City of Bellingham
Transportation Challenges and Successes

• **Introduction:** Eric Johnston, P.E., Public Works Director

• **Specifics:** Chris Comeau, AICP-CTP, Transportation Planner
  - COVID-19 Pandemic Effects on Transportation
  - Multimodal Transportation Planning, Climate Protection, and Funding
  - Virtual Tour of Successful Multimodal Transportation Projects

• **Questions/Discussion**
Bellingham, WA
“City of Subdued Excitement”

- 90 miles north of Seattle
- 60 miles south of Vancouver, BC
- Urban area ~ 100,000 residents
- College Town: WWU, WCC, BTC, NWIC
- Active & Outdoor Recreation Lifestyles
Bellingham is the Regional Center
(Employment, Shopping, Education, Medical Services, etc.)

Disproportionate Number of Vehicle Trips
In/Out of City each day

Out of town visitors generate a lot of sales tax
Heavy Influence by Visitors in Automobiles from Lower Mainland B.C., Canada

20% of daily vehicle trips in/out of Bellingham

U.S. Border Crossing Rank
Peace Arch (SR 543) #3
Sumas (SR 9) #7
Lynden (SR 539) #14
COVID-19 Pandemic Effects on Bellingham’s Transportation Patterns and Funding
COVID-19 Known Transportation Impacts: January - June 2020

January 2020 - State funding impacts from 2019 WA voter approval of Initiative 976 ($30 car tabs):
- TIB eliminated 2020 Complete Streets and Sidewalk Program grant funds
- Significant cuts expected to WSDOT budget and grant funds

March 2020 - WA Governor Inslee issues statewide “Stay-At-Home” Order
- Vehicle traffic volumes down ~ 50% citywide (Working from Home estimated at 25%-30%)
- US-Canada border closed for non-essential trips (20% of daily vehicle trips in/out of Bellingham)
- WTA transit ridership down ~ 85% citywide
- Airplane passengers down ~ 95% nationwide
- Recreational walking and biking increase citywide

May 2020 - Known City and State funding impacts from COVID-19 global pandemic:
- 15% - 20% reduction in City sales tax revenue in 2020, possibly more depending on 2nd half of 2020;
- Expectations for loss of additional Washington State grant funding programs in 2021-2022;
COVID-19: How has Bellingham Responded with Transportation?

Resiliency: Bellingham is well-situated due to land use densities, successful citywide multimodal transportation plans, and extensive park and trail system

Actions Taken and Opportunities Available:
• Significant transportation capital improvement projects under construction in 2020 ([See 2021 TIP](#))
• Low-Cost fixes and improvements to trail-street connections (Crosswalks, curb cuts, way-finding)
• Temporary arterial crossings that may become permanent within the next year, pending funding
• Green Cone program for restaurants and retail businesses to reserve spaces for curb-side pickup
• Proposals to close on-street parking to allow restaurants more physical space for outdoor dining
• Proposals to limit or close streets to auto travel to favor pedestrian and bicycle travel
• Allow residents to work with neighbors to temporarily close residential streets if they wish to
• More to come …………. 
COVID-19 Possible Transportation Impacts: June - Dec 2020

June 2020 - Whatcom County approved for Phase 2 under WA Governor Inslee’s “Safe Start Plan”
- WTA transit ridership remains down 75% – very slow recovery expected
  - 40% of ridership is WWU students – how to serve in Autumn 2020? Will students still ride WTA?
- Airplane passengers remain down 80+% – very slow recovery expected
- Recreational walking and biking stable – expected to remain strong with summer weather
- US-Canada border closed until July 31 for non-essential trips
  - 20% of daily vehicle trips in/out of City; major economic repercussions
- Vehicle traffic volumes increasing citywide (~75%) – may exceed 2019 pre-COVID volumes

