



# Transportation Planning Audit Project Prioritization

July 8, 2015



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The City Auditor's Office completes all projects in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

## Executive Summary

As per the Municipal Development Plan (MDP)<sup>1</sup>, The City has set “a long-term strategy of a more sustainable city form for Calgary and the transportation networks needed to serve it”. This strategy is supported by long-term goals and objectives as defined in the MDP, Calgary Transportation Plan (CTP), RouteAhead – Calgary Transit’s 30-Year Strategic Plan, and 2020 Sustainability Direction (SD). To achieve this strategy, The City has identified \$5.6B in transportation projects that need to be completed or initiated over the next decade. However, The City has an expectation of a \$2B funding gap for the period 2015-2024. Prioritization of projects assists The City in ensuring that available funding is directed to projects that can provide the most significant contribution to the long-term strategy. The Transportation department adopted Investing in Mobility (IIM), a 10-year capital infrastructure plan that defines the priority and timing of transportation-related capital projects. IIM is intended to help guide Council’s capital budget decisions by presenting a portfolio<sup>2</sup> of prioritized projects. Including project prioritization as part of effective project portfolio management is essential to ensure that The City can allocate its limited resources to best achieve its strategy, including the delivery of projects with the maximum value for The City.

The objective of this audit, as included in the approved 2015 Audit Plan, was to evaluate processes related to the effective prioritization of Transportation capital projects during portfolio planning. In keeping with The City’s priority of being a well run city, project prioritization should be conducted in an objective and transparent manner to support Council’s decision-making process.

Transportation Planning is responsible for the prioritization of Transportation capital projects. The scope of the audit focused on the Mobility Hubs (MH) and Transit Corridors (TC) category of projects in IIM. This category was selected as it represents the greatest total dollar amount of funded and unfunded projects (\$2.2B). In addition, it is a more complex category as it contains two distinct prioritization criteria for project selection. We focused on three projects: the Green Line Program, the Chinook Transit Oriented Development, and the Northeast Blue Line LRT Extension. We reviewed the prioritization process for these projects, including prioritization procedures, criteria, integrity of data used in the prioritization process, and communication to Council.

We noted several elements that have been implemented by Transportation Planning that support effective prioritization, in particular, the development of balanced scorecard of prioritization criteria, and controls to provide assurance over the integrity of prioritization data. Transportation Planning has developed a balanced scorecard of prioritization criteria, which were designed to align prioritization to the City’s long-term transportation objectives. With two exceptions, the criteria align to long-term plans, and we raised a recommendation to further extend the alignment to cover the inclusion of ongoing operating cost (CTP policy requirement), and consideration of defined targets for greenhouse gas emission reductions (2020 SD).

Our review of the data used for project prioritization concluded that controls are in place to provide reasonable assurance over the integrity of the data.

Transportation Planning communicate progress against long-term transportation plans to Council. As part of this communication, Transportation Planning sought agreement for IIM criteria, and communicated the results of the prioritization process in IIM 2013-2022, and IIM 2015-2024. We

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<sup>1</sup> Adopted by Council in September 2009, last amended in December 2014.

<sup>2</sup> A portfolio is a component collection of programs, projects, or operations managed as a group to achieve strategic objectives.

observed in reviewing the communication that funding shown in IIM was supported by anticipated cash flows.

However, there are missing elements of an effective prioritization process. Timing is favourable as there is an opportunity in the next update of IIM for Transportation Planning to implement these additional elements. In particular, defining a portfolio management plan setting out how projects are to be evaluated, prioritized and allocated funding will provide additional objectivity and transparency to the project prioritization process.

A fully defined process of project prioritization is not in place as key elements are missing when compared to the Project Management Institute's Standard for Portfolio Management. The existing prioritization process lacks procedures or guidelines defining how all project portfolio components are to be evaluated and prioritized. We identified projects in the MH and TC category that received high prioritization scores, but were unfunded, and projects which received lower prioritization scores but were partially funded. We also identified that the project prioritization process was not fully and accurately communicated through IIM, as projects were included in IIM as partially funded without having undergone the prioritization process, or had significantly changed in scope since the prioritization process was completed. In addition, we identified that MH and TC projects were prioritized within the MH and TC category using different criteria, while competing for the same funding. To improve objectivity and transparency we recommended that Transportation Planning create a portfolio management plan setting out how projects are identified, prioritized and optimized in the portfolio.

