

BIKE NETWORK REDEVELOPING AREA COMPLETION OPTIONS

RECOMMENDATION

That the September 27, 2022, Urban Planning and Economy report UPE01101, be received for information.

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| Requested Council Action | Information Only | | |
| ConnectEdmonton's Guiding Principle | ConnectEdmonton Strategic Goals | | |
| CONNECTED This unifies our work to achieve our strategic goals. | Climate Resilience | | |
| City Plan Values | ACCESS | | |
| City Plan Big City Move(s) | Greener as we Grow Communities of Communities | Relationship to Council's Strategic Priorities | Mobility Climate Adaptation and Energy Transition |
| Corporate Business Plan | Serving Edmontonians | | |
| Council Policy, Program or Project Relationships | <ul style="list-style-type: none"> ● Bylaw 5590 - Traffic Bylaw ● Policy C544 Active Transportation Policy | | |
| Related Council Discussions | <ul style="list-style-type: none"> ● UPE00228 Curbside Management Strategy (Urban Planning Committee, August 23, 2022) ● CR_7880 The Bike Plan Implementation Guide (Urban Planning Committee, February 15, 2022) ● UPE00491 Mobility Network Assessment (Urban Planning Committee, February 15, 2022) | | |

Previous Council/Committee Action

At the February 15, 2022, Urban Planning Committee meeting, the following motion was passed:

That Administration provide a report that outlines options for the completion of the bike network in the redeveloping area by 2026 including any associated engagement that could be considered as part of the development of the 2023-2026 capital and operating budget and return to the Urban

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Planning Committee in the third quarter. Each option should consider impacts on the Energy Transition Strategy and the ability to create a more connected network that enables accelerated mode shift. As part of the option analysis, Administration should consider things that will accelerate mode shift prior to the construction of permanent bike lanes including but not limited to end of trip facilities and temporary installations prior to neighbourhood renewal.

Executive Summary

- There are opportunities to improve reliable access to safe and comfortable transportation options for more Edmontonians and support the City's energy transition goals through a more rapid implementation of The Bike Plan.
- A rethink of processes related to public engagement, prioritization, delivery and communications is needed for rapid implementation.
- Administration has considered four options with different resource requirements and implementation timelines.
- In addition to implementing bike routes, resources to support initiatives like bike parking, education, and encouragement could also support active transportation.
- City Council will have the opportunity to guide the pace of Bike Plan implementation through the future approval of both capital and operating funds.

REPORT

The active transportation network, as described in The City Plan, will create opportunities for active mobility through the provision of high-quality infrastructure and will support reaching the goal of 50 per cent mode share for public transit and active modes. Improvements to the active transportation network will also help manage traffic congestion, create better environmental outcomes and improve public health. The Bike Plan (2020) provides a strategic planning framework to support the evolution of the active transportation network by outlining actions that invite Edmontonians to cycle for all reasons, in all seasons.

The implementation of the bike network, as envisioned in The Bike Plan, includes a city-wide district connector network of direct routes supporting travel within and between districts. This network is expected to include approximately 130 kilometres of new bike routes within the redeveloping area. Approximately 36 kilometres of these routes have been identified as near term priorities due to their potential to support equity, safety, ridership potential, and connectivity within the network. Planning and design has started on approximately 14 kilometres of these routes with budget approved as part of the Fall 2021 Supplementary Capital Budget Adjustment.

Currently, improvements to the bike network are implemented primarily through other capital projects such as roadway and neighbourhood renewal when project scope and budget allows. The Mobility Network Assessment UPE00491, Urban Planning Committee on February 15, 2022, recommends continued support of active transportation improvements city-wide. Support could include increased opportunities to complete bike network improvements when there is

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alignment with other capital projects as well as dedicated planning, design and delivery of new bike routes as resources allow.

Rapid Implementation Approach

A different approach to how active transportation projects have been historically completed in Edmonton would be required to accelerate the process and develop a city-wide network by 2026. The following key actions could be employed to accelerate bike network implementation:

- **Focus on Completion of District Connector Network** - The district connector network is a city-wide grid of direct and comfortable connections that support travel within and between districts. Focusing on the completion of the district connector network will best support city-wide coverage and connectivity. The Community Energy Transition Strategy recommends the completion of the district connector network by 2030 to support reduced transportation sector greenhouse gas emissions. Because many district connector routes are planned along, or near, arterial roadways, improvements in this network are most likely to address areas where active transportation is most uncomfortable for users due to higher vehicle speeds and volumes. Providing improved active transportation connections in these locations also provides the opportunity to address many locations identified as part of the high injury network through the Safe Mobility Strategy. Completion of the district connector network will require extending existing routes, constructing new routes, and filling in missing links within the existing network as shown in Attachment 1.

Rapid implementation along the preferred corridor may not be feasible in all locations due to technical constraints. In some of these locations it may be possible to provide adaptable infrastructure along a parallel corridor to provide interim connectivity. In other locations where a parallel route is not available, the route may not be completed until there is a larger reconstruction project that enables more substantial changes to the corridor.

