

City of
Bellevue



Transportation Commission Study Session

DATE: 1/16/2020
TO: Chair Lei Wu and Members of the Transportation Commission
FROM: Jennifer Ewing, Environmental Stewardship Program Manager, 452-6129
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SUBJECT: Environmental Stewardship Plan update

DIRECTION REQUESTED

This material is for information and discussion only at the January 23, 2020 meeting.

Staff will return to the Transportation Commission with recommended strategies and actions for the Environmental Stewardship Plan and will request input and feedback from the Commission at a subsequent study session.

<input type="checkbox"/>	Action
<input checked="" type="checkbox"/>	Discussion
<input checked="" type="checkbox"/>	Information

PROJECT EXECUTIVE SUMMARY

- **Purpose of the Project**

Based on direction from the City Council, staff have initiated the process to update the Environmental Stewardship Plan for adoption by Council. The Environmental Stewardship Plan is an inter-departmental environmental sustainability action plan, coordinated by the Community Development department.

- **Council Direction**

On November 12, 2019 the City Council directed staff to engage with the Boards and Commissions to seek input on the strategies and actions to achieve the goals in the updated Environmental Stewardship Plan.

- **Transportation Commission Role**

On November 12th, Council provided direction for staff to engage with the Boards and Commissions for input on strategies and actions to achieve the goals in the plan. No formal action is needed from the Boards and Commissions during this process.

The ESI Core Team has identified the following policy issues related to the Boards and Commissions outlined below:

- **Transportation Commission:** Strategies for reducing greenhouse gas emissions from transportation sources through supporting cleaner vehicles, promoting cleaner fuels, and reducing per capita vehicle miles traveled. Strategies for mobility are often paired with strategies for land use to support non-motorized mobility and to reduce adverse impacts from transportation sources.
- **Environmental Services Commission:** Strategies for increasing recycling and waste diversion, increasing low impact development and stormwater management best management practices.
- **Parks and Community Services Board:** Tree canopy assessment and forest health assessment and restoration in Bellevue’s parks, and long-term strategies for achieving the parks access goal.
- **Planning Commission:** Relationship between the updated Environmental Stewardship Plan and the Comprehensive Plan, and implementation of tree canopy, low impact development, and green building policies.
- **Bellevue Diversity Advantage Network:** Engaging with diverse communities and understanding any environmental concerns from Bellevue’s historically underserved communities

- **Context of the Project**

Materials at the January 23, 2020 study session are for information only to introduce the Environmental Stewardship Plan and the relevant issues for the Transportation Commission consideration. Staff will return to the Transportation Commission later in the spring with draft strategies for feedback and discussion with the Commission. The Environmental Stewardship Plan includes actions related to mobility and land use, energy, climate change, materials management and waste, and natural systems.

- **Options Being Considered**

Staff are currently assembling a comprehensive list of strategies and actions – some of which are ongoing and some are new. A shorter-list of actions for the plan will be extracted, considering the potential costs and benefits of various strategies. Staff will not present the full list of options for consideration at th January 23, 2020 study session, however, staff will return to the Commission with the shorter list of recommendations and will seek Commission comment and feedback.

BACKGROUND

The Environmental Stewardship Initiative (ESI) formally began in 2007 with a mission to implement continuous change, learning and innovation in practices that drive the City of Bellevue organization and the larger Bellevue community toward achieving the ESI vision. Over the last five years, the ESI’s work has been guided by the 2013-2018 ESI Strategic Plan. This plan contains 57 actions related to greenhouse gas emissions, energy and water, mobility and land use, ecosystems and open space, and materials management and waste, addressing our municipal operations and the community as a whole.

City Council's 2018-2020 Vision Priorities include Priority #11 related to the ESI. It states: "Review the progress of the Environmental Stewardship Initiative and analyze additional steps that the City may wish to take to achieve its environmental goals (e.g. tree canopy)". The 2013-2018 ESI Strategic Plan is being updated in direct response to Priority #11, and the plan going forward is now referred to as the Environmental Stewardship Plan.

Policy Issues

The updated Environmental Stewardship Plan will support the implementation of several policies in the Comprehensive Plan, as outlined below.

