

INVESTING IN MOBILITY UPDATE

EXECUTIVE SUMMARY

Investing in Mobility 2015-2024 is an update to the transportation infrastructure investment plan approved by Council in 2012 December. This update accounts for changes in projected funding levels, project cost estimates, and incorporates new capital projects that have been identified since the previous version of the plan was approved. Transportation requires \$5.6 billion in infrastructure investment between 2015 and 2024 to accommodate projected growth at current operating levels of service, and adequately maintain the transportation system. Transportation anticipates having up to \$3.7 billion in funding over the next decade. The gap between the Transportation department's infrastructure needs and available funding is \$1.9 billion.

There are several notable changes in this update to Investing in Mobility, including:

- funding for the majority of the rapid transit corridors identified as short-term priorities in RouteAhead;
- inclusion of new infrastructure required to connect to the Southwest and West Ring Road (Stoney Trail) segments;
- additional infrastructure needed to provide connections to the north and east portions of Stoney Trail in support of priority growth areas;
- alignment of infrastructure investments with other City departments to support suburban and redevelopment growth priorities as identified through the Corporate Growth Management Framework; and
- additional infrastructure projects and annual programs that have recently been identified to support the maintenance and growth of the transportation system.

Due to the constraints of available funding sources, two types of infrastructure will experience significant funding shortfalls until new, reliable sources of funding can be secured:

- supporting infrastructure for Calgary Transit, such as maintenance facilities, bus purchases and technology maintenance and upgrades; and
- upgrades to the Primary Goods Movement Network that would improve travel times and increase reliability for goods and services, as well as commuter traffic.

ADMINISTRATION RECOMMENDATIONS

Administration recommends that the SPC on Transportation & Transit recommend that Council:

1. Reconsider Council's decision contained in the minutes of the 2013 March 04 Combined Meeting of Council, with respect to Recommendation 1, Operations Control Centre only, contained in report TT2013-0112.
2. Reconsider Council's decision contained in the minutes of the 2014 January 31 Special Meeting of Council, with respect to Recommendation 1, NW-HUB (West Campus Mobility Phase 1) only, contained in report C2014-0081.
3. Approve the funded and unfunded transportation infrastructure lists outlined in Attachment 2.
4. Direct Administration to use Attachment 2 as the basis for developing the Transportation Department's capital budget for Action Plan 2015-2018.

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RECOMMENDATIONS OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2014 MAY 14:

That Council:

1. Reconsider Council's decision contained in the minutes of the 2013 March 04 Combined Meeting of Council, with respect to Recommendation 1, Operations Control Centre only, contained in report TT2013-0112.
2. Reconsider Council's decision contained in the minutes of the 2014 January 31 Special Meeting of Council, with respect to Recommendation 1, NW-HUB (West Campus Mobility Phase 1) only, contained in report C2014-0081.
3. Approve the funded and unfunded transportation infrastructure lists outlined in Attachment 2.
4. Direct Administration to use Attachment 2 as the basis for developing the Transportation Department's capital budget for Action Plan 2015-2018.

Oppositions to Recommendations

Recommendation 2

Opposed:

S. Chu, J. Magliocca, W. Sutherland, S. Keating

Recommendations 3 and 4

Opposed:

S. Chu, J. Magliocca, W. Sutherland

PREVIOUS COUNCIL DIRECTION / POLICY

The following two recommendations from report TT2012-0660, adopted by Council at its 2012 December 17 meeting, provide direction to the current update of Investing in Mobility. These are that Council:

1. Adopt Investing in Mobility's Optimize and Maintain scenario, with the corresponding recommended and unfunded lists shown in Attachment 2, as the 10-year infrastructure plan for Transportation.
2. Direct Administration to update Investing in Mobility in advance of each business planning and budget cycle to reflect changes in funding, project cost estimates, urban growth plans, and direction from Council and the corporate growth management framework.

