

Report to Council



Date: August 10, 2020
To: Council
From: City Manager
Subject: Transportation Master Plan Scenarios
Department: Integrated Transportation

Recommendation:

THAT Council receives, for information, the report from the Integrated Transportation Department, dated August 10, 2020, regarding the Transportation Master Plan Scenarios;

AND THAT Council directs staff to continue development of the draft 2040 Transportation Master Plan based on the general direction of Scenario 2.

Purpose:

To provide Council with an overview of three potential transportation scenarios and to receive direction to continue development of the draft 2040 Transportation Master Plan based on Scenario 2

Background:

This report builds off the July 27th report to Council on the Transportation Master Plan scenarios, which provided preliminary information on the transportation scenarios and resulting changes in budget allocations. This report provides a more in-depth discussion of the content of the TMP Scenarios Report (available online at: <https://kelowna.ca/tmp-scenarios-report>), including the scenario development process, scenario content, and scenario comparison analysis.

Local and Global Context: Our world is changing rapidly and global events are shaping our local community, including how we get around, both now and in the future. The TMP is being developed to be resilient and adaptable to these changing trends on the horizon:

- COVID-19: The pandemic has changed the way people travel in the short-term, with rapid increases in working from home, walking and bicycling and decreases in transit ridership. While the situation continues to be uncertain, it is important not to lose sight of the long-term vision established by Imagine Kelowna. While COVID-19 has created short-term impacts, the need to plan for long-term population growth over the next 20 years is still relevant. In addition, the TMP can help provide a roadmap for investment in Kelowna that will be an important part of economic recovery.
- Climate Change: Transportation accounts for over 50 per cent of greenhouse gas emissions in Kelowna. Given the urgency of the climate crisis, the TMP is being designed to support and align

with [Kelowna's Community Climate Action Plan](#) and will deliver on most of the transportation related actions recommended in the Plan. Examples include actions to reduce automobile dependence and improving more sustainable transportation modes, such as walking, bicycling, transit and electric vehicles.

- **Inclusiveness:** Ensuring that the planning, design and operation of our transportation network allows all people to move safely through our community is of vital importance. Council heard through Imagine Kelowna that people want to live in an inclusive city where all people feel safe and respected. Reflecting this, the TMP is being designed to align with [the Community for All Action Plan](#) and staff have applied an equity lens to the option evaluation.

What is a Transportation Master Plan? The Transportation Master Plan (TMP) will be a long-range, system-level transportation plan for the City of Kelowna. It will help to identify the strategic, prioritized investments (policies, programs, and projects) that will be needed over the next 20 years to achieve the community's vision and goals for transportation.

The TMP will help determine the projects that serve as the best investments, balancing the City's goals and financial considerations. It is a process designed to consider the "opportunity cost" of our funds, using data and analysis to compare projects to each other so that only the most cost-effective projects that are aligned with policy and provide high returns on investment are advanced.

As a system-level plan, the TMP will necessarily be at a high-level, and is not intended to provide detailed cross-sections or designs for every roadway in the City. Once the TMP is adopted, projects will continue through the project development process, which in most cases will include more detailed project-level planning and design, prior to construction.

TMP Timeline and Summary of Work to Date: Development of the TMP began in 2018 and is being developed in five phases. This report marks the culmination of Phase 3: Transportation Scenarios.



Scenario development, analysis and selection is an important part of the transportation master

planning process and marks a major milestone in the development of the TMP. Once a scenario is selected, work on Phases 4 and 5 will begin, including development of an implementation strategy and writing the draft plan. A summary of work to date is provided in the full TMP Scenarios Report (available online at: <https://kelowna.ca/tmp-scenarios-report>).

Coordination with other Plans: This report is also part of a coordinated series of reports for the 2040 Official Community Plan (OCP) and 20-Year Servicing Plan. This report, together with similar reports for parks and utilities, will culminate with a comprehensive report for the 20-Year Servicing Plan in the future that balances service levels and costs across all three of these areas to determine the total financial cost to service the 2040 OCP.