- **Manage Public Engagement Scope** - City-wide engagement during the development of The Bike Plan was used to inform the development of the future network plan. The Bike Plan envisioned additional opportunities for community insight as part of the planning and design of individual routes.

A rethink of public engagement scope will support the accelerated timelines. Administration would leverage input from previous engagement wherever possible; however, given the timelines, public engagement would not be feasible for most projects at a local level. Rapid implementation would instead focus on communications to ensure Edmontonians are informed about the changes. Opportunities for public input could be considered on limited projects that have multiple feasible solutions for connectivity and the greatest impacts to adjacent communities.

- **Implement Adaptable Infrastructure** - Adaptable infrastructure, similar to that used to implement the downtown bike network, would assist in rapidly expanding the bike network. Adaptable infrastructure involves the placement of portable elements such as concrete barriers and flex posts instead of making permanent changes with asphalt and concrete construction. The planning and design process for adaptable infrastructure would remain

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unchanged when compared to that of permanent infrastructure but installation of adaptable infrastructure requires less time. Because this infrastructure is adaptable, there may also be opportunities for small adjustments after installation as needed. Permanent infrastructure would still be considered where feasible, or when work aligns with roadway renewal or other capital projects. Additionally, funding in the longer term would be recommended to support transitioning adaptable infrastructure into permanent infrastructure when opportunities arise.

- **Re-prioritize Implementation** - Rapid implementation would require a re-consideration of currently prioritized routes to focus more on speed of implementation and mitigating the impacts of short delivery timelines. Less complex locations would be installed first. Routes that require more complex design solutions, or where a critical need for public engagement is identified, would be planned for later delivery to allow more time for planning and design. This would ensure that installation work proceeds where possible while planning and design continues for more complex locations.
- **Proactive communications** - Edmontonians will witness and experience the impacts of rapidly implementing the bike network. A proactive and robust communications program will increase awareness of what's new, how bike routes benefit all Edmontonians by creating space for everyone, and help people understand how to navigate safely around new infrastructure when biking, driving, walking, and using mobility aids. This work may include targeted communications to inform communities of planned changes, but may not include opportunities for the public to influence project decisions in the early stages.

Implementation Option A - Complete District Connector Network By 2026

At a strategy level, implementation of the majority of the district connector network in the 2023-2026 capital budget is estimated at \$170 million (-50 per cent to +100 per cent). While adopting a rapid implementation approach could provide opportunities to meet this goal, the challenges associated with this implementation option are significant and would likely impact the ability of Administration to meet the desired outcomes. In addition to the capital cost, the operating impact of this approach will require an increase in the annual operating budget of approximately \$11 million (representing a 0.65 per cent tax increase, based on the 2022 budget) to support operations and maintenance activities for the expanding network. This option could see the district connector network completed as much as four years ahead of the timeline recommended by the Community Energy Transition Strategy.

Additional opportunities and challenges associated with pursuing rapid implementation are provided in Attachment 2.

Alternative Implementation Options

To reduce the challenges associated with the rapid implementation, the approach may be scaled and modified. Alternative approaches would not complete the district connector network by 2026, but would accelerate the development of the active transportation network compared to the past. Longer implementation horizons would not realize the benefits of a city-wide network as soon, but would allow for the incorporation of more public engagement as part of the planning

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and design process, more opportunities for alignment with other capital projects and more implementation of permanent infrastructure.

Implementation Option B - Complete the District Connector Network by 2030

This option would complete the majority of the district connector network over two budget cycles. The estimated capital cost for this work would be \$90 million (-50 per cent to +100 per cent) in 2023-2026 and \$80 million (-50 per cent to +100 per cent) in 2027-2030. In addition to the capital cost, this approach will require an increase in the annual operating budget of approximately \$6 million (a 0.35 per cent tax increase, based on the 2022 budget) in 2023-2026 to support ongoing operations and maintenance activities for the expanding network. A further increase of approximately \$5 million (a 0.29 per cent tax increase, based on the 2022 budget) to the annual operating budget would be required in 2027-2030. This option would align with the completion timelines for the district connector network recommended by the Community Energy Transition Strategy.

Implementation Option C - Completion of the Near Term Priorities and Areas with High Bike Trip Potential by 2026

This option would focus on completing strategic priorities within the bike network by 2026. These priorities include the near term priorities identified in The Bike Plan, along with priority district connector routes and neighbourhood routes in the areas identified as having a higher potential to generate bicycle trips. The estimated cost for this approach is \$130 million (-50 per cent to +100 per cent) in the 2023-2026 capital budget. In addition to the capital cost, this approach will require an increase in the annual operating budget of approximately \$9 million (a 0.53 per cent tax increase, based on the 2022 budget) to support ongoing operations and maintenance activities for the expanding network. This option does not guarantee the implementation of the district connector network by 2030 as recommended in the Community Energy Transition Strategy, but would focus implementation resources in areas that are expected to have the greatest short term impact.

