

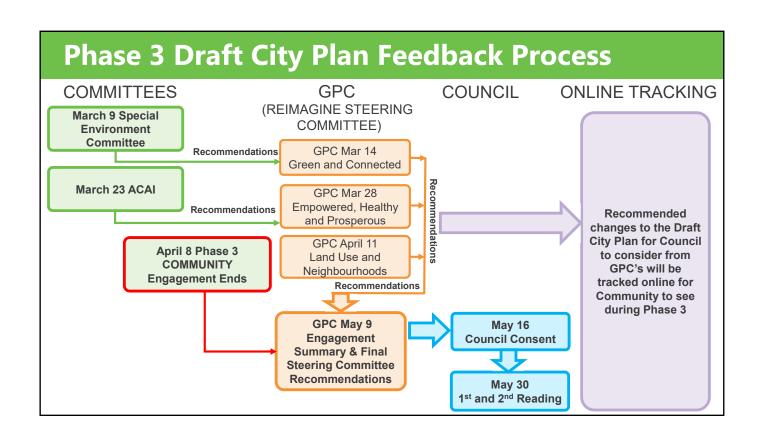
2022-Mar-14 GPC DRAFT CITY PLAN Green & Connected

1



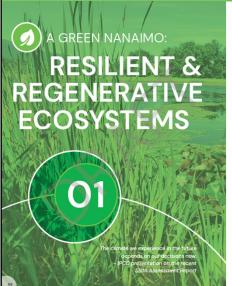
TOPICS

- A Feedback Process
- B Draft City Plan Review
 - 1-Green Nanaimo
 - 2-Connected Nanaimo
- C Action Plan Sample
- D Next Steps and Timelines









C1.1 Greenhouse Gas Emissions Reduction

C1.2 Climate Adaptation & Hazard Management

C1.3 Urban Tree Canopy, Natural Areas & Greenways

C1.4 Healthy Watersheds

C1.5 Water, Sewer, & Stormwater Services

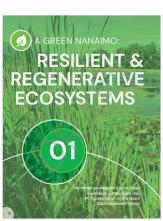
C1.6 Solid Waste Management

C1.7 Brownfield Sites

C1.8 Artificial Lighting & Dark Skies

Goal 1: A Green Nanaimo – Policies





Desired Outcomes

Become a 100% renewable city by 2050 and achieve the City's greenhouse gas emissions reduction goals as part of our commitment to minimizing Nanaimo's climate change impact.

Be a model of efficient use of land and resources to create healthy and comfortable built environments through individual behavio change; zero-carbon and energy efficient buildings, neighbourhoods, and employment centres; and use of renewable energy options.

Policies

OVERALL

C1.11 Leverage Nanaimo's available C1.14 resources and suthority and work with community members, organizations, businesses, and other levels of government to shift away from fossil fuels to 100% renewable energy by 2050 and, by sequestering or removing carbon, reduce Nanaimo's overall community greenhouse gas emissions to below zero by 2050.

C1.1.2 Set and actively work towards interim targets for greenhouse gas emission reductions for 2030, 2035, and 2040.

C1.13 Monitor progress annually towards targets and review / update greenhouse gas reduction targets every three years to ensure they are in line with the recommendations from the Intergovernmental Panel on Climate Change and reflect actions from Provincial and Federal Governments.

BUILDINGS

C1.14 Accelerate zero-carbon and energy efficient building design and practices for all new construction before 2030, and require this for all new construction after 2030.

C1.1.5 Support the upgrade of existing buildings so that all buildings achieve net zero emissions by 2050.

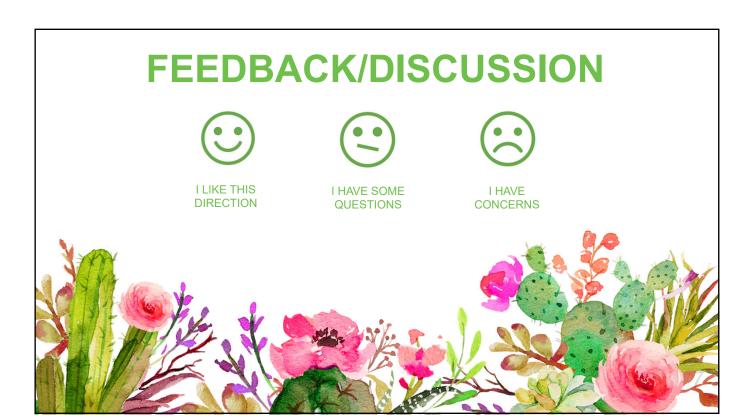
Cil.6 Develop a framework for evaluating the full life cycle of carbon emissions of buildings, including embodied emissions, while retaining heritage character and value for recognized heritage buildings.