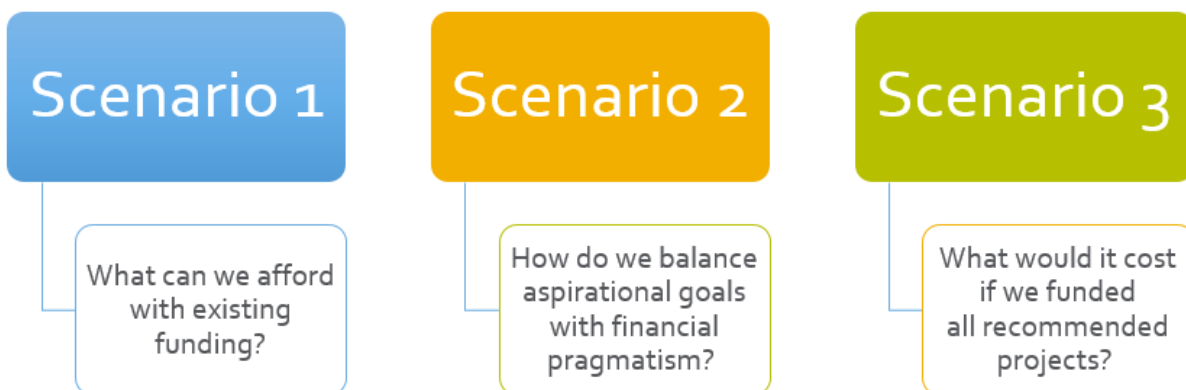
The transportation scenarios presented in this report have also been coordinated with and incorporate recommendations from the ongoing draft Regional Transportation Plan (RTP), draft Regional Bicycling and Trails Master Plan (RBTMP), and the draft Okanagan Gateway Transportation Study (OGTS). In addition, they incorporate options from existing plans, such as the 10-Year Capital Plan, Pedestrian and Bicycle Master Plan, and Community Climate Action Plan, among others.

Most importantly, the transportation scenarios are coordinated with the 2040 OCP. Notably, the OCP's growth strategy has deliberately focused on accommodating 50,000 new residents in a more compact land use form. As growth is focused in our urban centres and core area it will be important to take consistent and complementary action to invest in safe, attractive and convenient transportation infrastructure for walking, biking and transit. Due to the highly coordinated nature of the TMP and OCP, Council's direction for this report will also guide refinement to land use and policies in the draft 2040 OCP, expected to be launched later this year.

Discussion:

The detailed content of the three transportation scenarios and the supporting analysis can be viewed in the full TMP Scenarios Report (available online at: <https://kelowna.ca/tmp-scenarios-report>).

The online report includes an overview of the scenario development process, the content of each scenario, project descriptions, maps, and a comparison of the scenarios in regard to outcomes, service levels, and TMP Goal achievement.



Scenario 1 was designed to answer the question, what can we afford with current funding levels for transportation over the next 20 years? In other words, the budget for transportation would not

increase, aside from basic revenue increases due to population growth. However, Scenario 1 is not business as usual. Using the results of the evaluation process, Scenario 1 was crafted to maximize OCP support and TMP goal achievement within a similar budget as today. However, Scenario 1 would not be able to fund many of the recommended projects and would not fully support the 2040 OCP Growth Scenario.

On the other end of the spectrum, Scenario 3 was designed to answer the question, what would it cost if all the recommended projects over the next 20 years were included in the TMP? It provides a full list of all the projects that performed well in the evaluation process, fully supports the 2040 OCP Growth Scenario, and provides strong progress toward the TMP goals. However, Scenario 3 would require increasing the current transportation budget by approximately 60 per cent and is likely considered cost-prohibitive, as substantial DCC and property tax increases would be needed to fund the investment package.

To balance these two ends of the spectrum, staff prepared Scenario 2, which does a responsible job at supporting the OCP and provides meaningful progress toward the TMP goals. Scenario 2 manages to achieve this while staying within the median budget submitted by the public during the Phase 3 public engagement. Examples of some of the additional projects that could be funded in Scenario 2 include the Clement Avenue extension project, Dilworth ATC (an active transportation connection between the Okanagan Rail Trail and Mission Creek Greenway), multi-modal improvements for Lakeshore and Glenmore Road, and many of the recommendations in the draft Regional Transportation Plan and Okanagan Gateway Study. Scenario 2 does the best job at maximizing benefits while keeping costs reasonable and is the staff recommendation.

	Scenario 1	Scenario 2	Scenario 3
Financial Summary			
Annual Transportation Budget	\$48 M (+0 %)	\$58 M (+20 %)	\$77 M (+ 60 %)
DCC Revenue Increase¹	0.0% / yr	0.3% / yr	4.5% / yr
Average Property Tax Increase	0.0% / yr	0.2% / yr	0.7% / yr
Outcome Summary			
Support of 2040 OCP	minimal	moderate	most
TMP Goal Progress	minimal	moderate	most
Alignment with Regional Transportation Plan & Gateway Study	minimal (many projects not included)	moderate (most projects included)	most (all projects included)
Number of funded projects	71	99	111

¹ Estimated increase in revenue required annually over the next twenty years. Revenue changes are based on the 2030 20-Year Serving Plan & Financing Strategy which is currently under review and is subject to change. Figures are meant to illustrate at a high level the impact on the size of the future 2040 20-Year Servicing Plan & Financing Strategy. Conclusions based on development cost charge rate impacts cannot be drawn from this information.