July - December 2020 - Possible outcomes
- Likely increase in Single Occupant Vehicle (SOV) due to less carpools and transit-by-choice ridership
- Likely increase due to preference for self-isolating road trips rather than group air, bus, or train travel
- Likely increase in parents driving kids to school instead of riding school buses autumn 2020
- Could be partially mitigated by permanent shift to more employees working from home
- Could be partially mitigated by permanent shift to online vs brick & mortar retail shopping
- Likely increase in vehicle trips for curbside pickup at retail, grocery, restaurants
- Likely increase in vehicle trips for 24-7-365 delivery for retail, grocery, restaurants
Post 2020:

- Nobody knows what will happen for the remainder of 2020 or beyond .....  
- Let’s focus on something more positive today 😊
Bellingham’s Multimodal Transportation Planning
Bellingham has a long history of supporting Active Transportation

“Bicycle Day” 1948 →
Who Are We Planning For in Bellingham?

**BALANCE:**
All mobility needs for all modes must be carefully considered, balanced, and implemented so that the citywide multimodal transportation system continues to work for everyone.

City web site: [2016 Multimodal Transportation Chapter Bellingham Comprehensive Plan](#)
Bellingham’s Active Transportation Plans

Pedestrian Master Plan (2012)
- 258-mile pedestrian network
- ~162 miles (63%) complete
- 343 Prioritized sidewalks + crossings

Bicycle Master Plan (2014)
- 164-mile bicycle network
- ~87 miles (53%) complete
- 215 Prioritized bikeways + crossings

Multiuse Greenways Trails (1990 x4)
- Extensive citywide trail system
- 80 miles existing multiuse trails
- 61 miles (76%) = secondary transportation
In 8 years (2013 - 2020) City Council approved construction and funding in 6-Year TIP* for:

- **44** PMP sidewalk network links
- **35** PMP pedestrian crossings
- **79** total pedestrian improvements

### Pedestrian Sidewalk Improvements

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects Completed</td>
<td>16</td>
<td>8</td>
<td>279</td>
</tr>
<tr>
<td>Projects Not Yet Completed</td>
<td>27</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Percent Completed</td>
<td>37%</td>
<td>23%</td>
<td>7%</td>
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</tbody>
</table>

*Some sidewalk projects divided into pieces for funding and constructability*

### Pedestrian Crossing Improvements

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects Completed</td>
<td>14</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Projects Not Yet Completed</td>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Percent Completed</td>
<td>82%</td>
<td>47%</td>
<td>56%</td>
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</tbody>
</table>

*One crossing at SR 539/Tremont eliminated as infeasible.*
Bicycle Master Plan - Approved October 2014
(Adopted BMP into Comprehensive Plan November 2016)

In 6 years (2015 - 2020) City Council approved construction and funding in 6-Year TIP* for:

87 BMP bicycle network links
24 BMP bicycle crossings
111 total bicycle improvements

Over half (52%) of Bike Plan implemented in 6 years!

<table>
<thead>
<tr>
<th>Bikeway Network Improvements</th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Bikeway Projects</td>
<td>22</td>
<td>54</td>
<td>113</td>
<td>215</td>
</tr>
<tr>
<td>Projects Completed</td>
<td>14</td>
<td>30</td>
<td>43</td>
<td>87</td>
</tr>
<tr>
<td>Projects Not Yet Completed</td>
<td>8</td>
<td>24</td>
<td>70</td>
<td>104</td>
</tr>
<tr>
<td>Percent Completed</td>
<td>64%</td>
<td>56%</td>
<td>38%</td>
<td>52%</td>
</tr>
</tbody>
</table>

*Includes "Further Study Needed" Links

**Two network links eliminated; determined to be infeasible

<table>
<thead>
<tr>
<th>Bicycle Crossing Improvements</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Total Crossing Projects</td>
<td>26</td>
</tr>
<tr>
<td>Projects Completed</td>
<td>24</td>
</tr>
<tr>
<td>Projects Not Yet Completed</td>
<td>2</td>
</tr>
<tr>
<td>Percent Completed</td>
<td>79%</td>
</tr>
</tbody>
</table>

*2 at Meridian/I-5 interchange not feasible
2020 Completeness of Bicycle and Pedestrian Networks in Bellingham