TRANSPORTATION

C1.1.7 By 2050, all transportation trips are zero-carbon.

C1.1.8 Prioritize walking, cycling and transit over other transportation modes to help Nanaimo achieve a zero-carbon transportation system.





C1.2 CLIMATE ADAPTATION & HAZARD MANAGEMENT

Climate adaptation is critical to lessen the impacts of climate change and ensure our community continues to thrive even as climate change occurs.



Desired Outcomes

and natural diversity that support resiliency and prepare for a changing climate.

Increased agility in preparing for, responding to, and recovering from climate-related hazards.

adaptation measures. People and major community assets protected from the impacts of climate change.

Policies

COMMUNICATION & CAPACITY

C1.2.1 Improve community capacity and resilience by increasing awareness of climate change, its expected local impacts, and how individuals, businesses, community groups, and others can contribute to mitigation and adaptation.

C1.2.2 Support community and neighbourhood organizations that help community members prepare for climate change and other hazards.

C1.2.3 Encourage and incentivize community members and local businesses to adopt mitigation and adaptation strategies to make homes, businesses, and the local economy resilient to a changing climate.

Cl.2.4 Prioritize hazardous lands and properties at risk for consideration in the City's property acquisition strategy. Advocate to the Province for support in

when assessing, planning, designing, or retrofitting city-owned facilities and infrastructure.

C1.2.6 Encourage shoreline naturalization to support and protect waterfront properties from flooding risk and landslip while also protecting and restoring habitats.



C1.3 URBAN TREE CANOPY, NATURAL AREAS & GREENWAYS



Desired Outcomes

Natural and constructed infrastructure and landscapes that are adapting to climate change, increasing our resiliency, and being sustained through management of trees and absorbent areas on both public and private larger.

Increased number and quality of trees throughout all parts of the city.

Policies

URBAN TREE CANOPY

- C1.3.1 Endeavour to maintain and expand the city's tree canopy in balance with other desired land use outcomes
- C1.3.2 Consider street tree planting and other climate resilient landscaping in new neighbourhoods and redevelopment sites.

Continuation of Nanaimo's treed character and recreational networks through a strongly integrated system of connected parks and trails, open spaces, and habitat corridors.

Improved community understanding of the benefits of tree canopies and green infrastructure.

- C1.3.3 Promote planting of trees on public and private lands throughout the city.
- C1.3.4 Consider ecosystem biodiversity and resilience when replacing or planting new trees in public spaces.
- C1.3.5 Encourage private landowners to retain trees that are not a hazard and to replant or plant new trees that support and enhance the treed character of the city.

NATURAL AREAS

- C1.3.9 Seek to avoid activities that result in changes to ecological features such as steep slopes, watercourses, riparian areas, significant trees, and environmentally sensitive lands.
- C1.3.10 Encourage appropriate restoration where riparian or other environmentally sensitive sites have been altered from natural state historically or by development as a part of redevelopment, targeting net gain of ecological values.
- C1.3.11 Maintain existing treed areas and restore tree and vegetative cover on steep slope areas for the purpose of controlling erosion, enhancing ecological services, reducing visual and aesthetic impacts, and protecting the ecosystem.

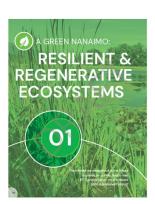
GREENWAYS

- C1.3.16 Work with other agencies and interested community groups to promote and implement potential greenways, including both habitat greenway systems and recreational greenway systems, which may be combined in appropriate locations.
- C1.3.17 Continue to create an interconnected greenway network over time, including along lake and ocean waterfronts, watercourses, and slopes.

C13.18 Continue to establish greenways to protect and enhance natural habitat, support wildlife, and allow for active transportation routes where environmental setbacks and constraints allow. Support development of trails, viewing points, and rest areas within greenways, sited and installed in an environmentally sensitive manner.

NANAIMO

Goal 1: A Green Nanaimo – Policies



C1.4 HEALTHY WATERSHEDS

In addition to the role of vegetated riparian shoreline areas, ecological function in Nanaimo's streams, lakes, wetlands, and waterfronts is dependent on the quality and quantity of water provided by related watersheds that drain to them.

Desired Outcomes

A significant number and wide array of biologically diverse freshwater and saltwat ecosystems throughout the city that are preserved for future generations.

