

# WALK. ROLL. CONNECT.

Getting you where you want to go



## We're All Traffic: Active Transportation in TSMO

TSMO and MOD Integration Peer Exchange  
Feb. 19, 2021



# “Small but mighty”: ATD=3.0 FTE

- **Active Transportation Plan**: Level of Traffic Stress analysis/findings, policy discussion, action/implementation plan
- **Pedestrian Safety Action Plan**: FHWA EDC-4, Safe Transportation for Every Pedestrian. [bit.ly/WSDOT-STEP-2018-Plan](https://bit.ly/WSDOT-STEP-2018-Plan)
- **Speed Management for Injury Minimization**: Multi-agency, multidisciplinary work group developing policy framework jurisdictions can adapt and adopt
- **SRTS and Ped/Bike Program grants**: 2021-23 report now with legislature to decide \$\$
- **Bicyclist/pedestrian data**: Short-duration counts; permanent counters; researching methodologies including crowdsourced
- **Research**: Most recent: FHWA-funded report on multimodal network connectivity, methodologies for siting highway crossings for pedestrian route directness and safety
- **Internal**: Input on Design Manual and Traffic Manual updates; MAP21 safety performance measures; Traffic System Management/Operations (TSMO); Highway System Plan coordination; ADA coordination; asset management; convened “invisible teams” across regions/divisions to share information, build understanding and capacity
- **External**: [Cooper Jones Active Transportation Safety Council](#); [AASHTO Council on Active Transportation](#), Nonmotorized Design Technical Subcommittee; APBP Diversity, Equity and Inclusion Task Force; lots of presentations; more

# TSMO and Active Transportation

- The Active Transportation Plan (ATP) serves as a **statewide needs assessment** required under state law ([RCW 47.06.100](#)) to address:

- ▶ **statewide strategy**
- ▶ **integration** of bicycle and pedestrian pathways with **other road users**
- ▶ **coordination** with local and regional government
- ▶ the role of such facilities in **reducing traffic congestion**

**TSMO goal: Maximize the safety and efficiency of existing and planned infrastructure and systems (for whom?)**

- Regards **existing capacity** as an asset that needs to be managed and **preserved**
- Maximizes safety performance of **existing system**
- Utilizes strategies that are multimodal, intermodal and cross-jurisdictional
- Focuses on **reliability**
- Implements quickly at **relatively low cost**
- Aims to defer **roadway** expanding projects

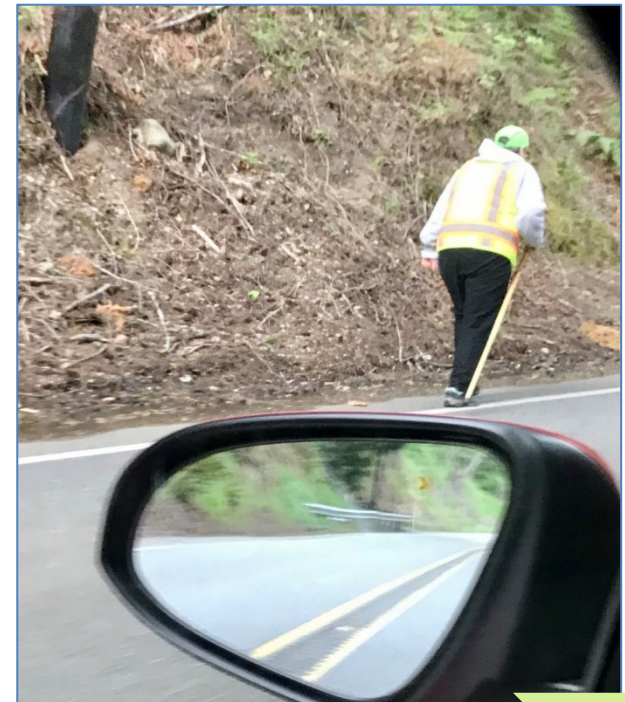
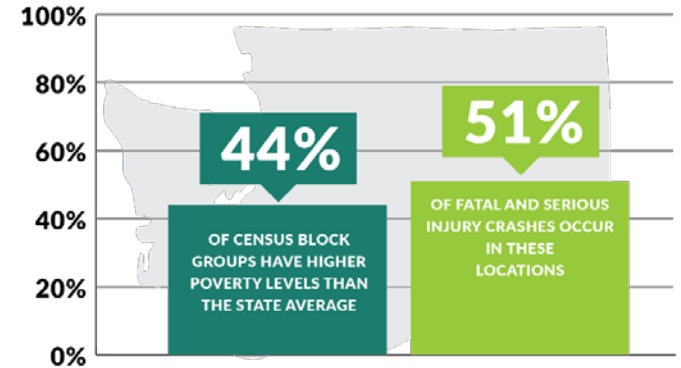
# Chicken and Egg



- We didn't count cars, then build roads.
- We said, "People need to get places. Let's make that easier, safer, more convenient."
- We did GREAT at that.
- For drivers....
- So great that now we have to talk about TSMO to deal with the "success".
- Let's unleash the power of induced demand for walking, bicycling and transit the way we did for driving.