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At its 2013 March 04 meeting, Council adopted the following recommendation from report TT2013-0112:

1. Allocate a portion of the proposed Phase 2 GreenTRIP funding allocation towards:
 - Operations Control Centre - \$25 million
 - West LRT Land Costs as per confidential Attachment 2, Table 2.2

On 2013 November 27, Council adopted the following amended recommendation from report C2013-0668:

2.d.

- (ii) The \$52 million in tax room for 2015 to 2024 be used to create a dedicated transit fund (the "Green Line Fund") to build the Green Line transitway in both North Central and Southeast Calgary as described in Calgary Transit's RouteAhead plan, so that other sources of funding can be used for other RouteAhead priorities:
- (iii) The Administration be authorized to use the Green Line Fund as matching funds for future provincial and/or federal transit funding that is specifically dedicated to the Green Line;

At its 2014 January 31 special meeting, Council adopted the following recommendations from report C2014-0081:

1. Direct Administration to allocate remaining GreenTRIP funds, and City matching Municipal Sustainability Initiative funds, to the following transit projects:
 - Southwest Transitway
 - 17 Avenue SE Transitway
 - South Crosstown BRT
 - North Crosstown BRT
 - NW-HUB (West Campus Mobility Phase 1)
 - West LRT Land (as required)
2. Rank the Green Line Transitway as the highest transportation priority for potential Building Canada (BCF) funding, and report back to the SPC on Transportation and Transit in Q3 2014 as part of the Green Line Fund detailed workplan report.

At its 2014 March 10 meeting, Council received report PFC2014-0175 for information. This report outlined priority suburban and redevelopment growth areas for use by each department in the preparation of their infrastructure investment plans.

BACKGROUND

Investing in Mobility 2015-2024 is an update to the previous version of Investing in Mobility approved by Council in 2012 December. The update accounts for changes in projected funding levels and project cost estimates, and incorporates new capital projects that have been identified since the previous version of the plan was approved. The new projects include leading infrastructure that will enable suburban and redevelopment growth priorities to begin development. Investing in Mobility 2015-2024 will serve as the basis for Transportation's capital budget for Action Plan 2015-2018.

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Given the relatively short timeframe since the approval of the previous Investing in Mobility plan, prioritization for projects included in the previous plan have not been changed (with the exception of several RouteAhead rapid transit corridors). The same prioritization process described on pages 8 to 11 of the Investing in Mobility binder has been applied to new candidate projects. Funding allocations are also heavily influenced by growth management requirements, and the eligibility constraints of different grant programs.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Funding Requirements and Projections

Transportation has identified the need for \$5.6 billion in infrastructure investment between 2015 and 2024 to accommodate growth and adequately maintain the transportation system. This is an increase of just over one billion from the level of investment identified in the previous plan, and is based on a more detailed assessment of supporting infrastructure and growth management needs. Transportation anticipates having up to \$3.7 billion in funding over the next decade (depending on what level of funding is received from the Federal Building Canada Fund for transportation projects). Detailed information on each funding source is provided in Attachment 1.

The gap between the Transportation department's infrastructure needs and available funding is \$1.9 billion. As a result, a number of projects contained in Investing in Mobility will remain unfunded until new, reliable sources of capital funding are secured. Increased funding from the Green Line Fund and short-term consumption-driven increases from provincial fuel taxes help to reduce the overall funding gap.

Infrastructure Categories

Investing in Mobility continues to use the new infrastructure categories developed in the previous version of the plan. The four main categories, which align directly with CTP investment policies, are:

- **Mobility Hubs and Transit Corridors** – major transit corridors and supporting infrastructure (such as maintenance facilities), along with investments that support intensification around transit stations.
- **Goods Movement and Traffic Growth** – projects that improve travel speeds and reliability on heavily used roadways, and projects that connect new suburban communities to the rest of Calgary.
- **Transportation Network Optimization** – lower-cost, high-benefit projects that maximize the use of existing infrastructure to improve travel times, reliability and safety for all transportation choices.
- **Lifecycle and Asset Management** – projects and annual programs that maintain the transportation system in a reasonable state of repair, extend the functional life of infrastructure, and provide safe and reliable service for all transportation choices.

