NELSON NYGAARD

MEMORANDUM

To: Mark Epstein and Chris Wierzbicki, City of Bainbridge Island

From: Dru van Hengel, Jennifer Wieland and Lauren Squires, Nelson\Nygaard

Date: October 2, 2019

Subject: Sustainable Transportation Plan: Best Practices to Guide Scope Development
Task 3: Best Practices Research – Summary of Findings

This memo summarizes the findings of the best practices research completed by Nelson\Nygaard to support the City of Bainbridge Island in developing a revised scope and budget for a Sustainable Transportation Plan. This research included a literature review and interviews with industry experts to identify best practices in sustainable transportation planning.

Appended: Literature review matrix, Audio files of interviews with industry experts.

Plans Reviewed

In collaboration with City of Bainbridge Island staff, Nelson\Nygaard selected and reviewed four agencies' sustainable transportation plans to understand how other communities approach sustainable transportation goals and outcomes similar to those articulated by Bainbridge Island City Council. The plans represent a range of approaches intended to create this sustainable mobility paradigm shift. From Western Washington peer, Bellingham, WA to North American sustainable transportation leader Vancouver, B.C. to San Mateo, CA, a suburban Bay Area peer anchored by regional commuter hubs (CalTrain stations) to the East Coast rural Pioneer Valley region home to several universities, these nationally-recognized, award-winning plans present approaches and best practices in sustainable transportation planning applicable on Bainbridge Island. The following goals for Bainbridge Island's Sustainable Transportation Plan guided the selection of plans for review:

- *Goal 1:* Present a unifying vision for the future of transportation on Bainbridge Island
- *Goal 2:* Create a holistic, inclusive definition of sustainable mobility with suite of practical solutions
- *Goal 3:* Integrate the island's transportation and land use visions
- *Goal 4:* Complete missing links and make first/last mile connections
- *Goal 5:* Build a toolbox of facility types and solutions tailored to people of all ages and abilities and the island's unique contexts
- *Goal 6:* Demonstrate transparent decision-making based on community values, with a clear link to implementation planning, investments, and subsequent funding requests

An overview of the plans follows:

- **Bellingham (WA) Bicycle and Pedestrian Master Plans (2014, 2012) and Complete Networks Ordinance (2016)**

  Bellingham is a mid-sized western Washington city that uses a variety of planning and policy tools to advance a multimodal planning approach. Bellingham integrates land use

and transportation planning to achieve its mode shift goals and level of service standards for walking, bicycling, and transit facilities. Bellingham's Bicycle and Pedestrian Master Plans establish primary walking and bicycling networks with prioritized improvements. Bellingham's nationally-recognized "Complete Networks" ordinance recognizes that everyone using the street needs a safe and complete network suited to its mode-specific needs. Bellingham's "Complete Networks" ordinance establishes a modal hierarchy that prioritizes the safety and needs of the most vulnerable: people walking and bicycling.

- Complete Networks Ordinance, City of Bellingham (2016)
- Bicycle Master Plan, City of Bellingham (2014)
- Pedestrian Master Plan, City of Bellingham (2012)

- **Vancouver (BC) *Transportation 2040* (2012)**

  Transportation 2040 is the City of Vancouver's long-term strategic plan to guide transportation and land use decisions and investments in the years ahead. This award-winning plan sets specific, measurable targets for mode share, vehicle miles traveled (VMT) reduction, and safety. While the City of Vancouver is much larger than Bainbridge Island, *Transportation 2040*'s goals, actions, and strategies serve as a model among North American cities for sustainable transportation planning. *Transportation 2040* is aligned with Greenest City 2020 Action Plan to achieve the goals of eliminating dependence on fossil fuels, making the majority of trips by sustainable modes, and achieving the cleanest air of any city in the world.

  - *Transportation 2040*, City of Vancouver (October 2012)

- **San Mateo (CA) *Sustainable Streets* (2015)**

  Sustainable Streets presents a transformational vision for the future of San Mateo's transportation network with the goal to create more vibrant, sustainable, comfortable, safe, and economically productive streets. A suburban community located 20 miles south of San Francisco, Caltrain operates three stations within San Mateo that serve as multimodal commuter hubs. *Sustainable Streets* presents a street-design-focused approach to implement green and complete streets, including design guidelines and principles. The implementation plan recommends a mix of corridor capital improvements, policy changes, program recommendations, and a Sustainable Streets fee to fund improvements.

  - *Sustainable Streets*, City of San Mateo (February 2015)

- **Pioneer Valley (MA) Sustainable Transportation Element Plan (2014)**

  The Pioneer Valley region of western Massachusetts encompasses 43 towns in Hampden and Hampshire counties, which are home to Springfield, MA and the "Five Colleges" (Amherst, Hampshire, Mt. Holyoke, Smith Colleges, and the University of Amherst). The Pioneer Valley Planning Commission developed the Sustainable Transportation Element to identify how the region will integrate sustainability into transportation initiatives to achieve greenhouse gas emissions reductions and energy efficiency. This plan identifies catalytic projects and partnerships across the region to advance sustainable transportation and cross-cutting strategies to achieve multiple regional goals with targeted investments.

  - *Sustainable Transportation Element Plan*, Pioneer Valley Planning Commission, (February 2014)

Industry Experts and Practitioners Interviewed

The literature review was supported by interviews with four industry experts, including academics and local practitioners. The purpose of the interviews was to understand industry experts' experience in sustainable transportation planning both conducting and applying meaningful technical analysis, overcoming challenges in the planning process, and funding and implementing plan recommendations. Interviewees included:

- **Chris Comeau, Transportation Planner, Public Works Engineering, City of Bellingham, WA**

  Chris Comeau has worked for the City of Bellingham for nineteen years leading citywide multimodal transportation planning. He has overseen the development of Bellingham's Multimodal Concurrency Program as well as the development and implementation of Bellingham's bicycle and pedestrian master plans. Since the early-2000s, Chris has been a thought leader and strategic implementer of Complete Streets principles at the local level.

- **Ken Chin and Julia Klein, Transportation Planners, Public Works Department, City of San Mateo, CA**

  While at the City of San Mateo, Ken Chin led the development of San Mateo's *Sustainable Streets* plan that included a robust series of community conversations called the *Taste and Talk* series with the goal to build a broad understanding of sustainable mobility among the San Mateo community. Ken also led the development and implementation of San Mateo's bicycle and pedestrian master plans. Julia Klein is leading San Mateo's General Plan Update which will integrate *Sustainable Streets* into citywide policy as the circulation element of the General Plan.