Environment Element:

- Promote and invest in energy efficiency and renewable energy resources as an alternative to non-renewable resources. (EN-4)
- Establish an achievable Citywide target and take corrective actions to reduce greenhouse gas emissions such as reducing energy consumption and vehicle emissions and enhancing land use patterns to reduce vehicle dependency. (EN-6)
- Provide regional leadership on environmental issues that extend beyond Bellevue's boundaries and require regional cooperation. (EN-8)
- Work toward a Citywide tree canopy target of at least 40 percent canopy coverage that reflects our "City in a Park" character and maintain an action plan for meeting the target across multiple land use types including right-of way, public lands, and residential and commercial uses. (EN-12)
- Reduce waste, reuse and recycle materials, and dispose of all wastes in a safe and environmentally responsible manner. (EN-14)
- Implement the city-wide use of low impact development techniques and green building practices. (EN-45)
- Promote the use of alternative fuels such as electricity and compressed natural gas and evaluate the use of such fuels for the city's vehicles. (EN-54)

Transportation Element:

- Establish targets to increase the proportion of commute trips by modes other than driving alone. Periodically evaluate progress toward these targets and adjust programs and activities as needed to achieve the goal. (TR-8)
- Continue to ensure that the city as an employer sets a positive example by maintaining a comprehensive and effective transportation demand management program for its employees. (TR-12)
- Ensure that the transportation system infrastructure in Bellevue provides mobility options for all modes, and accommodates the mobility needs of everyone, including underserved populations. (TR-21)
- Develop the transportation system in Bellevue to minimize environmental and neighborhood impacts, while addressing the city's long-term transportation and land use objectives (TR-139)
- Support means to reduce transportation-source greenhouse gas emissions. (TR-140).
- Avoid, minimize or mitigate significant adverse impacts to air quality, noise, light/glare and other elements of the environment in planning and implementing transportation projects. (TR-142)

- Provide curbside space for electric vehicle charging stations where on-street parking is allowed. (TR-143)

In addition to Bellevue policy, the Environmental Stewardship Plan will support the following regional policies:

King County Comprehensive Solid Waste Management Plan, 2019

The Bellevue City Council approved the King County Comprehensive Solid Waste Management Plan in June of 2019, which has since been finalized through its approval by the Department of Ecology. This plan includes countywide waste reduction and recycling goals, including achieving an interim recycling rate of 70% and Zero Waste of Resources with economic value by 2030.

Mayors' Climate Protection Agreement (Res. 7517)

Council agreed in February 2006 to strive to meet or exceed the Kyoto Protocol greenhouse gas emissions reductions targets (7 percent below 1990 levels by 2012) for reducing global warming pollution by taking actions in City operations and similar actions within our community.

King County Cities Climate Collaboration (Res. 8789)

Council joined the King County Cities Climate Collaboration (K4C) on August 4, 2014. The K4C is a partnership among 17 partners and King County, working collaboratively to achieve greenhouse gas emission reductions consistent with Countywide Planning Policies.

King County Countywide Planning Policies (CPP), Environmental Element

Reduce countywide sources of greenhouse gas emissions, compared to a 2007 baseline, by 25 percent by 2020, 50 percent by 2030, and 80 percent by 2050. Assuming 1 percent annual population growth, these targets translate to per capita emissions of approximately 8.5 metric tons of carbon dioxide equivalent (MTCO_{2e}) by 2020, 5 MTCO_{2e}, and 1.5 MTCO_{2e} by 2050 (CPP EN-18).

Environmental Stewardship Plan Update

On November 13, 2018, staff presented to the Council the scope and approach for updating the 2013-2018 ESI Strategic Plan, along with the main focus areas for the plan. These include: climate change; energy; materials management and waste; mobility and land use; and natural systems. The updated Environmental Stewardship Plan will build on the previous plan and existing efforts and will be an action-oriented plan aimed at implementing existing environmental policies. Council agreed with the proposed scope and schedule for the plan update. Through the plan update process, opportunities for new or updated goals and targets have been identified for discussion and direction by the Council.

The following steps outline the City's approach to the update:

Phase 1:

- Review progress with the ESI Strategic Plan Progress report (completed)
- Review the city's environmental goals and update as appropriate (May 20, 2019 Council presentation)
- Develop targets for each goal (November 12, 2019 Council presentation)

Phase 2:

- Analyze best practices and additional actions for consideration in an updated Environmental Stewardship Plan
- Engage with Boards and Commissions for input on possible strategies and actions related to their purview
- Engage with residents, businesses, and key stakeholders on possible actions for the plan

Phase 3:

- Develop a draft Environmental Stewardship Plan for public comment
- Finalize Environmental Stewardship Plan for adoption by the Council