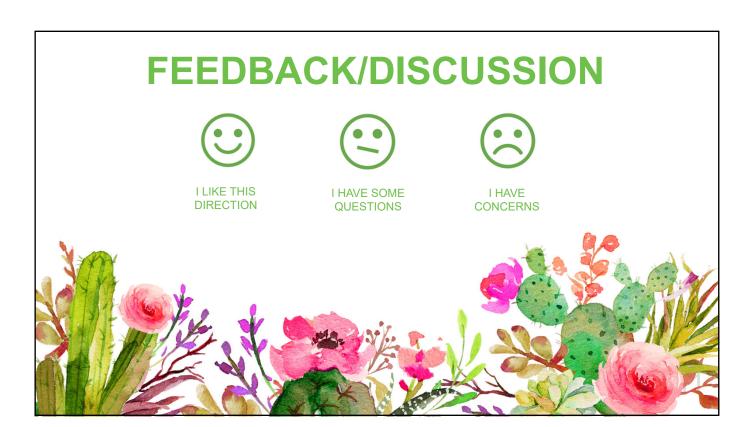
Restoration of areas that have been impacted by erosion related to past development.

Thoughtful integration of urban developmen and built and natural systems that protect and enhance the quality of the city's watersheds, even as the city densifies.

Policies

- C1.4.1 Review and update City design standards and regulations regularly for public and private development and stormwater and rainwater management systems to be resilient to anticipated climate change, including attention to cumulative flows and water quality at the watershed scale. Objectives include:
 - » supporting stream summer base flows and limiting in-stream or bank erosion related to high stormwater flows and volumes, by addressing extent and sizing of rainwater management best practices and detention storage;
- maintaining environmental water quality standards by addressing erosion and sediment control and stormwater pollution risks; and
- » managing risks of flooding including overland flow paths and relationships with sea level rise.
- C1.4.2 Incorporate best management practices, wherever possible, for new and existing developments to support watershed health, such as pervious paving, rain gardens and bloswales, deep absorbent soils, green / bule roof, rainwater capture or detention systems, or other best practices that existent.







C1.5 WATER, SEWER, & STORMWATER SERVICES

Desired Outcomes

A clean, safe, cost-effective, resilient and A clean, safe, cost-effective, resilient and sustainable drinking water supply for all customers that supports continued growth while maintaining environmental quality and accounting for climate change impacts.

system to the urban areas of the city that meets public health and environmental standards and supports thoughtful urban growth.

that integrates both built infrastructure and natural assets to provide flood protection, support healthy aquatic environments, and meet demands of climate change resilience

sufficient capital and operating funds to ensure long-term financial viability of city services and certainty regarding future development cost charges.

Innovations that support service delivery that is more cost-effective, sustainable, and environmentally friendly developed in partnership with other levels of governments and organizations.

Strongly linked growth and servicing capacity planning so that expansion and upgrades are strategic and efficient.

C1.5.2 Investigate and apply current climate

C15.3 Coordinate utility infrastructure upgrades with transportation and/ or parks improvements to minimize disruption and optimize community investments.

investments.

C15.4 Make land use, planning and capital investments.

C15.4 make land use, planning and capital investment decisions with a long-term life cycle asset management, perspective for the diskup.

maintenance, and renewal of servicing infrastructure. Including natural assets.

C15.5. Consider mitigation of all, noises, end light pollution associated with the provision of city infrastructure including parks. buildings, and facilities, where possible.

DRINKING WAYER PROPERTY.

DRINKING WATER PROVISION

major water users and license holders to ensure the long-term sustainable use and protection of its water source

C1.5.7 Continue to advance the City's water

WATER AND SEWER SERVICES

WATER AND SEWER SERVICES

C1.5.8 Reflect in planning for future expansion and upgrading of water and sewer services:

• priority of servicing of Urban Centres based on their priority designation (see policy D4.3.7); designation (see policy Uss.s.r., priority of servicing land within the UCB, except lands designated low-density residential or resource management; and slimiting new services outside the UCB.

UCS.

Support the RDN's Liquid Waste
Management Plan (LWMP). The City's
sewage collection system will continue
to evolve to support the principles,
goals, and objectives of the LWMP.

CLISIO Continue to explore and implement
ways to improve the efficiency of the
liquid waste collection and treatment
system with the RDM.

C1.5.12 Continue to maintain and update a Stormwater Management Policy, along with subdivision standards and specifications for stormwater management, to support the goals and desired outcomes of City Plan.

reimagine NANAIMO

SERVICING COSTS

C15.19 Endeavour to reflect the land use designations in this Plan in determining the demands and priorities for use of Development Cost Charges (DCCs) funds in capital project planning.