Bicycle Infrastructure Network
2020 Facility Extents By Concurrency Service Area

Miles of Bicycle Network Streets

2
4
8
12

Primary Pedestrian Network
2020 Sidewalk Extents By Concurrency Service Area

Miles of PPN Streets

2
8
12
20
35
Bellingham’s Transportation Measures for Climate Protection
Local Actions to Reduce Transportation Impact on Climate

• 2018 City Council updates 2007 Climate Protection Action Plan
  – Appoints Climate Action Task Force to identify more aggressive path to reduce greenhouse gas emissions, including everything from banning internal combustion engines to electrifying transportation fleet
  – 2020 City Council working through feasibility of recommended actions

• 2020 Council adopts 2021-2026 Transportation Improvement Program (TIP)
  – 20 multimodal projects under construction in 2020
  – 30 multimodal projects planned for 2021-2026 funding & construction
  – **Line item for Climate Protection funded by transportation sales tax**

• August 2020 "Transportation Fund" (Former Transportation Benefit District)
  – City Council may include sales tax on November general election ballot
    - **Approval** = Continue success implementing people-centered transportation system
    - **Disapproval** = Loss of $5 million per year in sales tax revenue - progress stalls
Bellingham’s Multimodal Transportation Funding
Game Changer = Dedicated Funding

Transportation Benefit District No. 1

• Approved by 58% of Bellingham voters - November 2010

• Sales tax revenue of 2/10 of 1% (0.002) inside City limits
  - Example: $100 purchase generates $0.20 cents in TBD revenue

• Approximately $5,000,000 in TBD revenue each year for
  - Street Resurfacing (ADA, Crosswalks, On-Street Bikeways)
  - Non-motorized (ADA, Sidewalks, Crosswalks, On-Street Bikeways)
  - 2011-2015 contract with WTA to buy back Sunday bus service
  - Annual Report Transportation Report on Annual Mobility (TRAM)

• 10-year lifespan (2011-2020); Expires December 31, 2020 unless renewed by voters in November 2020
Bellingham Transportation Funding, 2010-2020

- Waterfront District
- Canonical-Laurel Arterial Streets
- Orchard Drive Extension
- Connecting WA Gas Tax Revenues
- Meador Ave Bridge & James St Bridge Reconstruction
- TBD ends, unless renewed by voters, Nov 2023

Legend:
- TBD
- TIF
- REET
- Street Fund
- Federal grants
- State grants
Strategically Maximizing Transportation Funding

- There is always more need than funding
- **6-Year Transportation Improvement Program (TIP)** is strategic effort to leverage additional funding
- Documented transportation improvement needs
- High priorities in adopted City plans
- Good, competitive grant funding candidates
- Timing of various grant funding cycles
- Public-Private Partnership Opportunities
- Growth-related: Where is development happening?
- Ideally, all of the above
# Pedestrian and Bicycle Projects Programmed for 2020