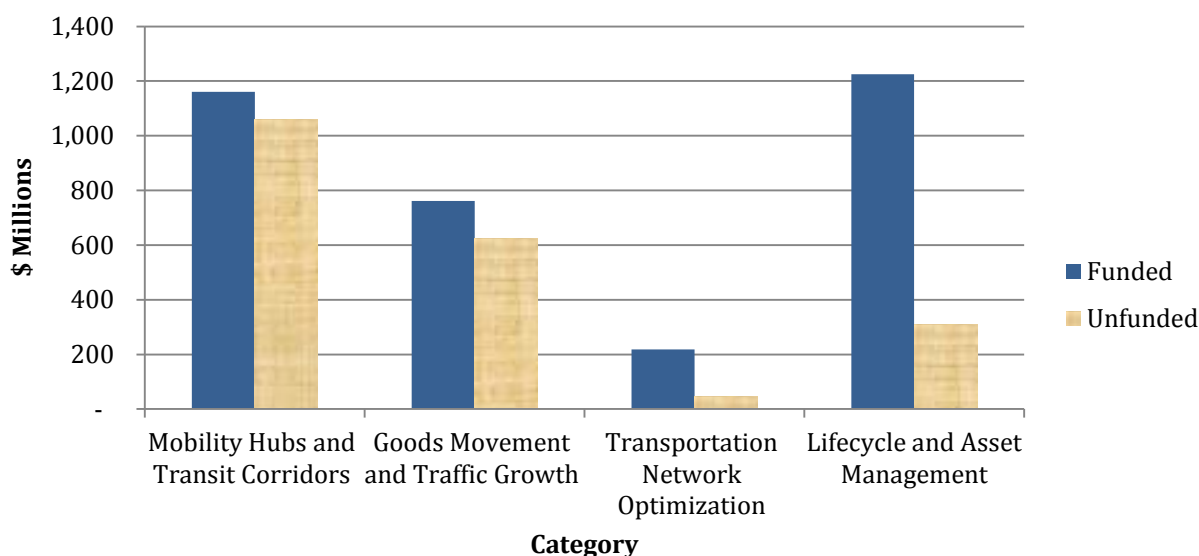
Prioritization criteria for MH and TC projects consider expected benefits, but no documented assessment is completed to evaluate expected return on investment (expected benefit relative to capital cost). We recommended that Transportation Planning include cost benefit analysis in future criteria to support the City's value-for-money priority.

Transportation Planning has agreed to the recommendations and has provided commitment to implement the recommendations in the next update of IIM in 2018. The City Auditor's Office will follow up on all commitments as part of our ongoing recommendation follow-up process. Addressing the recommendations gives Transportation Planning the opportunity to increase the effectiveness of the prioritization process supporting Council's decision-making process and helping the Transportation portfolio of projects support The City's transportation vision.

## 1.0 Background

To support The City's long-term goals and policies, in 2012 the Transportation department adopted Investing in Mobility (IIM 2013-2022), a 10-year capital infrastructure plan that defines the priority and timing of transportation-related capital projects. IIM is intended to help inform Council's capital budget decisions for the four-year business plan and budget cycle (Action Plan), and meet the priority transportation needs of Calgarians.

IIM is designed to be aligned with The City's long-term strategic goals and objectives. In 2014, IIM was updated (IIM 2015-2024) and presented to Council. The document outlines an overall need of \$5.6B<sup>3</sup> over the next 10 years to address all identified projects and programs, with expected available funding of \$3.6B and a gap of \$2B in unfunded projects. IIM is structured around four infrastructure categories as outlined in the graph below:



IIM is the output of prioritization conducted by the Transportation Planning Business Unit. The prioritization is based on a set of evaluation criteria. Different criteria are used for different types of transportation projects to reflect the unique role each type of infrastructure plays in the transportation system. Due to the \$2B funding gap expected over the next 10 years, IIM focuses on funding existing infrastructure (Transportation Network Optimization, and Lifecycle and Asset Management categories) over funding for new infrastructure (Mobility Hubs and Transit Corridors, and Goods Movement and Traffic Growth categories). As a result, the majority of the funding gap relates to Mobility Hubs and Transit Corridors (\$1,058M unfunded) and Goods Movement and Traffic Growth (\$622M unfunded) projects.

<sup>3</sup> This total includes \$240M allocated to annual programs that provide ongoing support for the projects identified in the four infrastructure categories. Supporting programs include functional and pre-engineering studies, and land purchases for future projects.

## 2.0 Audit Objectives, Scope and Approach

### 2.1 Audit Objective

The objective of this audit was to evaluate processes related to the effective prioritization of Transportation capital projects during portfolio planning.

### 2.2 Audit Scope

We examined prioritization processes utilized in IIM 2015-2024. The scope of the audit was the Mobility Hubs and Transit Corridors (MH and TC) category of IIM as it contains the greatest total dollar amount of funded and unfunded projects (\$2.2B), and two distinct prioritization criteria for project selection.