C15.20 Review and update DCCs on a regular and ongoing basis (generally every five years), and involve input from stakeholders and the public.

C15.21 Seek to achieve equitable distribution of DCCs between existing and future residents to offset the costs associated with new development.

C1.5.22 Consider including comprehensive servicing planning, capital and life-cycle planning, and costing as part of Area Planning processes for Urban Centres (see policy D4.3.8).

C15.23 Prioritize servicing investments to align with the development of Urban Centres based on their priority designation (see policy D4.3.7).





C1.6 SOLID WASTE MANAGEMENT

Solid waste management is a collaborative process. The City is responsible for curb-side compost, garbage, and recycling pickup while the RDN is responsible for solid waste management and disposal, including the Regional Landfill site on Cedar Road, Private sector services also provide recycling drop-off depots and other services. Reduction in solid waste supports preser reduction of greenhouse gas emissions, and other benefits.

Desired Outcomes

Effective and responsible solid waste, composting, and recycling collection, management, and disposal to meet community needs.

Progress towards zero waste throughout the full life cycle of production, consumptio recycling, and disposal to achieve local and regional waste management goals.

Support for development of circular economies which aim for maximum use of finite resources, transition to renewable resources, and recovery of materials and products that result in minimum waste generation.

PARTNERSHIPS

PARTNERSHIPS
C16.1 Work with the RDN, Nanaimo residents, businesses, partners, and agencies to accelerate waste reduction and avoidance in support of regional goals.

C16.2 Work with appropriate government partners to change existing regulatory barriers that discourage the reuse of materials and promote material exchange networks and the reengineering of recycled materials...

C1.6.3 Support the RDN's Solid Waste

C1.6.4 Work with similar local governments across the globe to develop and enhance circular economies.

C1.6.5 Support eliminating organic matter sent to the Regional Landfill.

increase public awareness to overcome barriers to recycling, reuse, and waste reduction through City outreach programs and community partnerships. Practice the "four Rs," providing city residents opportunities to refuse, reduce, reuse, and recycle, as well as to explore redesign, composting, and other practices.

Goal 1: A Green Nanaimo – Policies





C1.7 BROWNFIELD SITES

Desired Outcomes

Redevelopment of key brownfield sites in Nanaimo, ensuring that the work generates significant triple-bottom line benefits by improving the City's economic, environmental, and social health.

Policies

- C1.7.1 Stimulate and leverage private and public sector investment to promote the remediation, rehabilitation, adaptive re-use, and overall improvement of brownfield sites throughout the city.
- C1.7.2 Increase community awareness of the economic, environmental, and social benefits of brownfield redevelopment.
- C1.7.3 Leverage financial opportunities from a range of stakeholders.
- C1.7.4 Continue to use City resources to demonstrate leadership in the remediation, rehabilitation, adaptive re-use, and overall improvement of brownfield sites throughout the city.
- C1.7.5 Achieve appropriate permanent redevelopment or interim uses of brownfield sites throughout the city.
- C1.7.6 Consider risks and public benefit of accepting the property when considering land dedication of potentially contaminated sites.



RESILIENT & REGENERATIVE ECOSYSTEMS

C1.8 ARTIFICIAL LIGHTING & DARK SKIES

Desired Outcomes

Recognition of Nanaimo as a Dark Sky Community through public and private initiatives to protect dark sky views.

Effective and smart lighting on public and private lands that protects access to dark sky views while also directing light where it is needed for human safety.

Education of community and organizations of the environmental and quality of life benefits of dark skies and ways to avoid light pollution, increase safety and save energy through lighting design and placement.

PARKS, TRAILS, AND NATURAL AREAS

- C1.8.5 Work with community and other interested parties to prioritize the designation of suitable City Parks as Dark Sky Parks or Preserves.
- C1.8.6 Recognize Dark Sky spaces as recreational amenities for community members and visitors.

Cl.8.7 Work to establish a hierarchy of lighting of trails, parks, and natural areas to provide a range of user options that balance dark sky and community safety.

Policies

PARTNERSHIPS

C1.8.1 Work with neighbouring governments including Snuneymuxw First Nation, District of Lantzville and the RDN, Nanaimo residents, businesses, partners, and agencies to build awareness and understanding of the benefits of protecting dark skies and support for collaborative strategies and seriors.