**Pedestrian and Bicycle Projects Programmed for 2020 (P.E., Design, ROW yet to occur)**

<table>
<thead>
<tr>
<th>Tier</th>
<th>Priority</th>
<th>2020 Pedestrian and Bicycle Improvements</th>
<th>Cost Estimate¹</th>
</tr>
</thead>
</table>
| 2.1 | Tier 1   | - Bill MacDonald/20th St/W 5th Street Pedestrian & Bicycle Crossing Improvements  
- Flashing Crosswalks, ADA ramps, marked crosswalks, median refuge  
- See TIP Project 97, Funded by WSDOT Pedestrian and Bicycle Safety Grant | TIP Funds |
| 2.1 | Tier 2   | - Saninich-Maple-Ellis Separated Bicycle Lane from 55th/Saninich to Lakeway Drive  
- Remove two vehicle lanes, install buffer-separated bicycle lane N/W side, green bike box at Magnolia-Ellis; parallel with Samanth-Maple-Ellis  
- See TIP Project 97, Funded by WSDOT Pedestrian and Bicycle Safety Grant | TIP M9 |
| 2.2 | Tier 1   | - Ells Street Bike Lane Separated Bicycle Lane from Forest Street to Lakeway Drive  
- Remove one vehicle lane, install buffer-separated bicycle lane N/W side, green bike box at Magnolia-Ellis  
- See TIP Project 97 | $75,000 |
| 2.2 | Tier 2   | - Magnolia Street Bike Lane Separated Bicycle Lane from Commercial St to Ellis St  
- Remove one vehicle lane, install buffer-separated bicycle lane S/W side, green bike box at Magnolia-Ellis; parallel with Samanth-Maple-Ellis  
- See TIP Project 97 | $50,000 |
| 2.3 | Tier 1   | - Whatcom Street Bike Lane - Shared lane markings (50 ft.) from Ellis Street bike lane to Grant Street Bike Bldg; connects to Chestnut Street bike lane and Grant Street Bike Bldg  
- See TIP Project 97 | $4,000 |
| 3.1 | Tier 1   | - Edwards Street Bike Lane - Shared lane markings (800 ft.) from Maple Street bike lane to Humboldt Street Bike Bldg; connects to Grant/Lakeway Bike Path  
- See TIP Project 97 | $6,000 |
| 3.1 | Tier 2   | - Victor Street Bike Lane - Shared lane markings (7,000 ft.) from Commercial Park and Usher Street bike lane to Ellis Street bike lane  
- See TIP Project 97 | $50,000 |
| 3.1 | Tier 3   | - Meridian Street Bike Lane - Separated bike lane (2,110 ft.) from W. Illinois to Water Street  
- See TIP Project 97 | $50,000 |
| 3.1 | Tier 4   | - 40th Street/Eldred Avenue Sidewalk Improvements - Complete the eastern end of 40th Street with curb, gutter, and sidewalks from Fielding to the 40th Street intersection  
- See TIP Project 97 | $100,000 |
| 3.1 | Tier 5   | - Grant/Kentucky Crossing Improvements - Curb extensions, ADA ramps, 4-way stop  
- See TIP Project 97 | $50,000 |
| 3.1 | Tier 6   | - 11th Street/Taylor Avenue Crossing Improvements - RRFF signal at crossing between South Hill Neighborhood and Taylor Dock Park  
- See TIP Project 97 | $25,000 |
| 3.1 | Tier 7   | - Proctor-Orchard Bike Lane - Separated bike lane (8,380 ft.) from Division/Hammond Trail along Finlayson and East Orchard Drive to James/Orchard traffic signal  
- Bike lanes on both streets and Boardwalk  
- See TIP Project 97 | $50,000 |
| 3.2 | Tier 1   | - North Street Bike Lane - James/North Crossing Improvements - One-way bike lane on both streets and Boardwalk  
- See TIP Project 97 | $75,000 |
| 3.2 | Tier 2   | - Northwest Bike Lane - Separated bike lane (5,000 ft.) from 12th Street to Ash Street  
- See TIP Project 97 | $50,000 |
| 3.2 | Tier 3   | - Orchard-Birchwood Sidewalk and Bike Lanes - Sidewalk north side, bike lanes both sides  
- See TIP Project 97 | $50,000 |

**City of Bellingham Arterial Streets**

[Map of Bellingham arterial streets with key and project associations]
2010-2020 Social & Economic Equity of Transportation Funding & Infrastructure

TBD Funded Pedestrian Improvements by Neighborhood, 2011 through 2020

- Lower Income: 69.0%
- Higher Income: 27.3%
- Colleges: 3.6%

TBD-Funded Bikeway Improvements by Neighborhood, 2011 through 2020

- Lower Income: 75.7%
- Higher Income: 20.3%
- Colleges: 4.0%
How to Quickly Build Bicycle Network Connectivity
At Relatively Low Cost on Existing Arterial Streets

• **Road Diets** (multi-lane streets) & **Rechannelization**
  – Remove excess vehicle lane(s) to add bike lanes
  – Reorganize and/or narrow lane markings to add bike lanes
  – *11 lane miles removed in favor of 12 miles of bike lanes*