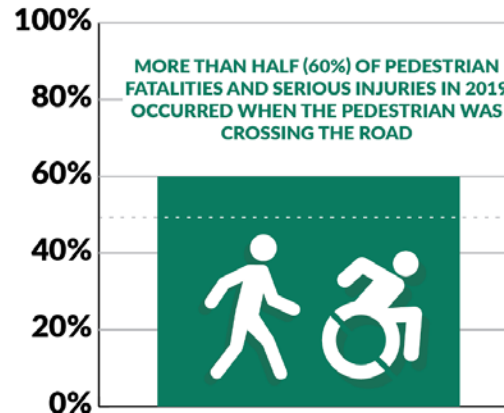
# Equity: The data

- **History:** Effects of transportation and land use decisions
  - Very clear patterns in data
  - Redlining and roads: Disparities in walk/bike infrastructure, road design, highway locations, exposure to pollution
- **Demographics**
  - ~25% of Washingtonians don't drive
  - More fatal/serious crashes in census tracts w/higher levels of poverty and Black, Indigenous, people of color



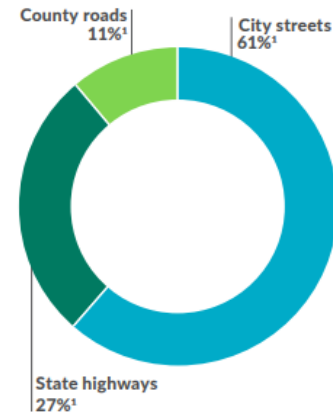
# Safety: The data

- Pedestrian crossings
- Driver speed
- Population centers
- Target Zero: Safe Systems Approach

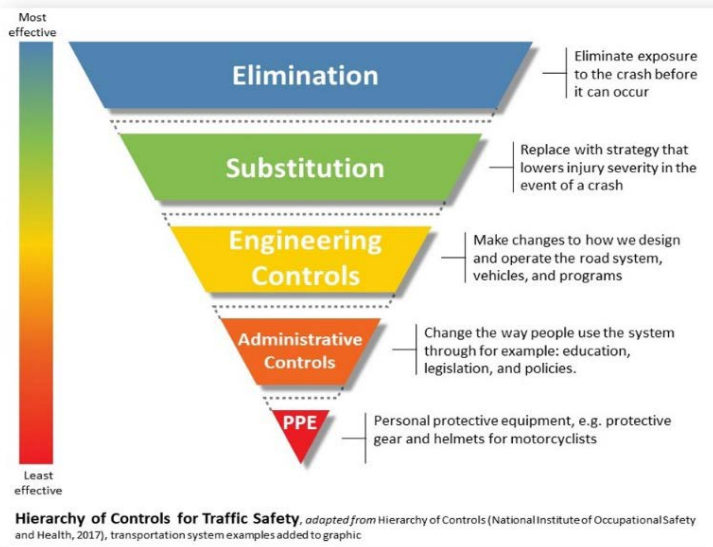
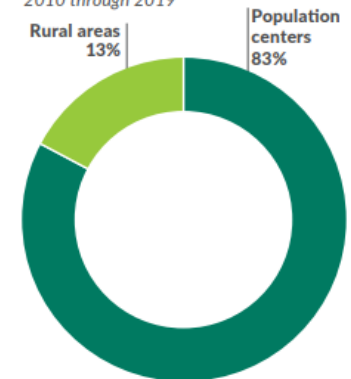


**86%**  
OF PEDESTRIAN & BICYCLIST  
**FATALITIES**  
OCCURRED ON ROADS WITH A  
**POSTED SPEED OVER**  
**25 MILES PER HOUR**  
FROM 2010-2019

**Majority of bicyclist and pedestrian fatalities and serious injuries in last decade were on city streets**  
*Bicyclist and pedestrian fatalities and serious injuries; 2010 through 2019*