URBAN LIGHTING

- C18.2 Continue to balance community safety, energy, and dark sky preservation in the selection and installation of new and upgraded street lighting infrastructure.
- C1.8.3 Continue to balance dark sky values with safety principles when building new or retrofitting existing City buildings and facilities.
- C1.8.4 Continue to support dark sky principles balanced with safety considerations for new and upgraded buildings and developments.

FEEDBACK/DISCUSSION



I LIKE THIS DIRECTION

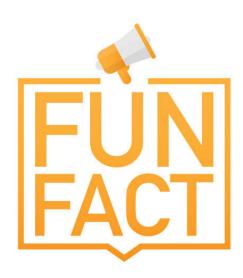


I HAVE SOME QUESTIONS



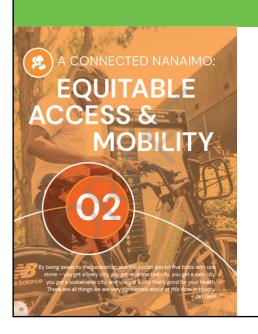
I HAVE CONCERNS





17

Goal 2: A Connected Nanaimo Policies



C2.1 Complete Communities

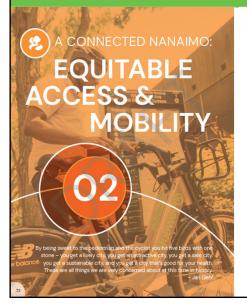
C2.2 Integrated Walk, Roll, Cycle, & Transit Network

C2.3 Recreational Trails

C2.4 Safe Mobility (Vision Zero)

C2.5 Complete Streets

Goal 2: A Connected Nanaimo Policies



C2.1 COMPLETE COMMUNITIES

Desired Outcomes

Alignment between land uses and mobility networks with higher density land uses developing in Urban Centres and along Corridors, supporting transit and increasing walkability.

A fine-grained street network that is comfortable and safe for all, especially vulnerable road users.

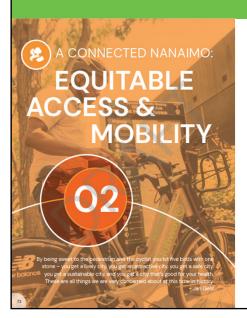
Behavioural changes including reduction in average distance driven per person per day and reduction in household car ownership that in turn help reduce vehicle emissions and other environmental impacts of transportation as well as congestion.

Policies

COMMUNITY MOVEMENT

- C2.1.1 Prioritize walking, rolling, cycling, and transit routes in all Urban Centres (see policy D4.3.20).
- C212 Ensure that new developments and redevelopments incorporate a finegrained, redundant street network that encourages walking, rolling, and cycling, augmented with active mobility connections via pathways and parks.
- C21.3 In rezoning, subdivision, and development permit approvals, seek to acquire active mobility and trails routes through road dedication or secured by statutory right-of-way. Dedication as part of park and/or school lands are also accepted.
- C2.1.4 Partner with other organizations like the School District and ICBC to identify safe routes for walking, rolling, and cycling and encourage these options.

Goal 2: A Connected Nanaimo Policies



C2.2 INTEGRATED WALK, ROLL, CYCLE, & TRANSIT NETWORK

- C2.2.23 Support transit priority measures in partnership with BC Transit and the Ministry of Transportation and Infrastructure along Primary Transit Routes where warranted.
- C2.2.24 Prioritize transit improvements in Urban Centres, along major transit corridors, at community parks, and other key destinations.
- C2.225 Support improved transit integration with BC Ferries service at the Departure Bay and Duke Point ferry terminals.

OTHER CONNECTIONS

- C2.2.26 Work with neighbouring jurisdictions when planning active mobility connections to support regional connectivity.
- C2.2.27 Preserve options for future mobility infrastructure in the E&N Railway Corridor.

- C2.2.28 Work with the RDN, BC Transit, BC Ferries, Nanaimo Airport, and other transportation providers to integrate and connect land-based, marine, and air transportation modes and reduce reliance on personal vehicles when connecting between modes.
- C2.2.29 Support BC Ferries to maintain the reliability, frequency, and affordability of ferry services to Metro Vancouver.
- C2.2.30 Work with BC Ferries to encourage scheduling, fare technologies, and terminal improvements that reduce the impact of ferry traffic on Nanaimo's road network and neighbourhoods.
- C2.2.31 Support efforts by the Nanaimo Airport to expand the number of daily flights and destinations served, and to improve flight reliability and passenger facilities.
- C2.2.32 Continue to support connectivity to Vancouver via float plane and helicopter, and integrate with multimodal linkages.



