsterdam Crescent place an historic echo to the improvements on Metral Drive.

To understand the value the new Standards and the Metral Drive design would add to the Canadian context and confirm our belief that this technique has not been previously adopted, the team queried many well respected planners, engineers, and advocates for better urban design to find examples of such designs. It revealed nobody in Canada appears to be adopting the raised intersection approach despite the overwhelming benefits that it provides. Nanaimo aims to change that! We believe Nanaimo would be the first to implement a true Dutch-style design in Canada and the first to include it in their Manual of Engineering Standards and Specifications.

The Metral Drive project will provide a Canadian showcase for Dutch-style raised intersections in Canada prioritizing the safety of our most vulnerable, and will position Nanaimo as an example of best practice for all communities in Canada to reference. Sharing of the Metral Drive project renderings has already gained significant praise from notable organizations and people through social media, further validating the design decisions made during these two projects and highlighting the interest for this kind of design in Canada

For Nanaimo's Engineering Standards, Guideline, and Metral Drive projects, the City of Nanaimo has been awarded the Transportation Association of Canada (TAC)'s 2020 National Sustainable Transportation Award and the Canadian Institute of Transportation Engineers (CITE) 2021 Nominee to the International Awards, in Transportation Achievement Award: Complete Street Category

SECTION 6: Required Attachments

- Council, Board or Band Council resolution indicating support for the project to be considered for a 2021 Community Excellence Award.
- Five representative photos of the project. Photos should be submitted as JPEG files at a resolution suitable for display.
- Optional: Links to any publicly available videos related to the project.

Applications should be submitted as Word or PDF files. Submit applications to Local Government Program Services, Union of BC Municipalities.

E-mail: awards@ubcm.ca

SECTION 7: Signature

Applications are required to be signed by an authorized representative of the applicant.

Name: William Sims

Title: General Manager, Engineering & Public Works

Signature: See next page

Date: May 21, 2021