TMP Goals – Balancing Tradeoffs: While the majority of the twelve TMP Goals show improved outcomes in 2040 compared to today, the two goals “Optimizing Travel Times” and “Protecting the Environment” are anticipated to perform worse compared to today. The reason is that Kelowna’s population is projected to increase 40 per cent by 2040. If all our future residents continue to drive as much as we do today, both traffic congestion and driving-related greenhouse gas emissions will also increase. However, all three scenarios are able to reduce the growth of traffic congestion and greenhouse gas emissions from what would have been otherwise, if we made no investments in transportation between now and 2040. While the end result is still an increase compared to today, the reality is that the scenarios all help manage these important issues, which are challenging to trend downwards in the face of a growing population and thriving economy. The degree to which each scenario manages these important issues is summarized below²:

- *Scenario 1* would result in the most future traffic congestion and greenhouse gas emissions of the three scenarios.
- *Scenario 2* helps to reduce the growth of traffic congestion more than Scenario 1 and manages to provide the same environmental benefit and greenhouse gas reductions as Scenario 3 - at a fraction of the cost. Scenario 2 has been tailored to improve roadway safety and traffic flow without tipping the scales to inducing more auto travel, working to optimize benefits and balance trade-offs across these two important goals.
- *Scenario 3* manages future traffic congestion the best of the three scenarios but performs about the same on protecting the environment and greenhouse gas emissions as Scenario 2. This is because the more than doubling of investment in road projects would likely induce some additional auto travel, counteracting some of the environmental benefits of the increased investment in transit, biking and walking that is also present in Scenario 3.

A full discussion of how the three transportation scenarios perform against each of the twelve TMP Goals is provided in the TMP Scenarios Report (available online at: <https://kelowna.ca/tmp-scenarios-report>).

Conclusion:

Transportation is consistently ranked as one of the most important public issues in the City’s *Citizen Surveys* and is critical for supporting the direction of the 2040 OCP growth scenario.

To help achieve the vision established by Imagine Kelowna it will be necessary to increase investment in the transportation network to shift as many future trips as possible to more sustainable, affordable and healthy modes of transportation. This will be necessary to keep Kelowna moving and maintain our high quality of life. The best way to do this will be by making land use decisions that reduce residential and employment growth in car dependent areas and making corresponding transportation investments to move more people in the same amount of road space and make it easy, convenient and enjoyable for people of all ages and abilities to use space-efficient and sustainable transportation modes.

² Note that mobility pricing has not been included in any of the three scenarios at this time as the tool is highly complex and likely best implemented at the provincial level, at least initially. However, it could be an effective tool at managing both traffic congestion and reducing greenhouse gas emissions over the long term. Further explorations of this strategy are recommended as part of implementing both the Regional Transportation Plan and Kelowna Community Climate Action Plan.

That said, the future is uncertain, and a key part of the Imagine Kelowna vision is to remain financially sound and economically resilient. To balance the community's aspirational goals with financial pragmatism, staff have carefully tailored Scenario 2 to deliver a cost-effective suite of options that will support the 2040 OCP and help achieve the Imagine Kelowna vision and TMP goals, while staying within the budget submitted through the public engagement process.

Next Steps:

Following Council's direction regarding the preferred transportation scenario, Phase 4 of the TMP will begin. This will include development of a phasing and implementation strategy and writing the draft Transportation Master Plan. It is anticipated that the draft plan will be circulated for public engagement later this year.

Internal Circulation:

- Communications
- Development Planning
- Development Services
- Financial Planning
- Financial Services
- Infrastructure Delivery
- Infrastructure Engineering
- Infrastructure Operations
- Parks & Buildings
- Policy and Planning
- Public Works
- Real Estate
- Utility Services

Considerations applicable to this report:

Financial/Budgetary Considerations:

Information set forth in this report contains "forward-looking information," except for historical fact, the information contained constitutes projected financial performance of the corporation with plans and bylaws that have not yet been approved/adopted by Council and is based on what staff believe to be reasonable assumptions. There can be no assurance that forward-looking information will prove to be accurate as actual results and future events, such as the adoption of the 20-Year Servicing Plan & Financing Strategy and 2040 Infrastructure Plan, could differ materially from the anticipated information and assumptions contained in this report. Readers are cautioned not to place undue reliance on forward looking information

Considerations not applicable to this report:

- Legal/Statutory Authority
- Legal/Statutory Procedural Requirements
- External Agency/Public Comments
- Communications Comments

Submitted by: M. VanZerr, Strategic Transportation Planning Manager

Reviewed and Approved by: R. Villarreal, Department Manager, Integrated Transportation

Approved for inclusion:



A. Newcombe, Divisional Director, Infrastructure

Attachment 1 - TMP Scenarios Presentation

cc: Deputy City Manager
Divisional Director, Planning & Development Services
Divisional Director, Corporate Strategic Services
Divisional Director, Infrastructure
Divisional Director, Partnership & Investments
Divisional Director, Financial Services
Infrastructure Operations Department Manager