Implementation Option D - Focus on the Completion of the Near Term Priorities by 2030

This option would focus on the implementation of the near term priorities identified in The Bike Plan implementation guide by 2030. The estimated cost for this approach is \$25 million (-50 per cent to +100 per cent) in the 2023-2026 capital budget and \$45 million in the 2026-2030 capital budget. In addition to the capital cost, this approach would require an increase of approximately \$2 million (a 0.13 per cent tax increase, based on the 2022 budget) in annual operating budget to support ongoing operations and maintenance activities for the expanding network. A further increase of approximately \$2 million to the annual operating budget would be required in 2027-2030. This option does not provide a clear path towards the implementation of the district connector network by 2030 as recommended in the Community Energy Transition Strategy.

A comparison of all implementation options is included in Attachment 3.

Additional Actions to Support Active Transportation

In addition to the development of new and improved bike routes, The Bike Plan identified other actions that the City can take to support a connected city where people can safely and

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comfortably bike for any reason in any season. These actions include work to support end of trip facilities, wayfinding, education and encouragement programs. The Bike Plan also identified value in reviewing and pursuing changes in laws and regulations to reduce barriers to active transportation use. Support for these initiatives requires both capital funding for assets like bike racks and signage, in addition to operational funding to support the management and delivery of these programs. These initiatives would support both the existing bike network, and the locations where new infrastructure is constructed.

Additional resources for bike parking could support improved end of trip facilities in alignment with ongoing work on the Curbside Management Strategy. This may include the addition of more public bike racks on the road right-of-way, implementation of secure and accessible bike/micro mobility parking facilities and amenities in high demand areas, and working to incorporate improved secure bike parking for City-owned facilities.

Building off of the successful implementation of the downtown and southside bike network, the following programs could support Edmontonians through significant infrastructure changes and encourage a culture of behaviour which embraces safe streets for Edmontonians and all the ways they move:

- Re-establishing the bike street team to provide on-the-ground support, education, and encouragement for all users in areas of new infrastructure.
- Encouragement programs and events to normalise to create and maintain a strong and fun bicycle culture and community.
- A shared pathway and trail etiquette program to promote safe and friendly behaviour on off-street paths and trails by all users.
- Bicycle skills training; establish or support in school resources for elementary school ages covering basic bicycle skills training and safety in partnership with Edmonton school district or non-governmental organizations, as well as support skills and safety training programs for adults and older adults offered by community organizations.

Budget/Financial Implications

At Council's direction, Administration is prepared to present both capital and operating funding requests for any of the implementation options as part of the 2023-2026 budget deliberations. This funding, along with any additional direction from City Council will guide the pace of implementation. However, with nearly all unconstrained funding anticipated to meet renewal needs over the 2023-2026 capital budget, there will be limited funds for growth investment in new assets. As discussed in the 2023-2032 Capital Investment Outlook (FCS01169, City Council June 7, 2022), it is likely the only new growth projects to proceed will be those that are mandated by legislation, those that have high safety impacts, or are high priority and eligible to receive funding from partners and other orders of government.

Next Steps

Administration will continue to explore opportunities to expand the bike network through coordination with asset renewal plans and through funding from other sources such as grants.

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Continued work on the Curbside Management Strategy will also help to equalize all modes of urban mobility including active transportation working to enhance clarity of which curbside lanes and street types will have bike lanes as a priority use of public curb space.

COMMUNITY INSIGHT

The Bike Plan is the culmination of two years of engagement with Edmontonians. Through 62 public events, including workshops, pop up events, drop-in sessions, surveys and community conversations, more than 11,500 Edmontonians provided feedback about biking in Edmonton.

Engagement for The Bike Plan did not consider details of implementation. As a result, specific community insight regarding rapid implementation is not available. While public engagement would still be incorporated into the planning and design process where possible, rapid implementation would require a rethink on the amount of public engagement required which will result in fewer opportunities for additional community insight.

The absence of local public engagement from the planning and design process for most new bike routes would be a departure from the City's Public Engagement Policy - C593A and the planning process recommended in the Bike Plan Implementation Guide. Without public engagement, it may be challenging to develop public support for changes to the mobility network in some communities.

GBA+

The development of the The Bike Plan included strategies intended to reach and engage with a diverse range of Edmontonians such as targeted workshops and focused community conversations. Learnings from The Bike Plan highlighted the importance of considering all users as part of planning, design, and engagement activities including children, seniors, women, racialized populations, people with low income, people with disabilities, people riding with bike share or scooter share and people moving goods or cargo. Diverse populations may have economic, physical, or social barriers to driving and can experience mobility challenges when they do not have access to perceived safe and comfortable transportation alternatives.

Administration will also work to identify and address social inequities in the active transportation network and mobility system. Considerations for this work include:

- Create awareness of the unique circumstances and needs of the broad, and evolving, range of potential active transportation network users and help project teams to identify and acknowledge their own biases.
- Review project-specific engagement tactics and communications to determine who is typically excluded from participating in engagement activities, what contributes to this exclusion, and identify measures to make engagement more inclusive.
- Understand how specific groups of people move around their neighbourhood and city, what they view as barriers or challenges in the City's mobility network, and what amenities and design features they value.

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In order to meet accelerated timelines, the reduced opportunities for community insight may limit the integration of these considerations.

ATTACHMENTS

1. District Connector Network
2. Opportunities and Challenges of Rapid Implementation
3. Implementation Options Summary