- **Madeline Brozen, Associate Director, UCLA Institute of Transportation Studies**

  A transportation planner by training, Madeline Brozen has spent the last eight years at UCLA leading the Complete Streets Initiative to achieve more livable and complete streets in the Los Angeles region. Madeline is Assistant Director of the Lewis Center for Regional Policy Studies and the Institute of Transportation where she has focused her research on measurement approaches and performances metrics for bicycling, walking and transportation access. Recently, Madeline has completed research on how different groups of people including older adults, non-native English speakers, and women use the transportation system. She orients her research to be directly applicable by municipalities in creating solutions that address barriers to transportation for these groups. Madeline's recently completed LA Metro research includes *Understanding How Women Travel*.

- **Prof. David Blum, Affiliate Instructor, Urban Design and Planning, University of Washington**

  Professor David Blum is an affiliate instructor at the University of Washington's College of Built Environments specializing in land use planning, affordable housing and real estate development. A Mercer Island resident, Professor Blum has deep planning and development experience in the Central Puget Sound. He has worked at King County Metro managing transit-oriented development projects as well as at the Low Income Housing Institute developing affordable housing. Professor Blum recently led undergraduate students in applied coursework for the City of Bainbridge Island as well as

hosted international delegations to study Bainbridge's ferry terminal and connectivity to downtown Winslow.

Summary of Findings

Across the literature review of award-winning municipal sustainable transportation plans and interviews with industry experts from nationally-recognized academics to local planners working in peer communities to Bainbridge Island, several key themes, areas of focus, and lessons learned emerged as relevant and applicable to Bainbridge Island's Sustainable Transportation Plan. The combination of plan review and expert interviews revealed the following common themes:

- **Unifying vision and goals focused to achieve targets**

  Bainbridge Island's intent for the Sustainable Transportation Plan is to establish a vision for the future of transportation on the island accompanied by specific desired outcomes. All sustainable transportation plans reviewed are grounded in a set of goals accompanied by targets and performance measures to track progress over time. The triple bottom line sustainability framework that focuses on social equity, environment and economy is commonly used by plans to articulate its vision of a sustainable mobility future.

  Common goals and accompanying targets include:

  - Safety: Eliminate traffic-related fatalities and injuries
  - Mode Share: Increase trips made on foot, bike, or transit
  - Distance Driven: Reduce single occupant vehicle commuting, reduce average distance driven, or reduce overall vehicle miles traveled (VMT)
  - Climate Action and Emissions Reduction: GHG emissions reduction or eliminating dependence on fossil fuels
  - Livability: Improving the ability for people to meet their daily needs with short, sustainable trips and increasing access to opportunity, especially for historically underserved populations

- **Dynamic and inclusive engagement**

  Extensive community engagement was a critical component of each of the sustainable transportation plans reviewed. The engagement continued throughout the plan development process, usually spanning one year. Engagement best practice includes a mix of strategies to pique community interest and broaden awareness, include underrepresented voices, and offer a variety of feedback mediums. Engagement must include a variety of touch points throughout the plan development process from quick interactions at established community events or an online survey to deeper ongoing engagement with focus groups or community advisory committees.

  The City of San Mateo cited its ***Taste and Talk*** **series as a successful engagement strategy that generated sustained community support** for its *Sustainable Streets* plan that continued long after the plan was adopted. San Mateo staff convened the community each month for a year for TED Talk-style gatherings to hear from sustainable mobility industry experts. This educational outreach generated momentum and interest in the plan while establishing a solid community base of knowledge around sustainable transportation. The City of San Mateo also engaged a Citizen's Advisory Committee throughout plan development, shared plan information at established community

meetings, and deployed a survey asking community members how they would spend a fictious $100 among a broad range of transportation priorities.

Madeline Brozen recommended **focus groups as an engagement strategy** for Bainbridge to gain a deeper understanding of how Islanders travel apart from peak commute to and from the ferry. **Off-peak travel accounts for most of people's daily trips,** however mobility options and services are often oriented around peak commute times. Additionally, census-based household travel surveys only capture work commutes at a census-block-level scale. To gain fine-grained data on how people travel in Bainbridge's unique context, Brozen recommended targeting segments of the population representing those with specific travel needs and preferences such as women with children, older adults, youth, and people with low incomes for focus groups. Hearing directly from these populations would help the city understand what types of trips are commonly made on the island and how to eliminate barriers, or tailor improvements or services to meet these mobility needs.

- **Ground solutions in deep understanding of existing conditions**

  Sustainable transportation plan recommendations are grounded in an in-depth understanding of how people currently travel and how existing mobility networks support those travel patterns. Inventory of existing networks, infrastructure state of repair, and collision patterns in the current network inform where improvements may be needed. Analysis of demographic characteristics, travel patterns, and anticipated growth inform the changing mobility needs in a community. Safety and equity analyses inform where certain populations may be experiencing inequitable outcomes or disproportionate burdens in the mobility system.

  Key existing conditions research areas include:

  - Review of existing plans, standards, and concurrent projects
  - Sidewalk and crossing inventory
  - On- and off-street bicycle network and trail system inventory
  - Analysis of travel patterns and commute trips by mode
  - Transit ridership analysis
  - Demographic and population analysis
  - Growth projections (population and mode share)
  - Systemic safety analysis: collision patterns and analysis of roadway factors commonly present in collisions involving people walking and bicycling
  - Pedestrian and bicycle level of traffic stress analysis
  - Equity analysis to understand where low-income populations, youth and older adults, and communities of color may experience mobility barriers or disproportionate burden

  Professor David Blum recommended Bainbridge Island's Sustainable Transportation Plan begin with the **visualization of the *Island-wide Transportation Plan (IWTP)* forecasts and growth scenarios** to inform community conversations on the island's mobility future. The depth of analysis captured by the IWTP could be further expanded upon to frame the needs for investment to meet future demand establishing an overall problem statement for the Sustainable Transportation Plan to address. A

Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis of the IWTP could inform areas for further study to be completed by the Sustainable Transportation Plan.