The starting point of our evaluation of the prioritization process was to focus on three projects listed in IIM 2015-2024: the Green Line Program given the significant dollar amount of the program (\$524M funded and \$150M unfunded), the Chinook Transit Oriented Development as it is a Mobility Hubs project with different prioritization criteria than Transit (\$20M funded), and one unfunded project - the Northeast Blue Line LRT Extension (\$151M unfunded). These three projects have a combined funded and unfunded amount of \$845M. In order to determine if the prioritization criteria were consistently applied to the projects in the MH and TC category, we reviewed additional documentation for projects in this category for a total combined funded and unfunded amount of \$1.9B.

### 2.3 Audit Approach

Our audit approach included an evaluation of project prioritization focusing on the following four elements:

1. Defined portfolio management plan including procedures to prioritize projects;
2. Prioritization criteria:
  - a. Alignment to long-term plans; and
  - b. Inclusion of cost-benefit analysis.
3. Integrity of the data used in the prioritization process; and
4. Accuracy of communication with Council, reflecting:
  - a. The prioritization process;
  - b. Progress against long-term plans; and
  - c. Available funds.

We used the Project Management Institute's (PMI) Standard for Portfolio Management as generally recognized benchmark.



## 3.0 Results

### 3.1 Portfolio Management Plan

While elements of effective portfolio management are in place, Transportation Planning has not established a portfolio management plan with formal procedures and guidelines describing how projects are to be evaluated and ranked in order to be included in the portfolio, how funding is to be allocated to projects, how to deal with exceptions to the process, and how to measure projects on a common basis within the same category. This resulted in funding recommendations of projects in IIM that do not align to the prioritization criteria, inclusion of projects that do not undergo an evaluation process, and projects that do not have a common basis for comparison (Section 4.1).

To provide greater transparency to support Council's understanding of the prioritization process and enhanced objectivity, we recommend Transportation Planning create a portfolio management plan defining how projects are evaluated, prioritized, and funding is to be aligned to prioritization (Recommendation 1).

### 3.2 Prioritization Criteria

Transportation Planning has established numerous criteria to evaluate projects and has utilized these criteria as part of the scoring process. Prioritization criteria for TC projects were developed in partnership with the RouteAhead project team and validated by Council. Different factors were considered to ensure a balanced approach to the criteria. Factors include transit travel time, passenger capacity, alignment with the Primary Transit Network, and whether construction coincides with planned lifecycle maintenance. Prioritization criteria for MH projects capture items such as current level of transit activity, preparedness of the Transportation department to invest in an area, and the ability to meet social needs.

Prioritization criteria do not support the optimization of the portfolio through value maximization. While prioritization criteria in IIM focus on alignment of the Transportation portfolio to The City's long-term strategic goals and objectives, no assessment is performed to capture the cost-benefit ratio or projected payback of projects (Section 4.2). Council has established the concept of value for money as part of its "A Well-Run City" priority. The City Manager, through the Leadership Strategic Plan, has also emphasized the need to focus on funding infrastructure based on return on investment. To ensure that funds are allocated to projects with the potential to provide greater return, we recommend Transportation Planning include a cost-benefit analysis as part of the evaluation and prioritization process (Recommendation 2).

Overall, prioritization criteria in IIM align with long-term plans. Although the criteria generally capture the requirements of the Municipal Development Plan (MDP), Calgary Transportation Plan (CTP), and 2020 Sustainability Direction (SD), they do not fully align with these documents (Section 4.3). CTP policy requires that ongoing operating costs be considered as part of the approval process for projects. Operating costs are not captured by the prioritization criteria. In addition, 2020 SD has defined targets for greenhouse gas emission reductions that are not captured by the prioritization criteria. To ensure full alignment with The City's strategic plans, we recommend Transportation Planning revise the prioritization criteria to include operating costs and greenhouse gas emissions (Recommendation 3).

### 3.3 Integrity of Data

We reviewed the data used for MH and TC project evaluation. The data are both qualitative (tend to be more subjective) and quantitative (stated in objective terms). Controls are in place to provide reasonable assurance of the integrity (accuracy and completeness) of the quantitative data. Controls include the use of automatic sensor counters to measure bus ridership and periodic manual counts to validate the data, the use of federal and municipal census information, and the use of data collected through surveys and comparison with information generated by third parties. While PMI good practices for portfolio management state that data used for portfolio components may be qualitative and quantitative, the use of quantitative data allows for a more objective method for evaluating portfolio components. We identified an opportunity to improve the prioritization process by further quantifying data (Recommendation 4).