• **Resurfacing & Repair**
  – Add bike lanes via normal repair and maintenance
  – Utility repair funding extended to install bikeways on surface

• **Removal of Parking**
  – On-street parking utilization studies
  – Remove low use parking on one side to add bike lanes
  – *Over 6 miles of parking removed in favor of 12.5 miles of bike lanes*
Virtual Tour Highlighting Some of Bellingham’s Recent Successful Transportation Projects
• 2015 Alabama Street – **Road Diet**: 4 vehicle lanes to 3 (Cornwall to James), bike lanes both sides, green bike boxes installed at Alabama/Cornwall intersection, 6 HAWK signals supporting 6 Bike Boulevards that cross Alabama Street; -17% collisions; -28% injuries

• 2016 National Institute of Transportation Engineers **Completes Streets Project of the Year**

Public Works Plan for
Short-Term (2017-2020)
and Long-Term (2021+)

Connectivity of Pedestrian & Bicycle Facilities between Barkley Village & Downtown

**Mobility Barriers**

- 2014 existing bicycle and intersection improvements
- 2015 - 2017 bicycle and intersection improvements
- 2018 bicycle and intersection improvements
- 2019 - 2020 bicycle and intersection improvements
- Future unfunded links

- Meridian St south of Illinois is in Fountain District Urban Village (no parking removal allowed). Bicycle facility yet to be determined.
2016 Champion St Resurface & Repair

- Ellis St to Cornwall
- Water main repair
- Arterial Resurfacing
- Bike lane added
- Green bike box at Champion/Cornwall
- ADA ramps
- Major Transit street
2019 Roeder Avenue Resurface & Repair

- Bellingham Waterfront
- Arterial Resurfacing Needed
- Sewer/Water/Storm Water Utility Repairs
- Opportunities to install buffer-separated bike lanes when completing
- Allows use of other funding sources to complete citywide bike network
- Minimize Costs
- Maximize Connectivity
Chestnut Street Before/After 2019 Road Diet & Rechannelization for Buffer-Separated Bike Climbing Lane
2019 Waterfront Cycle Track

- **New Construction**: Exclusive bikeway in its own right-of-way separated and/or raised from vehicle lanes and sidewalks
  - May be separated by street trees and landscape strips or hardscape elements
  - May be one-way or two-way
  - Requires additional infrastructure at signalized intersections to minimize conflict between people on bikes and in vehicles
  - Requires significant amount of additional public right-of-way
  - Very expensive to construct (*This = $12 million*)
- *Bellingham Bikeways Illustrated*

Cycle track installed 2019 on Granary - Laurel arterials between Roeder Avenue and Cornwall Avenue through Downtown portion of the Waterfront District.
Samish-Maple-Ellis-York

Summer 2020 Road Diet & Rechannelization for Buffer-Separated Bike Lanes

Old Highway 99; Prior to I-5 (1960s)

Urban infill development under construction; 400 apartments

Existing transit route expected to be high-frequency transit in future

Creates a continuous dedicated bikeway from North to South Bellingham

Squalicum: Columbia-Birchwood
Roeder: Waterfront District (2019)
Chestnut: Downtown (2019)
Samish-Maple-Ellis (2020)
Despite 4 years of extensive citizen involvement, neighborhood meetings, public hearings, studies, plans, grant applications & awards, in January 2020 a local citizen started Change.org petition to gather signatures in opposition to the Samish-Maple-Ellis Multimodal Safety Improvements project scheduled for summer 2020 construction.
Public Works Plan for Short-Term (2017-2020) and Long-Term (2021+)

Connectivity of Pedestrian & Bicycle Facilities between Puget Neighborhood and Downtown Bellingham

**Mobility Barriers**

- **2014 existing bicycle and intersection improvements**
- **2015 - 2017 bicycle and intersection improvements**
- **2018 bicycle and intersection improvements**
- **2019 - 2020 bicycle and intersection improvements**
- **Future unfunded links**
2019 Cordata Parkway
Road Diet for Bike Lanes