- **Integrate land use and transportation**

  Long-term strategic visions of a community's sustainable mobility future must guide both land use and transportation decisions. Land use decisions support shorter trips and sustainable transportation choices. Madeline Brozen cited the foundational determinants of transportation behavior as **access to destinations and cost**. Clusters of destinations accessible by sustainable short trips create environments where walking, bicycling, and taking transit are the easy choice. She recommends Bainbridge Island inventory the most likely destinations that islanders would access by walking and cluster other destinations in proximity and orient the urban design of these locations for optimal pedestrian comfort and convenience. Cost, whether it be in time or money, influences transportation behavior. Sustainable choices must be both time and cost competitive. If driving is always the cheapest and fastest option, people will continue to drive.

  The City of Bellingham's **Multimodal Concurrency Program** is linked to the city's infill land use strategy highlighting the success of an integrated sustainable transportation and land use approach. The varying land use contexts throughout the city inform the viability of different modes of transportation in different places. Non-motorized, and transit improvements are among the suite of mitigations and improvements required in urban villages to offset the impacts of development. Bellingham's pedestrian and bicycle plan projects qualify as mitigations thus energizing plan implementation.

- **Establish complete networks for each mode and accommodate the most vulnerable users first**

  Every street can't accommodate every mode. Each mode needs a complete, connected network. Achieving a level of quality for sustainable travel modes (walking, bicycling and transit) is based on network completeness and level of comfort for people of all ages and abilities. With limited right-of-way, integrated network planning to understand what streets, corridors or connections are most important for each mode helps cities negotiate trade-offs and resolve competing priorities. Vancouver, San Mateo and Bellingham's sustainable transportation plans include modal hierarchies to guide transportation decisions and prioritize the needs of people walking and bicycling first. Vancouver's *Transportation 2040* includes priority polices to improve high-crash locations, areas with high walking potential and close critical gaps in the bicycle network first as well as following policy statement to create complete networks.

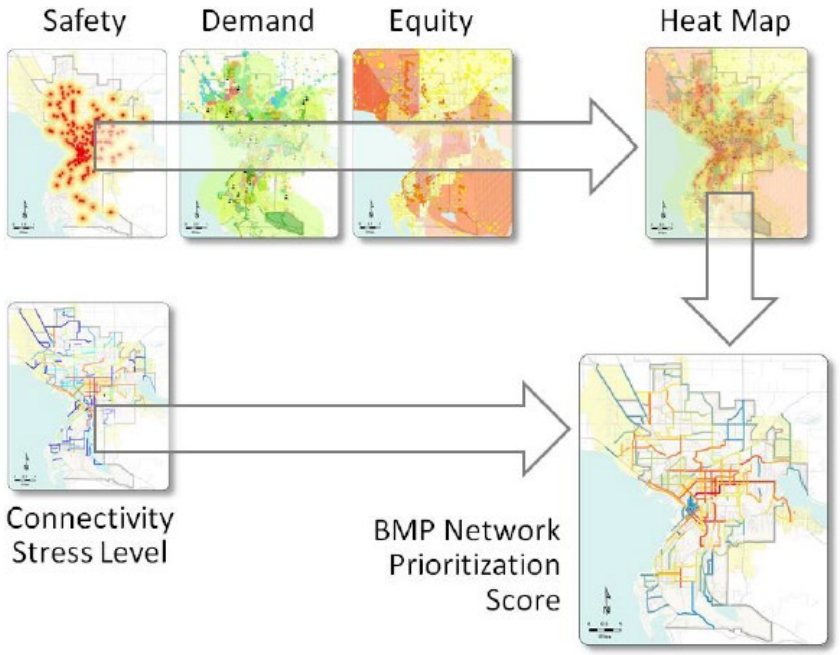
  > *"In highly constrained urban environments, it is not always possible to provide the ideal facilities for all users' needs, and compromises sometimes have to be made, including accommodating some users on parallel streets.[1]"*

[1] City of Vancouver, *Transportation 2040*: https://vancouver.ca/files/cov/Transportation_2040_Plan_as_adopted_by_Council.pdf

- **Priority networks focus high-value investments**

  A key outcome of Bainbridge Island's Sustainable Transportation Plan is a clear, transparent set of priorities comprised of capital projects and programs supported by the community for implementation. Existing conditions analyses highlight gaps in the current mobility network, areas of travel demand, and safety hot spots. With the goal to create complete, comfortable networks for all sustainable travel modes, overlaying gaps in the current network with areas of highest demand and need highlight priority projects to achieve plan goals. For example, the City of Bellingham arrived at a high priority network for bikeway investments based on safety, demand, equity, and connectivity level of stress analysis. This prioritization framework elevates gaps in the network aligned with areas of high demand, safety need, equity concern, and level of stress for high priority implementation.

Figure 1 City of Bellingham, Bicycle Master Plan: Project Prioritization Process



Source: City of Bellingham (https://www.cob.org/services/planning/transportation/Pages/bike-master-planning.aspx)

- **Facility design guidance for people of all ages and abilities**

  Bainbridge Island's sustainable transportation plan will support sustainable mobility with a toolbox of facility types tailored to people of all ages and abilities. Sustainable transportation plans often include local design guidance and specifications for walking and bicycling facilities best-suited for people with varying levels of comfort from the interested and confident cyclist to the strong, enthusiastic cyclist, for example. Facility selection is supported by level of traffic stress analyses completed during assessment of the existing mobility network.

  Madeline Brozen highlighted that different populations have varying levels of sensitivity to environmental factors when making a travel mode choice. Brozen cited her research confirming that women are highly sensitive to lighting levels and presence of sidewalk

when making a choice to walk. Older adults are sensitive to distances, which is particularly important when siting bus stops near destinations to be accessed by seniors. **Consideration of the populations likely to use sustainable transportation facilities can inform design treatments to eliminate barriers.**

Documenting local design guidance in a jurisdiction-specific plan establishes a locally preferred standard and tailors national guidelines to the local context. Facility design guidelines establish a common baseline for all implementing partners from planners to public works engineers to maintenance staff.

- **Recommendations include a mix of projects, programs, partnerships, and policy change**

  All sustainable transportation plans reviewed included a mix of recommendations and priority strategies ranging from capital investments (sidewalks, bikeway connections, and intersection improvements) to programs to support sustainable behavior change (education, enforcement, and encouragement) to strategies partnerships and policies to guide implementation. For capital investments in bicycling, walking, and transit networks, many plans develop high-level cost estimates for the highest priority, short-term projects to support funding and implementation. Common programmatic and policy recommendations include:

  – Vision Zero policy and supportive programs
  – Safe Routes to School
  – Safety education and encouragement programs including Open Streets events and marketing campaigns to support sustainable travel behavior change
  – Parking pricing, residential parking permit program and elimination of parking minimums
  – Transportation demand management program
  – Transit investments including speed and reliability improvements, first/last mile transit access program, and formal partnerships with local transit agencies for implementation

- **Delivering the plan: Focus on the first five years**

  Supported by a robust prioritization framework based on plan goals and priority outcomes, sustainable transportation plans quantify the cost to implement high-priority projects and set out an action plan for implementation. Many plans include a robust inventory of partners and potential local, state, federal and grant-based funding sources for implementation. Dedicated local funding can take a variety of forms from ballot measures to sustained allocation of General Fund dollars or establishment of a specialized fee, benefit district, or city fund to support plan implementation.