### 3.4 Communication with Council

Transportation Planning has established a process of communicating Transportation's project prioritization process and progress against long-term plans to help inform Council's capital budget decisions. In 2013, Transportation, in conjunction with Planning, Development and Assessment presented a progress report to Council on the performance of long-term plans (MDP and CTP). This progress report includes 14 core indicators used to track changes on density, land-use mix, multi-modal transportation and environmental sustainability. In addition, since 2012, annual reports have been presented on the progress of 2020 SD targets. Reported targets include objectives led by Transportation that are directly linked to the MDP and CTP (e.g. Expand the Primary Transit Network and Increase Transportation Choice). Transportation has reported to Council on the development of IIM, how the document connects with long-term strategic goals, and has asked for guidance and approval on project prioritization criteria.

Transportation Planning has established controls to ensure the accuracy of the information reported to Council on the availability of funds for projects. Based on our analysis of all projects in the MH and TC category, projects listed as funded in IIM have supporting cash flow documentation. We confirmed cash flow projections back to supporting information on source of funds, including:

- The provincial Basic Municipal Transportation Grant, a regular source of income for The City as it receives funding based on the volume of taxable road-use fuel sold in Alberta;
- The federal Gas Tax Fund, legislated as a permanent source of funding for local public infrastructure projects based on 2011 census data;
- The provincial Municipal Sustainability Initiative (MSI), supported by the Province; and
- The provincial Green Transit Initiative Program (Green Trip) also supported by the Province and earmarked for transit projects.

We would like to thank staff from Transportation Planning and Calgary Transit for their assistance and support throughout this audit.

## 4.0 Observations and Recommendations

### 4.1 Project Prioritization Process

The prioritization of projects in IIM is not supported by a defined portfolio management process or procedure. There is no portfolio management plan defining how portfolio components are ranked and prioritized, resulting in:

1. Project funding not aligned to prioritization criteria;
2. Projects included in IIM without undergoing prioritization or with a different scope to that which was previously prioritized; and
3. Projects in the same category undergoing different prioritization.

A portfolio management plan as defined by the PMI Standard for Portfolio Management is intended to ensure alignment of the prioritized portfolio with the organization's strategic objectives. The development of a portfolio management plan includes formal procedures and guidelines describing the approach and intent of management in identifying and prioritizing portfolio components. Projects are to be evaluated and ranked in order to be included in a portfolio. Resources are to be allocated to portfolio components that will provide the most significant value for the investment and are most strongly aligned to the organizational strategy. Proposed portfolio components are to be organized into relevant organization groups to which a common set of decision filters and criteria may be applied for evaluation, selection, and prioritization. The portfolio components in a group have a common goal and are measured on the same basis.

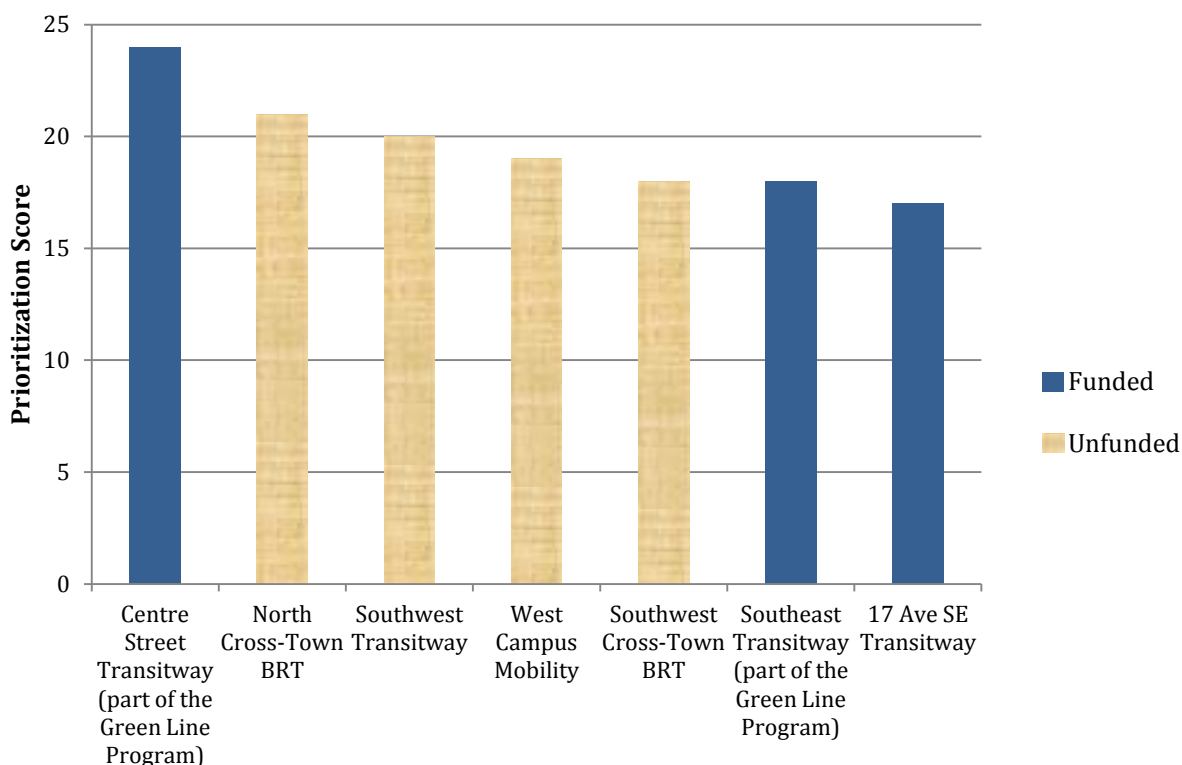
Without a portfolio management plan supporting project prioritization, there is a risk that prioritized projects in the portfolio do not align with The City's long term strategies.