On February 19, 2019 staff presented to the Council on the city’s progress towards achieving environmental goals and implementation of the 2013-2018 ESI Strategic Plan. A key takeaway was that the City of Bellevue’s environmental goals are a mix of short-term and long-term goals, aspirational and achievable goals, measurable and qualitative goals, and goals from other Council adopted plans or strategic plans. In this presentation, Council was supportive of staff performing a review of the City’s environmental goals and returning with options for updated goals and targets. On May 20, 2019, staff presented to the Council on the updated goals and example targets for each focus area of the plan, and on November 12, 2019, staff presented the recommended goals and targets for the plan for both the entire city and for Bellevue’s municipal operations.

To develop the recommended goals and targets for the plan, the staff team reviewed best practices and approaches taken by peer cities, and undertook an initial phase of public outreach with an online survey, community workshop, a workshop with sustainability leaders and stakeholders, and six pop-up events around the city. The team also analyzed progress to date, forecasted trends, and the impact of any regional or statewide policies and efforts.

Based on this research, analysis, and community engagement, staff organized the proposed environmental goals and targets into three categories:

- **Stretch** targets aim to place Bellevue on a slightly more aggressive path than historic and current trends.
- **Bold** targets are more ambitious than Bellevue’s current pathway. They are consistent with many peer cities as well as with best practices.
- **Leading edge** targets are the most ambitious option and would align Bellevue with the most advanced cities around the world acting on climate change and sustainability.

Council Input on the Environmental Stewardship Plan

On February 19, 2019 and May 20, 2019, the Council provided input to staff that they would like the city to take a step forward in its environmental efforts and to lead by example through municipal operations. Council reiterated the importance of setting goals and expressed interest in comparing our commitments to best practices and peer communities.

Staff recommended targets that align with the “Bold” level of ambition, which Council supported. However, Council requested staff to consider revising some of the targets to align with the “Leading Edge” level of ambition.

Recommended Communitywide Goals and Targets

The recommended communitywide goals and targets, are aligned with the “Bold” level of ambition and are summarized below by category. These long-term aspirational targets provide the framework for the Environmental Stewardship Plan, and serve to integrate all of Bellevue’s overarching environmental aspirations and goals into one plan. These recommended targets are considered aspirational, and non-compulsory in nature, and they will be used to track progress over time. The target year is 2050 for communitywide goals, unless otherwise noted. Interim targets will also be developed as part of the action development process.

Also, as staff work to develop the strategies and actions for the plan, there may be an opportunity to adjust targets to achieve more or less ambitious goals based on the types of strategies developed and the level of effort required for implementation.

Climate Change

- **Goal:** Reduce Bellevue’s greenhouse gas emissions and prepare and adapt to ongoing climate change impacts.
- **Target:** Reduce Bellevue’s communitywide greenhouse gas emissions 80 percent by 2050, compared to a 2011 baseline.

Natural Systems

- **Goal:** Improve and preserve the integrity and health of Bellevue’s natural systems and ensure all of Bellevue’s residents have access to Bellevue’s abundant natural resources.
- **Targets:**
 - Achieve a 40 percent citywide tree canopy by 2050, (increasing from a 37% citywide tree canopy in 2017).
 - Ensure that 100 percent¹ of Bellevue’s residents live within 1/3 of a mile to a park, open space, or trail by 2050 (increasing from the current target of 72%).
 - Maintain and improve the health of Bellevue’s streams².

Materials Management and Waste

- **Goal:** Reduce the negative impacts from consumption and waste practices and strive towards Zero Waste of Resources.
- **Target:** Achieve Zero Waste of Resources by 2050.

Mobility & Land Use

- **Goal:** Minimize the environmental impacts of transportation and development in Bellevue by focusing development in growth centers and providing all residents with access to a variety of mobility options.
- **Targets:**

¹ Staff originally recommended that 90 percent of residents live within a 1/3 of a mile of a park, open space, or trail head at the November 12th Council presentation. However, based on direction from Council to consider increasing some targets to “leading edge”, staff now recommend a 100 percent target.

² A target for stream health will be recommended in 2020, as part of the Watershed Management Plan currently under development.

- Achieve a 45 percent commute-trip drive-alone rate for residents and people working in Bellevue by 2050.
- Strive to have 50 percent electric vehicles registered in Bellevue by 2050.
- Reduce per capita vehicle miles travelled (VMT) by 50 percent by 2050, compared to a 2011 baseline.
- Support transit oriented development and strive to achieve 85 percent of jobs and 65 percent of housing located with a ¼ mile of a frequent transit network stop (15-minute headway or less) by 2050.