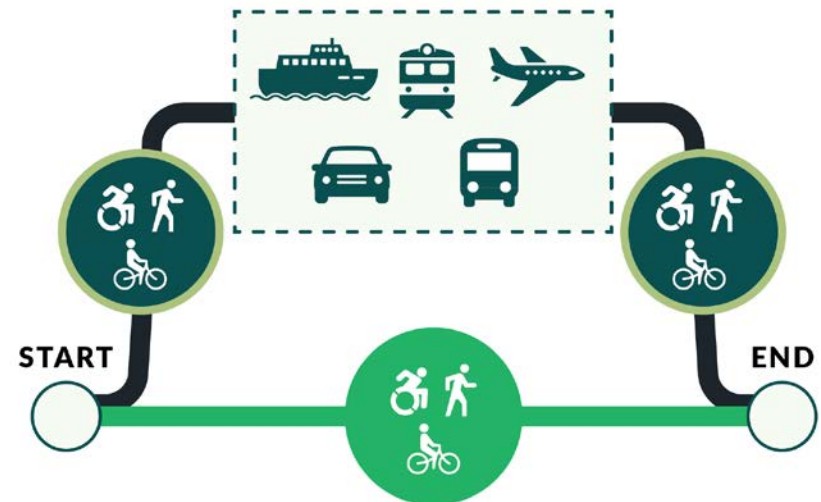


**Majority of bicyclist and pedestrian fatalities and serious injuries on state highways are in population centers**  
*Bicyclist and pedestrian fatalities and serious injuries on state highways; 2010 through 2019*



# Core concepts in plan's focus on facilities

- **It's about the network!**
- Level of traffic stress: **objective, quantitative set of design and operations factors** to define gaps.
- **Focus on population centers** lets us address critical safety needs and tap into latent demand where potential is highest.
- **Latent demand** unleashed when you can get all the way to your destination; importance of **route directness and crossing availability** in the context of **travel need**.
- **“USER COUNT” is not a synonym for active transportation demand!**
- Use of demographic information helps us address **disproportionate serious injuries and deaths** by applying **equity factors + safety + demand** in evaluation and future prioritization.



# Level of Traffic Stress

- Examine roadway and intersection Level of Traffic Stress to determine suitability for walking and biking: Roadway width (number of lanes), posted speed limit, traffic volume, shoulder width, bike lanes/sidewalks; calculated differently for in-town vs rural, calculated separately for pedestrians and bicyclists
- Note on data limitations: Is there a sidewalk? Does that signal have a pedestrian head or detect bicyclists?
- Analytical process:
  1. Calculate Level of Traffic Stress 1 (suitable for all ages/abilities) to 4
  2. Identify network gaps (LTS 3 or 4)
  3. Evaluate gaps using safety, equity and demand criteria to identify highest need



# ATP goals

- **Networks:** Connect comfortable and efficient walking and rolling networks so people can reach their destinations and other forms of transportation and have everyday access to physical activity.
- **Safety:** Eliminate deaths and serious injuries of people walking and rolling.
- **Opportunity:** Eliminate disparities in access to safe active transportation connections for people and communities most dependent on walking, bicycling and transit.
- **Participation:** Increase the percentage of everyday short trips made by walking or bicycling.
- **Partnership:** Collaborate with local, regional, state, tribal and federal partners to complete and improve the network across boundaries.

# Evaluation criteria

## Safety

- History of driver crashes with bicyclists or pedestrians that result in death or serious injury
- Systemic safety: based on roadway characteristics that contribute to crash potential (LTS)
- Connections to and between destinations (including intermodal links and trails)

## Equity

- Places with relatively high numbers of people living in poverty
- Places with relatively high numbers of Black, Indigenous, people of color
- Places with relatively high numbers of people with a disability

## Potential Demand

- Potential demand based on population density, density of jobs, proximity to schools, bus stops/intermodal connections, and other destinations

# It's about the network

WHEN THE INFRASTRUCTURE IS ONLY COMFORTABLE FOR A SMALL GROUP OF PEOPLE...

THIS ISN'T SO BAD.

NOPE. NOT A CHANCE!

ONLY A FEW WILL USE IT.

WITH INFRASTRUCTURE THAT IS COMFORTABLE AND SAFE FOR MOST PEOPLE...

HMM, THIS ISN'T SO BAD, EITHER

AHH, MUCH BETTER...

FEWER PEOPLE ARE EXCLUDED FROM USING IT.

(C) RYAN MARTINSON 2018

# It's about *accessible* active transportation

“... the curb-cut effect illustrates the outsize benefits that accrue to everyone from policies and investments designed to achieve equity.”

– Angela Glover Blackwell, [“The Curb-Cut Effect”](#), Stanford Social Innovation Review



# Stay in touch

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