1. Project funding does not align to prioritization criteria.

#### Transit Corridors (TC) Projects

IIM prioritization scores are assigned based on pre-defined criteria designed to align with The City's long-term objectives. TC projects were awarded points based on customer experience, support from land use, and project characteristics. The range for total prioritization points for a project is between a minimum of 2 and a maximum of 30.

In IIM 2013-2022 (Appendix A) TC projects received comparatively higher prioritization scores and no funding, while projects received comparatively lower scores and were partially funded:



When IIM was updated (IIM 2015-2024 – Appendix B), reprioritization and re-evaluation of TC projects was not completed because new funding sources were identified and previously unfunded projects became fully or partially funded without further prioritization.

#### Mobility Hubs (MH) Projects

The following Transit Oriented Development (TOD) projects received comparatively higher prioritization scores but were not included in IIM 2013-2022:

- Anderson TOD, 20 points
- SAIT/North Hill TOD, 19 points

The Chinook TOD project received 18 points. While it remained unfunded (\$20M), it was included in IIM as a high priority.

When IIM was updated (IIM 2015-2024), the Chinook TOD project was included with a funded status for \$20M. The Anderson TOD and SAIT/North Hill TOD projects were not included in IIM even though they had previously received higher prioritization scores.

2. Projects are included in IIM without undergoing prioritization or with a different scope to that which was previously prioritized.

The following is a list of projects included in the MH and TC category in IIM that were not evaluated using prioritization criteria:

- Northeast LRT Station Enhancements – unfunded \$22M
- South LRT Station Enhancements - unfunded \$16M
- Train Cars for LRT (Growth) - funded \$66M, unfunded \$80M
- Transit Fleet Maintenance Facilities - funded \$108M, unfunded \$133M

The Northeast LRT Extension project was included in IIM with a different scope compared to the evaluation process. In the evaluation process the project has an estimated capital cost of \$355M, 7.5KM in length, and is envisioned for a period past 2024. In IIM, the project has an estimated capital cost of \$151M and about half of the length. No re-evaluation was done for this project to account for its reduced scope in IIM.

3. Projects in the same category undergo different prioritization.

MH and TC projects are in the same category of the portfolio and in direct competition for funding allocated to that category, but they are not evaluated on the same basis and therefore cannot be effectively prioritized. MH projects are evaluated using eight criteria components that focus on contribution to mobility choice, development potential and additional benefits. TC projects are evaluated using ten criteria components that focus on land use, customer experience and project characteristics.

### Recommendation 1

Transportation Planning create a portfolio management plan setting out how projects are identified, prioritized and optimized in the portfolio. Prioritization processes should include documentation setting out how projects in every category are to be evaluated, under what circumstances, and how funding is to be aligned to prioritization.

### Management Response

Action Plan	Responsibility
<p>Agree.</p> <p>Administration agrees with formally defining and documenting the current IIM process and looking to align it with the portfolio management plan principles with an aim to improve the overall process.</p> <p>It should be noted, in the case of the Mobility Hub project prioritization that the two higher</p>	<p><u>Lead:</u> Manager, Transportation Strategy Division</p> <p><u>Support:</u> Transportation Department – All Business Units</p> <p><u>Commitment Date:</u></p> <p>a) July 31, 2016</p> <p>b) July 31, 2017</p> <p>c) April 30, 2018</p>