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Investing in Mobility also has a Support Functions category which includes funding for planning and design work, land acquisition, and financing costs. A list of flood-related projects is also included in this version of Investing in Mobility.

On 2012 July 30, Council approved the following target ranges for the combined total value of funded and unfunded projects in each category.

- Mobility Hubs and Transit Corridors (40% - 50%);
 - Goods Movement and Traffic Growth (25% - 30%);
 - Transportation Network Optimization (5% - 10%);
 - Lifecycle and Asset Management (20% - 25%).
- } new infrastructure
- } existing infrastructure

The target ranges were based on the infrastructure maps contained in the CTP, and an analysis of Transportation’s lifecycle and asset management needs. The targets are guidelines only, and can be deviated from if necessary to address funding gaps, funding eligibility constraints or Council direction. Moving too far from the targets would mean that the needs of one or more infrastructure categories are being neglected, jeopardizing The City’s overall mobility objectives.

A further review of Transportation’s lifecycle and asset management requirements has found that the original targets slightly underestimated the funding needs of this category. Table 1 shows the revised funding targets for each category, along with the actual totals that have been achieved for each category for Investing in Mobility 2015-2024.

Table 1 – Combined Funded and Unfunded Targets by Category

CATEGORY	NEW TARGET RANGE (Funded & Unfunded)	ACTUAL SPLIT (Funded & Unfunded)
Mobility Hubs and Transit Corridors	40% - 45%	41%
Goods Movement and Traffic Growth	25% - 30%	26%
Transportation Network Optimization	5% - 10%	5%
Lifecycle and Asset Management	25% - 30%	28%

Allocation of Available Funding

This update of Investing in Mobility continues to adhere to previous Council direction, with more of the available funding directed to needs in the Lifecycle and Asset Management and Transportation Network Optimization categories. Robust funding for these two categories better addresses the risks identified in the integrated risk assessment for Investing in Mobility, as summarized in the Risk Assessment section of this report.

A summary of the funded and unfunded totals for each category are shown in Table 2. The full list of funded and unfunded projects in each category is available in Attachment 2.

Table 2 – Funded and Unfunded Totals by Category

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CATEGORY	FUNDED (\$ millions)	UNFUNDED (\$ millions)	TOTAL (\$ millions)
Mobility Hubs and Transit Corridors	\$1,161	\$1,058	\$2,219
Goods Movement and Traffic Growth	\$762	\$622	\$1,384
Transportation Network Optimization	\$218	\$45	\$263
Lifecycle and Asset Management	\$1,225	\$309	\$1,534
Support Functions	\$240	\$0	\$240
TOTAL	\$3,606	\$2,034	\$5,640

Table 2 includes the remaining GreenTRIP funding committed by the Province. The timeline for receipt of these funds is unknown. Potential funding from the Federal Building Canada Fund (BCF) has not been included in this table since amounts and timelines are both unknown. Administration is in the process of identifying priority projects, for Council review, so that applications to the BCF can be initiated. Council previously directed that the Green Line Program be The City's top transportation priority for BCF. Assuming up to \$150 million of BCF funding is secured for the Green Line Program, total funding levels could increase to just over \$3.7 billion, with the value of unfunded projects correspondingly falling to \$1.9 billion.

Despite the lower level of funding in the two 'growth categories' some types of infrastructure, such as RouteAhead rapid transit corridors and suburban growth projects, will be relatively well funded. However, two key types of infrastructure will be underfunded:

- supporting infrastructure for Calgary Transit, such as maintenance facilities, bus purchases and technology maintenance and upgrades; and
- upgrades to the Primary Goods Movement Network that would improve travel times and increase reliability for goods and services, as well as commuter traffic.

If new, unconstrained funding sources are not secured in the next few years, the quality and reliability of the transit and road networks will deteriorate below targets.