  The City of Bellingham created a **Transportation Benefit District** (TBD) funded by sales tax revenue that generates annual funding for non-motorized improvements. Bellingham's TBD generates nearly $5 million annually into the city's transportation budget, which has supported the implementation of nearly half of the bike master plan recommendations since plan adoption. The City of San Mateo proposed a Sustainable Streets Fee to replace its established Transportation Improvement Fee program with the goal of establishing a more flexible funding source for a wider array of projects.

Additionally, integrating plan recommendations into routine maintenance and repaving projects. Integrated project development can embed walking, bicycling, and transit-supportive elements in other transportation capital projects and can result in considerable ongoing progress toward plan implementation.

The biggest lesson learned for the City of San Mateo was the limitation on plan implementation due to the Caltrans funding for the planning effort. Caltrans restricted funding of environmental assessment of the *Sustainable Streets* plan that has severely limited the implementation of plan recommendations, including the Sustainable Streets fee.

Conclusion: Best Practices to Inform Scope Development

Upon Council review and discussion of best practices findings, Nelson\Nygaard will integrate pertinent elements and lessons learned from best practices research into a revised scope for the Bainbridge Island Sustainable Transportation Plan.

Pertinent scope elements and key deliverables for discussion and confirmation include:

Public Outreach and Stakeholder Engagement

- Pre-plan engagement: Speaker series featuring sustainable transportation experts
- Develop a Public Involvement Plan to outline engagement strategies during five phase of plan development:
    1. Developing Vision, Values and Priorities
    2. Articulating Projects and Programs
    3. Prioritizing and Phasing Recommendations
    4. Plan Review
    5. Plan Implementation
- Focused stakeholder engagement including Technical and Public Advisory Committees and City Council engagement

Existing Conditions: Bainbridge Island Mobility Atlas

- Review existing plans and policies
- Current and Planned Networks: Walk, Bike, Transit

  Key deliverable: Gap Analysis
- Safety Analysis

  Key deliverable: High-crash corridor map to inform priority safety improvements
- Current and Future Land Use Analysis

  Key deliverable: Travel Demand Index
- Demographic Analysis

  Key deliverable: Equity Index
- Public Health Analysis

  Key deliverable: Health Index

Vision and Values

- Setting the Plan Vision, Goals, and Objectives to guide the project

Key deliverable: Plan Vision, Values, and Objectives

Project Identification

- Walking
- Bicycling
- Transit
- Goods Delivery
- First/Last Mile Connections

Key deliverable: Priority Networks and Needs

Prioritization Framework and Tools to Support Implementation

- Evaluation Metrics
- Facility Decision Matrix and Design Guidelines
- Mobility Pilot Standards

Key deliverable: Project Prioritization Framework, Prioritized Project Lis

Programs and Policy Recommendations

Implementation Plan

- Funding Sources Inventory
- Financial Plan

Key deliverable: Near-term Action Plan

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Plan Overview	Complete Networks Ordinance, City of Bellingham (2016) The ordinance provides guidance for City of Bellingham planners and engineers in balancing the safety and mobility needs of all groups with priority emphasis on the most vulnerable people. Guides citywide transportation planning to achieve mode shift goals and modal network build out on all arterial streets. Bicycle Master Plan, City of Bellingham (2014) Identifies steps to creating a safe, connected network of bicycle facilities and supportive programs, including network, policy and program recommendations, prioritized recommendations, design guidance, and areas of further study. Pedestrian Master Plan, City of Bellingham (2012) Identifies steps toward creating a safe, well-connected and attractive pedestrian environment, including policy and program recommendations, design guidance, priority pedestrian network, implementation projects, and accompanying funding plan.	*Transportation 2040*, City of Vancouver (October 2012) A long-term strategic plan that will guide transportation and land use decisions and public investments supporting a multimodal city with more transportation choices for people living in, working in, and visiting Vancouver.	*Sustainable Streets*, City of San Mateo (February 2015) *Sustainable Streets* articulates the future vision for San Mateo's streets and transportation network, covering both policies and processes. The plan outlines how to use right-of-way to serve everyone (present and future), lays out guidelines and policies for implementation and identifies funding sources. This plan laid the groundwork for the City's General Plan Circulation Element. Design Guidelines provide guidance to planners, engineers, and developers.	*Sustainable Transportation Element Plan*, Pioneer Valley Planning Commission (February 2014) Identifies existing sustainable transportation initiatives and develops strategies to achieve greenhouse gas emission reductions and energy efficiency. Developed from the Regional Transportation Plan (RTP) for 2040 published in 2015 and updated every 4 years.