Action Plan	Responsibility
<p>ranking locations (Anderson and SAIT) did not have infrastructure projects identified at the time of the ranking so Chinook TOD was selected as the highest ranking location with identified infrastructure needs. The actions below will clarify this issue going forward.</p> <p>Transportation Strategy (TS) division will lead establishment of a portfolio management plan for IIM for the Transportation Department. Key actions include:</p> <p>a)</p> <ul style="list-style-type: none"> <li>• Educating TS staff on the portfolio management plan process;</li> <li>• Complete a peer review with other North American cities to benchmark the current process; and</li> <li>• Formally define the overall portfolio government management process of capital planning in Transportation and the role of the IIM plan.</li> </ul> <p>b)</p> <ul style="list-style-type: none"> <li>• Refine and formally document standards which identify how projects and programs are identified for inclusion, prioritized (including the application of funding), optimized and approved within IIM;</li> <li>• Formally document the criteria used for the above standards including data sources and quality expectations;</li> <li>• Document the role of prioritization done outside of IIM (e.g. RouteAhead) and how such prioritizations will be considered in the IIM process;</li> <li>• Formally document the linkages to The City's long term strategies in the developed standards and triggers for major updates as strategies are changed (e.g. New Calgary Transportation Plan);</li> <li>• Refine processes for developing portfolios (described as "infrastructure categories") in the plan;</li> <li>• Refine Business Cases to provide necessary information for project</li> </ul>	

Action Plan	Responsibility
<ul style="list-style-type: none"> <li>evaluation; and</li> <li>• Provide public facing materials to describe the above and promote transparency in the process.</li> </ul> <p>c)</p> <ul style="list-style-type: none"> <li>• Deliver an updated version of IIM to the SPC on Transportation and Transit based on the above standards to guide development of Action Plan 2019-2022; and</li> <li>• Establish processes to allow for regular updates to the plan to account for new projects and programs to guide adjustments to Action Plan.</li> </ul>	

## 4.2 Value Maximization

Project prioritization criteria do not include cost-benefit analysis.

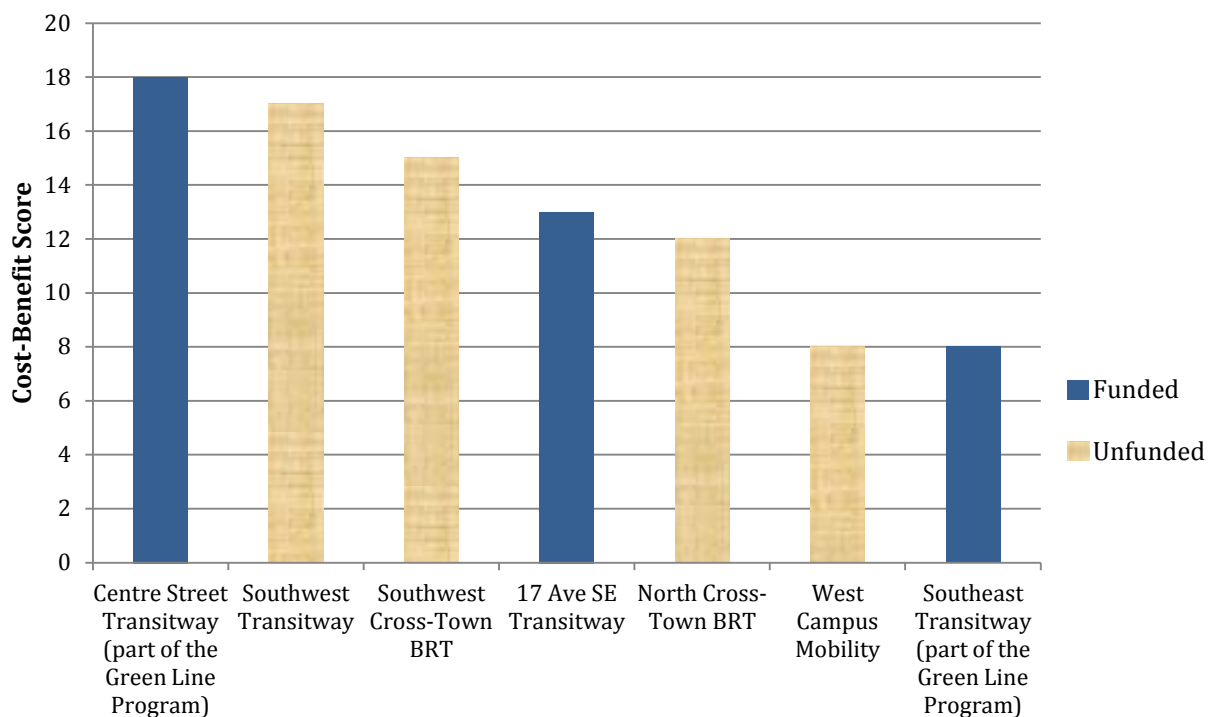
Council has established a strategic action of focusing on value-for-money as part of its “A Well-Run City” priority. Administration, through the Leadership Strategic Plan, has established a priority of strengthening the Corporation’s financial position by creating an infrastructure investment strategy to fund essential infrastructure emphasizing return on municipal investment. We therefore expected prioritization criteria to include evaluation of value for money/return on investment.

Without a more quantitative analysis, there is a risk that prioritized projects in IIM do not provide the most significant value for the investment.

