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REPORT TO TRANSPORTATION COMMITTEE
MEETING OF WEDNESDAY, APRIL 17, 2024

SUBJECT **Mass Transit Modelling and Climate Impacts**

ISSUE SUMMARY

To report back on modelling the climate impacts of mass transit in the Capital Regional District (CRD).

BACKGROUND

At the February 14, 2024, CRD Board meeting, staff were directed:

> *"To report back on modelling expanded mass transit in the CRD and its potential climate impacts."*

BC Transit is in the early stages of developing greenhouse gas (GHG) modelling and anticipates having data by the fiscal year end. This modelling will be at a system level and is not planned to include route level analysis nor forecast the impact of service level change scenarios. As the transit service provider for the region, BC Transit is well positioned with data and domain knowledge to take the lead on this project.

If the desired outcome is to maximize GHG reductions from the transportation sector, it is critical that mass transit investments be accompanied by corresponding changes in land use and active transportation networks to create the greatest impact. This is because the majority of GHG savings from mass transit are indirect and occur due to compact development around stations that support increased housing and employment density and access to amenities. Implementing mass transit to lower density areas with a focus on park and rides would attract more discretionary riders, those who have the option of driving. However, it would achieve a small GHG reduction as only a few car trips would be replaced by transit such as workday commutes, leaving residents car dependent for most trips.

Several local governments around the region are updating their Official Community Plans (OCPs) to intensify land use along transit corridors, in response to new provincial housing legislation. A new regional transportation service, with a mandate for integrated transit and mobility hub planning, would help ensure that transit service investments are fully integrated with long-range corridor planning.

Regional and Strategic Planning will support the BC Transit modelling effort. Once system-level modelling is complete, there would be an opportunity to consider whether additional scenario-based modelling is needed and have further discussion about joint project efforts between CRD and BC Transit staff.

IMPLICATIONS

Alignment with Board & Corporate Priorities
While "Support investments, expansion and equitable access to active and low carbon transportation" is within the 2023-2026 Board priorities, the current focus is on infrastructure within the CRD's control, such as regional trails.

Intergovernmental Implications
Given the dependencies on land use and active transportation, the Transportation Working Group and the Development and Planning Advisory Committee (DAPC) may have an interest in this item. When BC Transit has information to share it can be brought to these groups for comment.

Service Delivery Implications
Regional and Strategic Planning staff can provide technical support to BC Transit. Staff are fully engaged on the Board priority for transportation governance and core service delivery and do not have the capacity at current staffing levels to take a lead on GHG modelling of mass transit.

CONCLUSION

BC Transit is developing climate impact models for transit at a system level. CRD staff will play a supporting role in this work and will ensure that relevant findings are shared with the Transportation Working Group and DPAC when appropriate. Once the modelling is complete, there would be an opportunity to consider whether scenario-based modelling is needed and have further discussion about joint project efforts between CRD and BC Transit staff.

RECOMMENDATION

There is no recommendation. This report is for information only.

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