NANAIMO



Goal 2: A Connected Nanaimo Policies

ILS reimagine NANAIMO

C2.3 RECREATIONAL TRAILS

Desired Outcomes



An extensive and accessible trails network that provides opportunities and various types of trails for all ages, abilities, and lifestyles.

Seamless connectivity between the active mobility and recreational trails networks, supporting comprehensive access throughout the city.

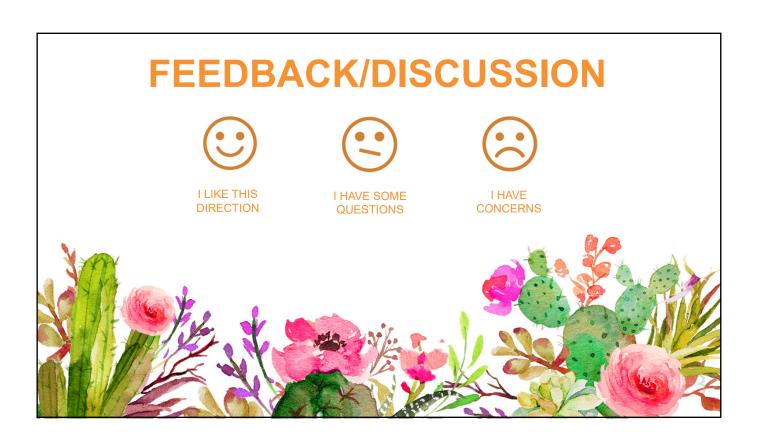
Policies

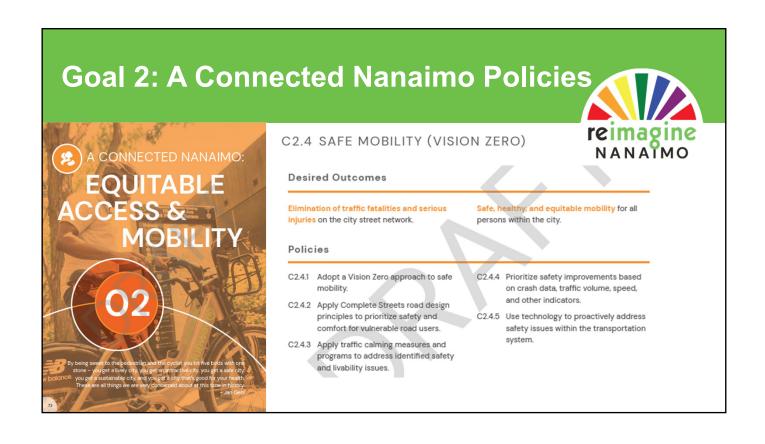
- C2.3.1 Where possible, connect recreational trails to Primary and Secondary Active Mobility Routes to support connected circuits and loops.
- C2.3.2 Integrate recreational trails as part of the network that provides safe routes to school, neighbourhood centres, parks, and other destinations.
- C2.3.3 Continue to expand the recreational trails network, linking to natural attractions and varied, year-round recreational and wellness opportunities.
- C2.3.4 Integrate trail planning efforts to support access, enjoyment, and protection of natural areas, supporting active lifestyles while managing detrimental impacts on waterways, sensitive habitats, tree health, steep slopes, and vegetation (see Section C13 Urban Tree Canopy, Natural Areas & Greenways).

assets in good conditions through the seasons and over time.

C2.3.5 Plan recreational trails and active transportation routes in greenways where appropriate (see City Plan Section D1.3).

- C2.3.6 Site and design recreational trails to support multiple objectives including hazard mitigation (e.g., wildfire breaks, sea level rise protection), emergency access routing, and maintenance access.
- C2.3.7 Establish good relations and pursue land, trail building, and maintenance partnerships among trail users, mountain bike clubs, volunteers, First Nations, and all levels of government.
- C2.3.8 Encourage and support the involvement of user and community groups in trail stewardship.
- C2.3.9 Pursue actions to improve responsibility and reduce conflicts among trail users.
- C2.3.10 Close and return redundant recreational trails to a natural state.
- C2.3.11 Develop recreational trails to Manual of Engineering Standards (MOESS) where applicable, or to current trail standards, while also meeting best practices.
- C2.3.12 Design recreational trails to be safe, multi-use corridors and accessible to a wide range of users and abilities with universal access where appropriate and possible.