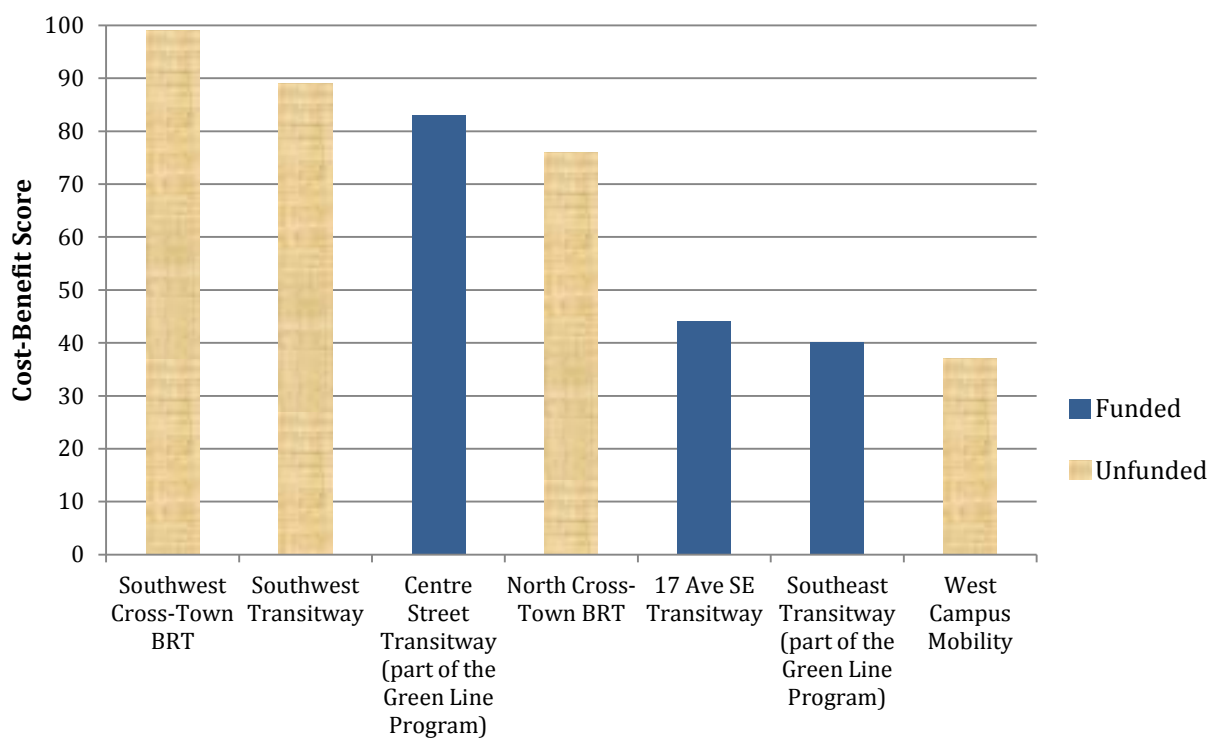
Prioritization criteria for MH and TC projects take the projects’ expected benefits into account (e.g. population and jobs served, increase in passenger capacity, number of intersecting Primary Transit Network routes) with no assessment as to the cost-benefit ratio or payback received from the investment. IIM prioritization criteria do not include an evaluation of the expected benefit relative to the expected capital cost.

From June 2013 to January 2014, TC projects were subjected to two separate cost-benefit analysis requested by Council. There is no evidence that the recommendation to fund projects (IIM 2013-2022 – Appendix A) was based on these analysis. Projects with comparatively higher value were unfunded while projects with comparatively lower value were partially funded:

June 2013 Cost-Benefit Analysis



January 2014 Cost-Benefit Analysis





By the time IIM was updated (IIM 2015-2024 – Appendix B), new funding sources were identified and TC projects became fully or partially funded. No evaluation or prioritization process took place for this update.

MH projects were not subjected to cost-benefit analysis.

IIM emphasizes alignment of the Transportation portfolio with the strategic City documents, and not the maximization of portfolio value.

## Recommendation 2

Transportation Planning revise the IIM evaluation and prioritization process to include a cost-benefit analysis to support Council's value for money priority and Administration's commitment to emphasize return on investment.

## Management Response

Action Plan	Responsibility
Agree.  Administration feels that the current IIM process analyzes both benefits and costs through the ranking process, but agrees that the current format does not explicitly express these as a monetized cost-benefit analysis.  Administration will review current evaluation criteria and establish the parameters to explicitly provide a cost-benefit analysis for all projects, and how the cost-benefit analysis can be included in the overall prioritization process to support Council's value for money priority.	<u>Lead:</u> Manager, Transportation Strategy Division  <u>Support:</u> Transportation Department – All Business Units  <u>Commitment Date:</u> July 31, 2017

## **4.3 Alignment with The City's Strategic Plans**

Prioritization criteria do not fully align with The City's strategic plans.