1988 – Cordata Parkway overbuilt as 4-lane road with landscaped median for planned business park and industrial uses

2014 Bicycle Master Plan recommended cycle track or buffered bike lanes

Planned construction of 2 roundabouts provided opportunity for study

Road Diet Study conducted 2017

2 Roundabouts constructed 2018-2019

Buffered Bike Lanes installed 2019
2019 Cordata Parkway
Road Diet for Bike Lanes

1988 – Cordata Parkway overbuilt as 4-lane road with landscaped median for business park and industrial uses

2014 Bicycle Master Plan recommended cycle track or buffered bike lanes

1 vehicle lane removed in each direction for 3 miles

Buffer-separated Bike Lanes installed each side
Public Works Plan for
Short-Term (2017-2020) and Long-Term (2021+)

Connectivity of Pedestrian & Bicycle Facilities between Cordata, W Bakerview & Meridian Bellingham

**Mobility Barriers**
- 2014 existing bicycle and intersection improvements
- 2015 - 2017 bicycle and intersection improvements
- 2018 bicycle and intersection improvements
- 2019 - 2020 bicycle and intersection improvements
- Future unfunded links

Dashed pink lines denote future arterial streets that if funded and built will include bicycle facilities.
2012 Northwest Avenue (2 miles of bike lanes from Downtown to I-5) 
Parking removed west side, bike lanes both sides, curb extensions, crosswalks, ADA ramps, pedestrian-activated flashing amber crosswalk at Shuksan Middle School
2015 Ohio Street – Parking removed south side, buffered bike lane north side, green bike boxes at Ohio/Cornwall intersection, green dashed boxes across Bellingham HS driveway, curb extensions, crosswalks, ADA ramps, multiuse trail connection
Public Works Plan for Short-Term (2017-2020) and Long-Term (2021+)

Connectivity of Pedestrian & Bicycle Facilities between Cordata, Meridian, King Mtn, Cornwall Park, Barkley, & Irongate Neighborhoods

Mobility Barriers
2014 existing bicycle and intersection improvements
2015 - 2017 bicycle and intersection improvements
2018 bicycle and intersection improvements
2019 - 2020 bicycle and intersection improvements
Future unfunded links

Dashed pink lines denote future arterial streets that if funded and built will include bicycle facilities.
James Street Study: Preferred Alternative

West Side Shared Use Path

- 11-foot vehicle lanes with a 10 to 12-foot wide bi-directional shared use path on one side
- Vegetated planting strip between path and roadway used for stormwater conveyance and treatment and separation from traffic
- Curbed shoulders in locations where additional sidewalk is needed on the other side of the road
Bellingham Web Site Resources

Multimodal Transportation Planning:
- Bellingham Complete Networks Program
- 2012 Pedestrian Master Plan
- 2014 Bicycle Master Plan
- 2016 Bellingham Comprehensive Plan Multimodal Transportation Chapter
- Bellingham Bikeways Illustrated
- Transportation Report on Annual Mobility (TRAM)
- 6-Year Transportation Improvement Program (TIP)
- Bellingham Transportation Benefit District (TBD)
- Multimodal Transportation Impact Fees (TIF)
- Multimodal Transportation Concurrency (T-Con)
- Travel With Care Public Safety Campaign
- Bellingham Transportation Commission

Bellingham Case Studies:
- Moving Beyond the Automobile: Multimodal Transportation Planning in Bellingham, WA
- Urban Village TIF Reduction Program in Bellingham, WA
- C-Curb Your Enthusiasm: A Road Diet, Safety Improvements, & Public Controversy in the Pacific Northwest
- Alabama Street Multimodal Safety Improvements: Before & After Analysis of Collisions, Speeds, & Volumes
- 2020 APA State of Transportation Planning - Moving People Over Cars: Mobility for Healthy Communities
For more information please contact:

Eric Johnston, P.E., Public Works Director ecjohnston@cob.org

Chris Comeau, AICP-CTP, Transportation Planner ccomeau@cob.org