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Plan Elements	**Complete Networks Ordinance** ▪ Application to all city transportation improvement projects ▪ Implementation of mode-specific networks and application of modal hierarchy ▪ Special consideration for freight vehicles ▪ Exceptions in extraordinary circumstances ▪ All sources of transportation funding used to implement Complete Networks **Bike Master Plan Elements:** ▪ Vision and Goals ▪ Existing Facilities ▪ Policies and Actions ▪ Bicycle Network Recommendations: Opportunities, Constraints, Recommended Network, and Project Prioritization ▪ Design and Maintenance Guidelines ▪ Program Recommendations ▪ Implementation ▪ Appendices: Public Engagement, Prioritized Projects List, Further Study Needed, Cost Calculator, Design Considerations, Wayfinding, Crash Data Map, Bike Counts **Pedestrian Master Plan Elements:** ▪ Goals ▪ Policy Recommendations ▪ Pedestrian Network Recommendations: Primary Network, Project Development Framework, Projects, Feasibility and Safety Studies, Proposed Citywide Projects ▪ Design Guidance ▪ Program Recommendations ▪ Implementation: Planning-Level Costs, Funding Sources, Performance Measures ▪ Appendices: Community Survey Summary, Pedestrian Needs Analysis, Project List, Summary of Existing Pedestrian Policies	**Elements:** ▪ Goals, Trends, Targets ▪ Directions (high-level policies and specific actions) – Land Use – Walking – Cycling – Transit – Motor Vehicles – Goods, Services, and Emergency Response ▪ Programs ▪ Delivering the Plan: Implementation, Tracking Progress, Emerging Areas of Focus	**Elements:** ▪ Vision, Goals, and Objectives ▪ Design Guidelines ▪ Implementation Plan: Recommended Projects, Programs, Metrics, and Funding Sources **Appendices:** ▪ Complete Streets Best Practices ▪ Existing Conditions Review ▪ Sustainable Streets Benefits and Costs ▪ Street Classification System and Street Width Review ▪ Level of Service and Multimodal Analysis ▪ Community Survey ▪ Recommended Projects ▪ Transportation Demand Management (TDM) Plan ▪ Funding Plan	**Elements:** ▪ Vision ▪ Passenger Transportation: Transit, Rideshare, and Rail ▪ Non-Motorized Transportation: Bike/Ped Facilities ▪ Air Quality ▪ Environmental Justice ▪ Climate Change ▪ Sustainability ▪ Transit-Oriented Development (TOD) Planning Analysis ▪ Recommended Strategies

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Vision, Goals, and Targets	**Complete Networks Ordinance** Bellingham Public Works plans, designs, and constructs all new and reconstructed city transportation improvement projects to provide appropriate accommodation for people of all ages and physical abilities on pedestrian, bicycle, transit, freight, and automobile networks. Bellingham Public Works has incorporated all principles of the national Complete Streets movement, *established citywide mode-specific transportation networks*, and adopted a *transportation modal hierarchy* as part of the evolution to Complete Networks. Complete Networks may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities over time. It is the city's intent that *all sources of transportation funding* be drawn upon to implement Complete Networks. **Bicycle Master Plan Vision** Bicyclists of all ages and abilities have access to a safe, well-connected network linking all areas of Bellingham. *Goals:* Safety, Connectivity, Equity, Livability, Public and Environmental Health, Transportation Choices, Education, Mode Shift, Economy **Pedestrian Master Plan Vision** The residents of Bellingham envision a community that invites people of all ages and abilities to walk for enjoyment, exercise, and daily transportation by providing a safe, convenient, and attractive pedestrian environment. *Goals:* Safety, Equity, Health, Economic Sustainability, Connectivity, Multimodal Transportation, Land Use and Site Design	**Vision** By 2040, we envision a city with a smart and efficient transportation system that supports a thriving economy while increasing affordability; healthy citizens who are mobile in a safe, accessible, and vibrant city; and a city that enhances its natural environment to ensure a healthy future for its citizens and the planet. **Goals** Transportation 2040's goals are framed by the three pillars of sustainability. ▪ Economy: A smart and efficient transportation system that supports a thriving economy while increasing affordability. ▪ People: Health citizens in a safe, accessible, and vibrant city. ▪ Environment: A city that enhances its natural environment, ensuring a healthy future for its people and the planet. **Targets** ▪ Mode share: By 2040, at least two-thirds of all trips will be made on foot, bike, or transit. The total number of trips by sustainable modes will grow significantly, while motor vehicle volumes will slightly decline. ▪ Distance Driven: By 2020, the average distance driven per resident is reduced by 20%. ▪ Safety: Zero traffic-related fatalities.	**Vision** The City of San Mateo envisions a transportation system that is sustainable, safe, and healthy and supports a sense of community and active living, where walking, bicycling, and transit are integral parts of daily life. Furthermore, the City envisions integrating Complete Streets and Green Streets into street designs that are comfortable and convenient for the breadth of travel choices and that improve water quality and reduce other environmental impacts, while creating more vital places that fit with desired community character. **Goals and Objectives** ▪ Safety and Vision Zero: Eliminate fatalities and serious injuries; Improve walking and bicycling conditions at intersections with highest rates of collisions ▪ Mobility: Improve multimodal access to employment centers, residential neighborhoods, community destinations and recreation for people of all ages and abilities ▪ Infrastructure and Support Facilities: Allocate street space equitably among all modes; Incorporate bike/ped facilities into public and private projects; Provide well-maintained bike/ped facilities; Develop a green infrastructure plan ▪ Programs: Establish Safe Routes to School and Transit, Safe Routes for Seniors, and Green Infrastructure Steward programs ▪ Equity: Identity low-income and transit-dependent communities that require bike/ped access improvements; Develop residential partnership program for neighbors to identify, prioritize, and implement improvements ▪ Implementation: Determine funding needs and sources; Incorporate projects into Capital Improvement Program (CIP); Ensure efforts are coordinated with external partners; Review and update plan at regular intervals **Targets** ▪ Eliminate pedestrian- and bicycle-related fatalities and reduce the number of non-fatal pedestrian- and bicycle-related collisions by 50% from 2010 levels by 2020. ▪ Increase the combined bicycle and pedestrian mode share to 30% for trips one mile or shorter by 2020. ▪ Reduce single occupant vehicle commuting by 20% by 2020.	**Vision** The Pioneer Valley region strives to create and maintain a safe, dependable, environmentally sound and equitable transportation system. We pledge to advance strategies and projects that promote sustainable development, livable communities, provide for the efficient movement of people and goods, and advance the economic vitality of the region. **Goals** ▪ Safety ▪ Operations and Maintenance ▪ Environmental ▪ Coordination ▪ Cost Effective ▪ Intermodal ▪ Multimodal ▪ Economically Productive ▪ Quality of Life ▪ Environmental Justice ▪ Land Use ▪ Climate Change