Energy

- **Goal:** Ensure long-term access to clean energy while reducing the fiscal and environmental impacts of consumption.
- **Target:**
 - Achieve 100 percent renewable energy by 2045.
 - Reduce energy use by 30 percent by 2050, compared to a 2011 baseline.

Staff have also developed a suite of municipal operations goals and targets which generally mirror the communitywide targets, although they have a more aggressive timeline of 2040, following Council’s direction of leading by example with Bellevue’s municipal operations.

INFORMATION

Current Performance

Some additional context and rationale for the Mobility and Land Use goals and targets is provided below. Additional background can be found in Attachment 1: Recommended Goals and Targets.

Goal:

- Minimize the environmental impacts of transportation and development in Bellevue by focusing development in growth centers and providing all residents with access to a variety of mobility options.

Targets:

- *Drive alone rate:* The Comprehensive Plan includes a goal for 2035, to reduce drive-alone commute trips to 55% by 2035 for Bellevue residents, and 60% for people who work in Bellevue. The Environmental Stewardship Plan recommends a 2050 goal of 45% for both residents and people who work in Bellevue. As of the last American Community Survey five year average in 2017, 65.9% of Bellevue residents and 73.4% of Bellevue workers drove alone for their commute.
- *Electric vehicles:* Leading cities and the King County Cities Climate Collaboration (K4C) are establishing aspirational goals around electric vehicles to help encourage a transition to cleaner fuel vehicles. Bellevue is already a leader in the region with electric

vehicles, and there are approximately 2,994 EVs currently registered³ in Bellevue. The Environmental Stewardship Plan recommends a 2050 target of 50% electric vehicles.

- *Per capita VMT*: Through the Washington State Green Transportation legislation, RCW 47.01.44, the State established transportation demand management goals to reduce per capita VMT by 18% by 2020, 30% by 2035, and 50% by 2050. Using this as a precedent, along with the updated K4C Joint Commitment goals, the Environmental Stewardship Plan recommends that Bellevue reduce per capita VMT by 50% by 2050. Between 2011 and 2018, per capita VMT decreased by 3%.
- *Proximity of jobs and housing to transit*: The Environmental Stewardship Plan recommends a target to strive to achieve 85 percent of jobs and 65 percent of housing located within a ¼ mile of a frequent transit network stop (15 minute headway or less) by 2050. This goal is based on the analysis in the Transit Master Plan of the percent of residents and workers with walkable access to frequent transit based on the fully funded scenario. As of 2012, 63% of jobs and 42% of households were within a ¼ mile of frequent transit service (15 minutes);

Staff have outlined several questions for discussion with the Transportation Commission, outlined below?

- Are there any strategies or actions that the Transportation Commission would like to suggest for consideration in the benefit cost analysis and public outreach?
- What does the Transportation Commission consider to be the greatest areas of opportunity for supporting mobility options to help reduce per capita vehicle miles travelled?

STAFF RECOMMENDATION

Staff will provide recommended strategies at the next Transportation Commission study session on this topic.

³ Accessed from Electric Vehicle Population Map, data.wa.gov on 1/14/2019:
<https://data.wa.gov/Demographics/Electric-Vehicle-Population-Map-by-ZIP-Code/bhmw-igtj>

NEXT STEPS

Staff are beginning the process of engaging with Boards and Commissions. At the same time, staff is analyzing possible strategies to achieve Bellevue's environmental goals. Staff will refine the list of possible strategies and perform a cost/benefit analysis of a shorter list of strategies, to identify actions with the greatest potential environmental benefit. In parallel to this analysis, staff will initiate a second round of public outreach and engagement with residents, stakeholders, and the business community to gauge support for various strategies.

Staff will return to the Boards and Commissions later in the spring with the results of this analysis and outreach, to request input from the Boards and Commissions on the short-listed actions for the plan. The input from the Boards and Commissions will be summarized as part of the outreach and engagement process and incorporated into the plan for transmittal to the City Council in July, 2020.

ATTACHMENTS

1. Recommended Goals and Targets Report
2. Environmental Stewardship Plan Update Phase 1 Outreach Summary

REFERENCE MATERIALS

1. [2013-2018 ESI Strategic Plan](#)
2. [ESI Strategic Plan Progress Report](#)