The Calgary Transportation Plan (CTP) contains policies that are requirements for all projects, without exception. CTP policy states that ongoing operating costs must be considered in the approval process for transportation infrastructure projects. IIM establishes that capital transportation projects are prioritized based on key documents, including 2020 Sustainability Direction (SD). 2020 SD has as one of its targets the reduction of greenhouse gas emissions by 20% by 2020.

Operating costs and greenhouse gas emission targets are not considered in IIM evaluation and prioritization criteria. These criteria were considered in the cost-benefit analysis for TC projects conducted following a separate Council request. By not considering operating costs and greenhouse gas emission targets there is a risk that projects that are less efficient, less

economical, or that do not advance The City's 20% greenhouse gas emission target by 2020 are prioritized.

### Recommendation 3

Transportation Planning revise the prioritization criteria to include operating costs and greenhouse gas emissions to ensure full alignment with The City's strategic plans.

### Management Response

Action Plan	Responsibility
Agree.  Administration will include criteria around greenhouse gas emissions (currently included only at the portfolio level), and operating costs to ensure further alignment with The City's strategic plans. These will be identified in the proposed standard around data criteria in Recommendation 1.	<u>Lead:</u> Manager, Transportation Strategy Division  <u>Support:</u> Transportation Department – All Business Units  <u>Commitment Date:</u> July 31, 2017

## **4.4 Data Quantification**

An opportunity exists to improve prioritization of TC projects by further quantifying data.

Prioritization criteria contain qualitative and quantitative components. Quantitative criteria deal with numbers and are objective. Qualitative criteria deal with descriptions and are of a more subjective nature.

Transportation Planning was able to refine two IIM qualitative criteria into quantitative criteria for the cost-benefit analysis requested by Council. These prioritization criteria in IIM are qualitative:

### Increase Travel Time Advantage

Based on Transit's knowledge of the types of transit services provided. Projects that are expected to increase the travel time advantage for transit customers (such as dedicated rights-of-way including LRT and transitways) receive a higher score.

This criterion was refined for the cost-benefit analysis by using traffic conditions information and quantifying expected time savings in dedicated lanes.

### Contributes to Lifecycle Maintenance and Asset Management

Based on a consultation process with Roads to determine if the construction coincides with Roads construction schedule. Projects that include reconstructing existing road segments score higher under this criterion.

This criterion was quantified for the cost-benefit analysis by including calculated dollar amounts associated with road rehabilitation or lifecycle replacement.

#### Recommendation 4

Transportation Planning replace qualitative prioritization criteria (Increase Travel Time Advantage, and Contributes to Lifecycle Maintenance and Asset Management) with quantitative criteria developed for cost-benefit analysis in future prioritization exercises.

#### Management Response

Action Plan	Responsibility
<p>Agree.</p> <p>Administration will further quantify qualitative criteria where possible, including the above criteria developed during the subsequent cost-benefit analysis conducted on the RouteAhead process. However, there may still be a need to include qualitative data if there is no quantitative equivalent available. This will be addressed in the proposed standard around data criteria in Recommendation 1.</p>	<p><u>Lead:</u> Manager, Transportation Strategy Division</p> <p><u>Support:</u> Transportation Department – All Business Units</p> <p><u>Commitment Date:</u> July 31, 2017</p>

## Appendix A

Extracted from Investing in Mobility 2013-2022. The following table contains the funding status for Transit Corridors projects that underwent the prioritization process according to RouteAhead criteria and Council requested cost-benefit analysis.

Project	Funded (\$M)	Unfunded (\$M)
Centre Street Transitway (part of the Green Line Program)	\$55	\$65
North Cross-Town BRT	\$0	\$50
Southwest Transitway	\$0	\$40
West Campus Mobility	\$0	\$30
Southwest Cross-Town BRT	\$0	\$20
Southeast Transitway (part of the Green Line Program)	\$127	\$515
17 Ave SE Transitway	\$23	\$75

## Appendix B

Extracted from Investing in Mobility 2015-2024. The following table contains the funding status for Transit Corridors projects that underwent the prioritization process according to RouteAhead criteria and Council-requested cost-benefit analysis.

Project	Funded (\$M)	Unfunded (\$M)
Green Line Program (Centre Street & Southeast Transitways combined)	\$524	\$150
North Cross-Town BRT	\$50	\$0
Southwest Transitway	\$40	\$0
West Campus Mobility	\$0	\$30
Southwest Cross-Town BRT	\$20	\$0
17 Ave SE Transitway	\$98	\$0