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Performance Measures	**Bicycle Master Plan Performance Measures** ▪ Percentage of bike network completed (goal: 100% complete by 2035) ▪ Ease of bicycle travel between urban villages ▪ Number of households within ¼ mile radius ▪ Number of bicycle racks and on-street corrals ▪ Number of targeted educational campaigns and culturally- and age-appropriate program promotional materials ▪ Number of schools participating in Safe Routes to School program ▪ Achieve Gold Bicycle Friendly Community rating by 2020, Platinum by 2035 ▪ Bicycle mode share, self-reported bicycling to school, and bicycle count **Pedestrian Master Plan Performance Measures** ▪ Safety: Decrease in number of pedestrian-involved collisions; Number of students that received ped safety education; Percent of sidewalks needing replacement ▪ Equity: Percent of intersections ADA compliant on select routes; Number of completed ADA transition plan projects ▪ Public and Environmental Health: Increase in number of children walking or biking to/from school; Percent of commute trips made on foot; Number of trees on arterials ▪ Economic Sustainability: Number of pedestrian-oriented wayfinding signs; Pedestrian count volumes at select locations ▪ Connectivity: Percent of complete facilities on designated walk routes for each public school; Number of miles of sidewalk complete in primary sidewalk network ▪ Multimodal Transportation: Pedestrian mode share; Percent of sidewalk complete ▪ Land Use and Site Design: Percentage of new residential units within Urban Village areas	**Tracking Progress, Key Actions** Transportation 2040 outlines a plan for measuring performance over time and overcoming data limitations. Key actions include: ▪ Set up a system of monitoring and evaluating actions ▪ Conduct regular traveler surveys and transportation panel survey ▪ Publish regular progress reports using key indicators ▪ Share transportation data in open format	**Performance Measures** ▪ Citywide combined bicycle and pedestrian mode share for trips of one mile or shorter ▪ Single occupant commuting ▪ Number of pedestrian- and bicycle-related collisions ▪ Number of pedestrian and bicycle fatalities ▪ Total roadway crashes and injuries from all roadway crashes ▪ Ratio of bicycle facility miles to road miles ▪ Linear feet of sidewalks ▪ Vehicle miles traveled (VMT) per capita ▪ Total transportation-related greenhouse gas (GHG) emissions per capita ▪ Travel time along identified key corridors ▪ Average vehicle occupancy ▪ Roadway segments using green infrastructure to manage stormwater runoff (percent of total network and percent in Downtown and PDAs) ▪ Tree canopy along streets in San Mateo ▪ Sales revenue per square foot in Downtown Sustainable Streets also identifies Corridor Performance Metrics for corridors with complete/sustainable/green streets projects and Development Performance Metrics to evaluate the multimodal impacts of new development.	**Performance Measures** ▪ Safety: Significant reduction of traffic fatalities and serious injuries ▪ Infrastructure Condition: State of good repair ▪ Congestion Reduction ▪ System Reliability: Improve efficiency ▪ Freight Movement and Economic Vitality ▪ Environmental Sustainability: Protect and enhance natural environment ▪ Reduced Project Delivery Delays: Reduce project costs, eliminate delays **Sustainability Indicators** ▪ Reduce VMT ▪ Reduce GHG ▪ Improve transit accessibility ▪ Livability (access to jobs, housing, schools, safe streets) ▪ Promote health transportation modes ▪ Transition to lower GHG fuels ▪ Water quality

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Existing Conditions	**Bicycle Master Plan: Network Opportunities and Constraints** In addition to inventorying the existing bicycle network, including on-street facilities and trails, the City identified key challenges to focus future analysis and improvements: ▪ Lack of arterial street crossings of I-5 isolate many destinations in the city. ▪ Overcoming lack of street connectivity in outlying areas where streets have yet to be platted and developed. The areas have significant environmental features (streams, wetlands, slopes). Off-street facilities may be best suited for bicycling connections. Bicycle network development, three phases: ▪ Network developed using existing plans and input from public and agency stakeholders. ▪ Technical demand analysis to establish baseline connectivity values. ▪ A field review and calibration procedure to refine network. **Pedestrian Master Plan: Existing Conditions Review** ▪ Analysis of travel patterns and commute trips made by walking ▪ Pedestrian counts ▪ Inventory of existing pedestrian facilities: network, sidewalk, crossings, trails ▪ Transit, schools, and land use	**Rising to the Challenge** To frame the challenges Transportation 2040 addresses, Vancouver reported on growth projections, demand for transit, health outcomes, demographics, climate change impacts, and emissions. **Trends and Targets** Vancouver documented baseline housing and employment growth along with the total number of cars entering the city to forecast trends and inform targets. The following baseline conditions informed policies and actions: ▪ Trips made by mode (historic data/targets) ▪ Collision data, breakdown by mode, locations ▪ Sidewalk network, width, curb ramp locations ▪ Bicycle network ▪ Bicycle counts ▪ Attitudes toward bicycling survey ▪ Trip length/breakdown by mode ▪ Bicycle parking and bike route signage locations ▪ Transit network and routes, stops, signal/lane priority ▪ Parking (locations, time limits, cost) ▪ Load zones ▪ Vehicles entering the city ▪ Freight activity (truck and rail)	**Local Documentation and Existing Conditions Review** To identify strengths, opportunities, and weaknesses, Sustainable Streets documented San Mateo's physical setting, demographics, existing infrastructure, and policy landscape. To inform development of design guidelines, Sustainable Streets includes a comprehensive review of municipal code policies and relevant guidance from previously adopted plans. <u>Setting and Land Use</u> ▪ Streets as a percent of land ▪ Land use and transportation context <u>Population Characteristics</u> ▪ Demographic and population data ▪ Population and employment growth ▪ Growth in travel <u>Travel Patterns</u> ▪ Mode share to work and all trips ▪ Transit ridership (SamTrans, BART, Caltrain) ▪ Automobile ownership ▪ Attitudes toward bicycling survey <u>Multimodal Connections and Existing Infrastructure</u> ▪ Roadway system, mileage, classifications ▪ Bicycle system, parking, barriers (e.g., rail lines) ▪ Safe Routes to School, school locations ▪ Pedestrian facilities (sidewalks, off-street paths, crossings) ▪ Transit stops/amenities, transit system, how people access BART and boardings, Caltrain boardings, shuttles, and ferry service ▪ Intelligent transportation systems (ITS) systems ▪ Parking data ▪ Cost of maintenance needs/revenues/shortfalls	**Meeting Future Needs Sustainably** With a focus on understanding existing needs and anticipated future deficiencies in transportation infrastructure, Pioneer Valley assessed the following to inform investment recommendations: ▪ Pioneer Valley Transit Authority ridership, bus fleet, paratransit ridership ▪ Park-and-ride average daily occupancy ▪ Bicycle compatibility index analysis for roadways ▪ Off-road paths inventory ▪ Air quality analysis ▪ Environmental Justice: Demographic profile identifying minority and low-income populations; Distribution of benefits and burdens ▪ Climate Change: Anticipated changes (heat index, precipitation, flood zones) ▪ GHG emissions: Annual VMT by county ▪ TOD community survey ▪ Bike, pedestrian, and transit networks