Highlighted Changes for the 2015-2024 Update

There are several notable changes from the previous Investing in Mobility plan. These are:

- funding for the majority of the rapid transit corridors identified as short-term priorities in RouteAhead;
- inclusion of new infrastructure required to connect to the Southwest and West Ring Road (Stoney Trail) segments;
- additional infrastructure needed to provide connections to the north and east portions of Stoney Trail in support of priority growth areas;
- alignment of infrastructure investments with other City departments to support suburban and redevelopment growth priorities as identified through the Corporate Growth Management Framework; and

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- additional infrastructure projects and annual programs that have recently been identified to support the maintenance and growth of the transportation system.

Two funding recommendations in Investing in Mobility 2015-2024 require adjustments to previous Council direction. These are summarized in Table 3.

Table 3 – Recommended Changes to Previous Council Direction

PREVIOUS DIRECTION	RECOMMENDED CHANGE
<p>Report: TT2013-0112 Date: 2013 March 04</p> <p>Direction:</p> <p>Allocate a portion of the proposed Phase 2 GreenTRIP funding allocation towards:</p> <ul style="list-style-type: none"> • Operations Control Centre - \$25 million • West LRT Land Costs as per confidential Attachment 2, Table 2.2 	<p>This recommendation better aligns the timing of available funding with the timing of construction for the Operations Control Centre, and frees up GreenTRIP to fund other RouteAhead rapid transit corridors.</p>
<p>Report: C2014-0081 Date: 2014 January 31</p> <p>Direction:</p> <p>Direct Administration to allocate remaining GreenTRIP funds, and City matching Municipal Sustainability Initiative funds, to the following transit projects:</p> <ul style="list-style-type: none"> • Southwest Transitway • 17 Avenue SE Transitway • South Crosstown BRT • North Crosstown BRT • NW-HUB (West Campus Mobility Phase 1) • West LRT Land (as required) 	<p>In order to allow for 4-car operations on the entire Ctrain network, upgrades to existing substations and ancillary infrastructure are required, and construction of new electrical substations is necessary.</p> <p>Administration recommends removing the NW-HUB from the Council-directed set of projects to be funded from GreenTRIP and MSI. This will free up sufficient funding for the traction power upgrades. The NW-HUB project would therefore be deferred until new funding is secured. NW-HUB was the lowest ranked rapid transit corridor in previous RouteAhead and Investing in Mobility analysis.</p>

In relation to damage sustained in the 2013 floods, reconstruction of the 12 Street S.E. (Zoo) bridge, as well as supplementary funding for the replacement of the destroyed Elbow River pedestrian bridges, are included in the Lifecycle and Asset Management category. A list of other flood resiliency projects is included at the end of Attachment 2. Flooding on the scale witnessed in 2013 is a periodic event. As a result, funding priority has been allocated to projects that will definitely be required to accommodate growth and maintain the transportation system over the next 10 years. Transportation will continue to seek funding from the Provincial Disaster Relief Program and/or alternate City funds for the other flood resiliency projects.

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Operating Costs of Capital

Investing in Mobility identifies operating costs that will be required to support construction of each capital project. Associated costs will be incorporated in the Transportation Department's budget adjustments. If the Council-directed property tax increases are not sufficient to support the projects identified in Investing in Mobility, Transportation may propose adjustments to the capital plan in order to align with operating budgets and to meet functional targets within the suggested timeframe.

Stakeholder Engagement, Research and Communication

This update to Investing in Mobility continues to be based on the engagement results that were used for the 2012 December version of the plan. This includes a series of shopping mall engagement sessions held in Q3 2012 that allowed citizens to allocate funds to the four main infrastructure categories and see potential impacts. The Action Plan 2015-2018 Engage Results were reviewed for alignment, with the general observations being that Investing in Mobility 2015-2024 is well aligned with citizen priorities. Public transit (including a desire to see slight increases in service levels) is the highest citizen priority, and is consistent with the funding allocation levels outlined in Table 1. Roads maintenance, optimization of vehicle flow, pedestrians and cyclists are also high priorities for engaged citizens, and are addressed to the greatest extent possible through the recommended funding allocations.