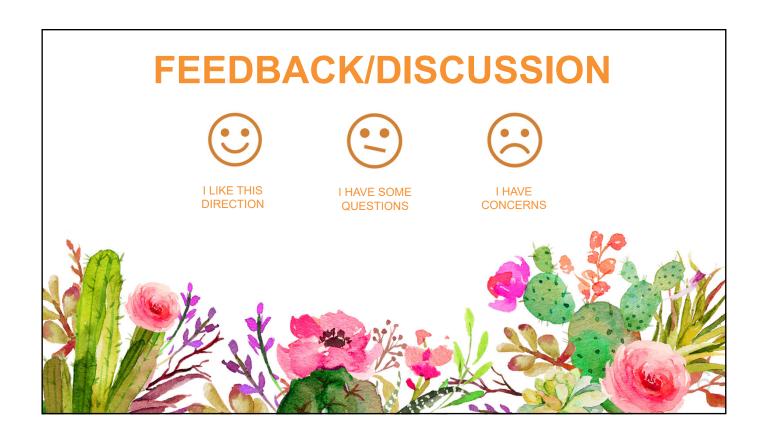


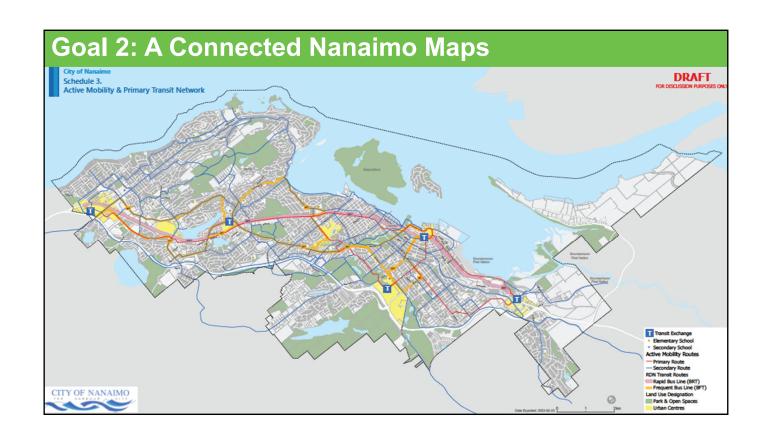


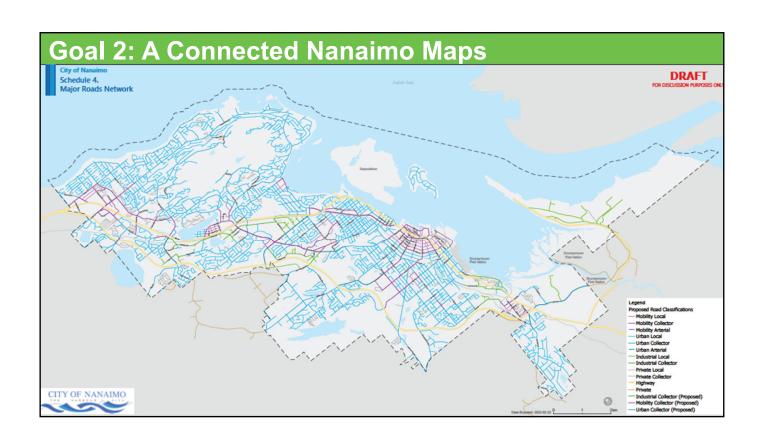
Goal 2: A Connected Nanaimo Policies C2.5 COMPLETE STREETS NANAIMO CONNECTED NANAIMO: **Desired Outcomes** Streets and other mobility infrastructure Streets are planned and designed based safely accommodate all persons and modes of on their adjacent land use, so that facilities travel in an attractive and comfortable setting. support the level and type of mobility anticipated. **Policies** C2.5.1 Incorporate Complete Street principles C2.5.4 Ensure access for all travel modes in road retrofits and new construction, through the development process, supported by City standards, prioritizing walking, cycling, transit, and guidelines, and best practices. goods movement. C2.5.2 In road projects, include improvements C2.5.5 Maximize the use of the existing road to walking, rolling, cycling, transit, goods network before building new facilities. movement, and streetscapes and C2.5.6 Work with the Ministry of support a human-scale environment Transportation and Infrastructure to C2.5.3 Encourage future development to operate and maintain a transportation implement street-oriented design network that supports the needs of the formats that support vibrant and community and the region and aligns