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Prioritization Framework	**Bicycle Master Plan** Prioritization for each bicycle network project based on project goals, emphasis on low-income and vulnerable populations, and improving comfort of the "Interested but Concerned" rider. Criteria were defined through the public input process and the goals were represented by four weighted variables: Safety (15%), Connectivity (45%), Demand (25%), Equity (15%) **Bicycle Master Plan: Project Prioritization Methodology** ▪ Safety (15% weight): Bike crashes ▪ Connectivity (45% weight): Route level of stress and directness, I-5 barriers ▪ Demand (25% weight): Density of employment and population, proximity to schools, trail access points and parks, bike count volumes ▪ Equity (15% weight): High concentration of population under 18 years old and low-income population **Pedestrian Master Plan: Priority Project Evaluation Criteria** ▪ Safety (crash reduction) ▪ Posted Speed ▪ Traffic Volume ▪ Economic Equity (serve low-income residents) ▪ Safe Routes to School ▪ Pedestrian Access to Community Destinations ▪ Transit Connectivity ▪ Crossing (intersection only) ▪ Implements Neighborhood Plan	While *Transportation 2040* does not include a prioritized project list, the **Hierarchy of Modes** guides transportation decisions, prioritizing the needs of people walking and bicycling first. *"In highly constrained urban environments, it is not always possible to provide the ideal facilities for all users' needs, and compromises sometimes have to be made, including accommodating some users on parallel streets."* Priority policies reflect the modal hierarchy and plan targets: ▪ Prioritize improvements at high-crash locations and areas with high walking potential ▪ Prioritize pedestrian safety and movement at intersections ▪ Prioritize maintenance at locations with more walking and street activity ▪ Prioritize critical gaps in the bicycle network and connections to schools, community centers, major transit stations, and commercial high streets ▪ Prioritize transit improvements along high-demand corridors	**Design Guidance Principles** Similar to the modal hierarchy, *Sustainable Streets* outlines principles to guide street design decisions: ▪ Prioritize pedestrian movement first ▪ Local priorities above regional needs ▪ Safety through design to reduce injuries and fatalities ▪ Action, observation, improvement (pilot project approach) ▪ Design proactively, not reactively **Overlays** Several design guidance overlays prioritize improvements for specific modes or green stormwater infrastructure along certain corridors: ▪ Pedestrian Greenways: Prioritize pedestrian safety and comfort ▪ Safe Routes to School: Prioritize pedestrian and bicycle safety along SRTS designated routes ▪ Transit Streets: Prioritize transit speed and schedule reliability ▪ Bicycle Priority Streets: Prioritize bicycle safety and comfort ▪ Downtown San Mateo ▪ Freight Routes ▪ Caltrain Station Areas ▪ Emergency Primary Response Routes	**Cross-Cutting Strategies** To prioritize improvements that achieve multiple elements of plans and goals, Pioneer Valley identifies emphasis areas: green infrastructure, housing, land use, transportation, brownfields, climate, economic development, environment, and food security. **Joint Transportation Committee Ranking** The Pioneer Valley Joint Transportation Committee (JTC) selected the top five strategies to advance sustainable transportation: ▪ Invest in the repair and maintenance of existing transportation infrastructure. ▪ Provide accommodations for pedestrians, transit users, and bicyclists in roadway and bridge design and the maintenance of existing facilities. ▪ Develop a comprehensive Commuter Rail network. ▪ Promote the Safe Routes to School program. ▪ Promote the implementation of bicycle lanes where practical.

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	*Transportation 2040* Vancouver (BC)	*Sustainable Streets* San Mateo (CA)	*Sustainable Transportation Element Plan* Pioneer Valley (MA)
Types of Improvements or Mobility Solutions	**Bicycle Master Plan** Short-Term Projects: 20 miles of bikeways providing critical access to key destinations and improving continuity of existing network. ▪ 33 miles of medium term, 74 miles of long-term projects ▪ Plan update every 10 years Program Recommendations: ▪ Education: Expand bicycle education opportunities, education for motorists, Safe Routes to School, information on proper use of bicycle facilities ▪ Enforcement: Promote safety through Municipal Code additions and revisions; Police Bicycle Patrol ▪ Engineering: Educate staff on bicycle facility design best practices ▪ Encouragement: Partner with local businesses and colleges; open streets event; Bicycle Friendly Community status **Pedestrian Network and Program Recommendations** Tier 1 Projects (first 10 years): ▪ $27,818,125 ▪ 41 sidewalk/corridor improvements ▪ 8.4 miles of sidewalk ▪ 17 crossing improvements Types of Projects: ▪ Sidewalk infill ▪ New off-street connections ▪ Intersections and crossings ▪ Intersection and feasibility studies ▪ Citywide projects: Alabama Corridor – Road Diet Feasibility and Pedestrian Safety Improvements; I-5 Ped/Bike Safety and Connectivity Study ▪ Pedestrian wayfinding ▪ Lighting study and improvements ▪ Trail safety and maintenance ▪ Trail and road network connectivity Program Recommendations: ▪ Safe Routes to School ▪ Marketing Campaigns, Neighborhood Walking Maps, Themed Walks, Open Streets Event ▪ Traffic Safety Campaign, Speed Reader Board Loaner Program ▪ Professional Development Courses ▪ Pedestrian Crossing Enforcement Actions	**Emerging Areas of Focus** *Transportation 2040* recommends a range of new projects, study areas, and actions. Some are quick and straightforward. Others represent fundamental changes to the way the City does business. Key initiatives and actions that significantly advance the plan's goals are identified as Emerging Areas of Focus: ▪ Wide Sidewalks in Commercial Areas and Near Transit ▪ False Creek Bridges ▪ Vibrant Public Spaces ▪ All Ages and Abilities Cycling Network ▪ Public Bike Share ▪ Seawall Improvements ▪ Georgia and Dunsmuir Viaducts/Eastern Core ▪ Broadway Corridor Rapid Transit ▪ Comprehensive Parking Strategy ▪ Arbutus Corridor ▪ Burrard Inlet Crossings ▪ Fraser River Area ▪ Rail Corridor Strategies ▪ Major Road Network **Key Policy Recommendations** ▪ Transit-supportive public realm policies proposed to provide easy connections and comfortable waiting areas ▪ Transit financing tools such as regional fuel tax, transportation carbon tax, a vehicle registration fee, and road pricings are proposed ▪ Optimization of network operations like signal timing and rush hour parking regulations to manage congestion ▪ Partnering with private industry to provide electric car charging stations throughout the city ▪ Eliminating minimum parking requirements in the downtown and near rapid transit stations ▪ Creating a toolkit to assist in developing strategies to reduce parking demand in new development ▪ Proposed educational and enforcement programs to promote walking and cycling as practical and healthy transportation choices ▪ Advocate for cycling skills training as a core part of the school curriculum ▪ Maintain and enforce 30 km/h speed limits on local street bike routes and greenways ▪ Update City bylaws and advocate for changes to the BC Motor Vehicle Act to encourage more and safer travel by sustainable modes	**Near-Term Complete and Green Street Corridor Improvements** ▪ North San Mateo Drive road diet maintaining on-street parking, adding bicycle facilities, pedestrian crossing enhancements, and green street elements ▪ South Grant Street addition of a landscaped median and pedestrian crossing enhancements ▪ El Camino Real Complete Street vision to improve bike/ped safety while accommodating vehicular travel, transit, and parking, including the SR 92 interchange **Key Policy Recommendations** ▪ Adopt VMT per capita as main transportation impact metric and use it to determine developers' fair share contributions to a new Sustainable Streets Fee ▪ Reduce or eliminate minimum parking where developable land is most at a premium to cultivate walkable urbanism ▪ Institutionalize Sustainable Streets revisions to specific items in the Municipal Code and pass a Complete Streets Ordinance, new street classification system, street design guidelines, methodologies for traffic modeling, and project evaluation metrics and practices **Recommended Programs** ▪ Adopt a Vision Zero policy ▪ New development review process and fee based on transportation performance metrics ▪ Citywide Transportation Demand Management plan, requiring new developments to include trip reduction programs and incentives ▪ Sustainable Streets education program ▪ Residential Parking Permit Program ▪ Neighborhood Traffic Management Program	In addition to the **five priority strategies** recommended by the JTC, Pioneer Valley identified further studies and funding needed to advance sustainable transportation planning: ▪ TOD Market Analysis and Transit Planning Study ▪ Regional Greenhouse Gas Monitoring ▪ Sustainable Transportation Project Review Criteria Update ▪ East/West Passenger Rail Study ▪ Funding for Bikeway/Walkway Projects **Eight place-based projects** were identified as key implementation projects: ▪ New Haven—Hartford—Springfield Rail Project ▪ Union Station Regional Intermodal Transportation Center ▪ Holyoke Rail Station ▪ Northampton Rail Station ▪ Westfield Intermodal Transportation Center ▪ PVTA Bus Maintenance Facility ▪ Northampton Park-and-Ride Lot ▪ Transit Pulse Point