Strategic Alignment

The structure and prioritization processes in Investing in Mobility are carefully aligned with policy direction from the CTP, MDP, RouteAhead and the 2020 Sustainability Direction. In particular, the four infrastructure categories directly reflect the investment priorities contained in Part 2 of the CTP. Investing in Mobility also aligns with other departmental infrastructure investment plans to support strategic growth priorities in suburban and redevelopment locations, as defined in the Corporate Growth Management Framework.

Social, Environmental, Economic (External)

By aligning with the policies and infrastructure maps contained in the MDP and CTP, Investing in Mobility moves The City towards the associated social, environmental, economic and fiscal outcomes. This includes health benefits from increased opportunities for walking and cycling and reduced air pollution. Increased use of transit, walking and cycling will also help to mitigate the growth in Calgary's greenhouse gas emissions. Investment in major road infrastructure and optimizing the existing network will support Calgary's economy by improving travel time reliability for goods movement and commuters.

Infrastructure investments that facilitate the more compact development patterns contained in the MDP will mitigate risks to The City and taxpayers by minimizing increases in capital and operating costs, while still accommodating population and employment growth.

Financial Capacity

Current and Future Operating Budget:

Anticipated operating budget impacts for the proposed capital projects are identified in Attachment 2. This information will contribute to the development of Transportation's operating budget for Action Plan 2015-2018. As identified in the Social, Environmental,

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Economic section above, Investing in Mobility's alignment with the MDP and CTP will help minimize long-term operating costs by supporting more compact development.

Current and Future Capital Budget:

The capital projects identified for funding within Investing in Mobility fit within anticipated available capital budgets for 2015-2024. The remaining projects in the plan will remain unfunded until new, reliable sources of capital funding become available. Should projects and annual programs in the Lifecycle and Asset Management category continue to be underfunded for an extended period of time, this will likely increase the long-term capital costs required to adequately maintain Calgary's transportation system.

Risk Assessment

Transportation completed an integrated risk assessment for Investing in Mobility in report TT2012-0325. These risks continue to be applicable for the 2015-2024 update of Investing in Mobility. The key risk categories identified in that report were:

- 1) An inability to secure new, flexible funding sources would increase the burden on the municipal tax base.
- 2) There is greater financial risk to The City if there is inadequate funding for lifecycle and asset management than if there is sufficient funding for new mobility infrastructure.
- 3) Corporate alignment is critical to ensure integrated, cost effective infrastructure and service delivery.

Risk 1) continues to pose the greatest challenge for capital planning in the Transportation department, as provincial and federal funding for capital projects is declining overall. The ability to implement many of the flood resiliency projects identified by Transportation will be limited due to constrained funding.

Consistent with Council direction on 2012 December 17, Risk 2) is addressed through greater emphasis for Lifecycle and Asset Management programs and Transportation Network Optimization programs over new growth infrastructure. This approach adheres to constraints on certain funding sources, such as GreenTRIP which must be allocated to growth transit projects, or development levies which must be allocated primarily to suburban growth projects.

Risk 3) is being addressed primarily through cross-departmental coordination that has been facilitated by the Corporate Growth Management team. This is supported by ongoing discussions between departmental capital planners on overall infrastructure plans.

REASONS FOR RECOMMENDATIONS:

The recommended funded and unfunded Transportation capital projects for 2015-2024 fit within projected funding levels, are consistent with citizen priorities, and align with strategic direction:

- Calgary Transportation Plan and Municipal Development Plan
- Corporate Growth Management Framework
- RouteAhead
- 2020 Sustainability Direction

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ATTACHMENTS:

1. Transportation Capital Budget Projections 2015-2024
2. Transportation Funded and Unfunded Infrastructure List 2015-2024