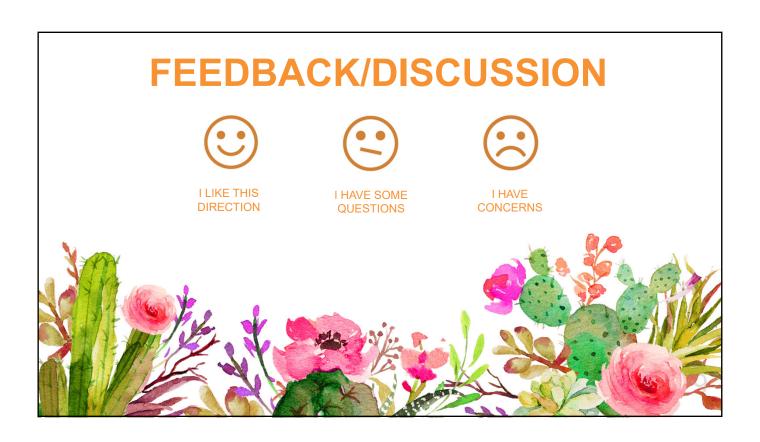
accessible streetscapes.

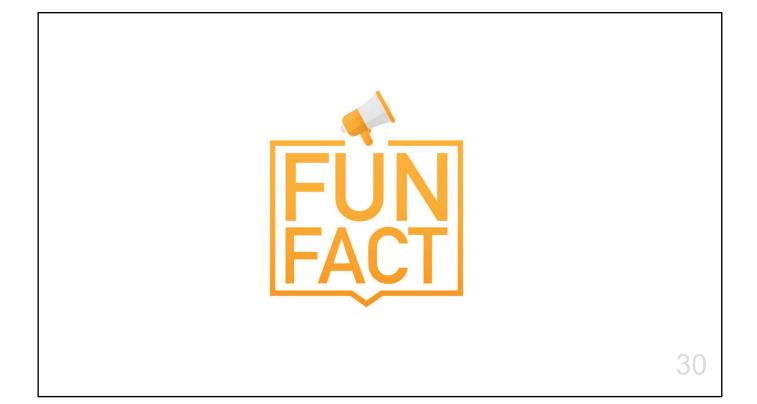
mobility and land use goals.











ACTION PLAN SAMPLE





F10 WATERFRONT USE & **PROTECTION**

C4.10 Waterfront Use & Frotection

ROLES

- WHAT THE C11.

 Secures public waterfront pactive freelywater environments

 Namage C17-yoursel waterfront

 Regulates waterfront land use on private lands through
 Development Perrips and obtains public access where
 possible

 ""AT OTHERS DO

 """ Resirve and water lots

 "" hasins and water lots

- Regulate off-shore activity (senior government)
 Manage port lands including boat basins and water lots (Port of Nanaimo)

WATERFRONT USE & PROTECTION AT A GLANCE: AREAS OF FOCUS



waterfront identity. Participants in REIMAGINE NANAIMO m neimagiNE NANAIMO
engagement ranked "Beautiful
Waterfront" second as what
people love most about Nanaimo

How we plan do this:

- ➤ Prioritize new waterfront park in future development, including Port Drive and Assembly Wharf areas
- Prioritize park additions around lakes and along stream corridors Continue enhancing waterfront experiences

How we plan do this:

How we plan do this:

ACTION PLAN SAMPLE



WATERFRONT USE & PROTECTION PROGRAM ACTIONS

IMMEDIATE 0-5 YEARS

Ref.	Program	Connected Actions
F10.1	Brand the Waterfront Walkway with a unique name and graphic identity.	 F5 Culture G5 Place Making & Investment Attraction
F10.2	Provide information in waterfront parks about environmentally sensitive areas and habitats and how to support their protection.	 C3 Urban Forest, Natural Areas & Greenways
F10.3	Conduct a review of all existing beach access right-of-ways and create a prioritized list for potential upgrades and amenities to improve public waterfront access.	

ONGOING REGULAR & REPEATED ACTIVITIES

Ref.	Program	Connected Actions	
F10.4	Seek opportunities to create water view trails to connect park and waterfront features including beaches and upland ridges where possible.		
F10.5	Develop, in on-operation with the District of Lantzville, a design and implementation plan to increase public access for both Nanaimo and Lantzville participate to the Parabon of Each Paint		

FUTURE BEYOND 5 YEARS

Ref.	Program	Connected Actions
F10.6	Monitor underwater ecological health of dive sites and foreshore accessed from parks (e.g., Neck Point and Departure Bay).	
F10.7	Work with the Nanaimo Port Authority to support redevelopment of properties along Stewart Avenue (Newcastle Channel) to encourage the development of the Waterfront Walkway and investment in new marina, office, and tourism development.	s G5 Place Making & Investment Attraction s G6 Tourism