	Complete Streets Policy, Bicycle and Pedestrian Plans Bellingham (WA)	***Transportation 2040*** Vancouver (BC)	***Sustainable Streets*** San Mateo (CA)	***Sustainable Transportation Element Plan*** Pioneer Valley (MA)
Implementation and Funding	**Bicycle Master Plan: 134-mile network, $20,531,162** <u>Implementation Strategies:</u> ▪ Continue to accommodate bicycle facilities during roadway construction, reconstruction, and overlays when possible ▪ Dedicate funding for high-priority bicycle facilities and studies, while planning for unforeseen costs ▪ Identify funding for programs and facility improvements in support of the bicycle network ▪ Pursue a variety of mechanisms for funding infrastructure projects ▪ Incorporate funding for maintenance of bicycle facilities into the annual maintenance budget ▪ Pursue grant funding ▪ Establish a grant match reserve fund (or similar system) in order to take full advantage of state and federal grants ▪ Institutionalize the Bellingham Bicycle Master Plan into plans and policies of the City ▪ Enhance transportation policies that facilitate Complete Street design ▪ Benchmark progress towards Plan implementation **Pedestrian Master Plan Funding Strategy** ▪ Transportation Benefit District (TBD) funding: 75% of revenue allocated for non-motorized improvements, approximately $1,579,000/year; approved each year by Council ▪ Identified additional funding needs for priority projects outside of annual TBD funding ▪ Implementation through larger corridor and street improvement projects ▪ Routine maintenance schedule and frequency ▪ Federal, state, Whatcom County, traditional and non-traditional local funding sources outlined with project eligibility <u>Implementation Strategies:</u> ▪ Strategically pursue infrastructure projects ▪ Support network improvements through education, encouragement, and enforcement programs ▪ Establish and encourage multimodal corridor design ▪ Integrate pedestrian needs into all Bellingham planning and design processes ▪ Integrate equity concerns into ongoing facility and program development	**Implementation Strategy** *Transportation 2040* identifies key policies and actions for priority implementation and categorizes all policies/actions as ongoing, short (2 years), medium (5 years), or long (5+ years). <u>Partners:</u> ▪ City of Vancouver ▪ TransLink, the regional transportation agency ▪ Province of British Columbia ▪ Transport Canada ▪ Metro Vancouver and neighboring municipalities ▪ Vancouver Coastal Health and other health care agencies and providers ▪ Schools and academic institutions ▪ Port Metro Vancouver, a federal authority ▪ Vancouver International Airport, a federal authority ▪ Rail companies ▪ ICBC, the provincial auto insurance provider ▪ Trucking, taxi, and commercial transit providers ▪ Transportation non-profit organizations ▪ Local business and community associations ▪ Enforcement and emergency service providers	**Sustainable Streets Fee** ▪ Replace Transportation Improvement Fee program with a Sustainable Streets Fee to allow for a more flexible funding source for a wider array of projects. ▪ The current traffic mitigation calculations and development review process focuses funding on congestion-reduction for vehicles, reserving less than 1% of total funding for bicycle and pedestrian projects. **Potential Funding Sources:** ▪ The City of San Mateo Capital Improvement Program ▪ State Active Transportation Program ▪ Sustainable Streets Fee ▪ County Measure M Vehicle Registration Fee ▪ County Measure A Sales Tax ▪ One Bay Area Grant Program	Pioneer Valley does not identify cost estimates or targeted funding for priority strategies and place-based projects. Next steps include identifying funding sources and partners. <u>Partners:</u> ▪ Pioneer Valley Planning Commission ▪ Pioneer Valley MPO ▪ MassDOT ▪ Municipal Departments of Public Works ▪ Department of Housing and Urban Development Sustainable Communities Initiative Regional Planning Grant Program ▪ Capitol Region Council of Governments (CRCOG)