

HIGH-CAPACITY STATION ACCESS: Enhancing user experience for people walking and riding bicycles

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HIGH-CAPACITY TRANSIT IN PUGET SOUND TODAY



Link light rail **1 T**

- Two lines
- 25 miles
- 26 stations
- Connecting Northgate–Angle Lake, Tacoma Dome–Theater District

ST Express buses

- 24 express routes on regional freeway corridors

Sounder trains **N S**

- Two lines
- 83 miles
- 12 stations
- Connecting Everett–Seattle and Lakewood–Seattle

FUTURE EXPANSION



Link light rail 1 2 3 4 T

- Five lines
- 116 miles
- 83 stations

Stride bus rapid transit S1 S2 S3

- Three lines
- 45 miles on I-405 and SR 522/523
- Serving 12 cities and connecting to light rail in Shoreline, Lynnwood, Bellevue and Tukwila

Sounder trains N S

- Two lines
- 91 miles
- 14 stations

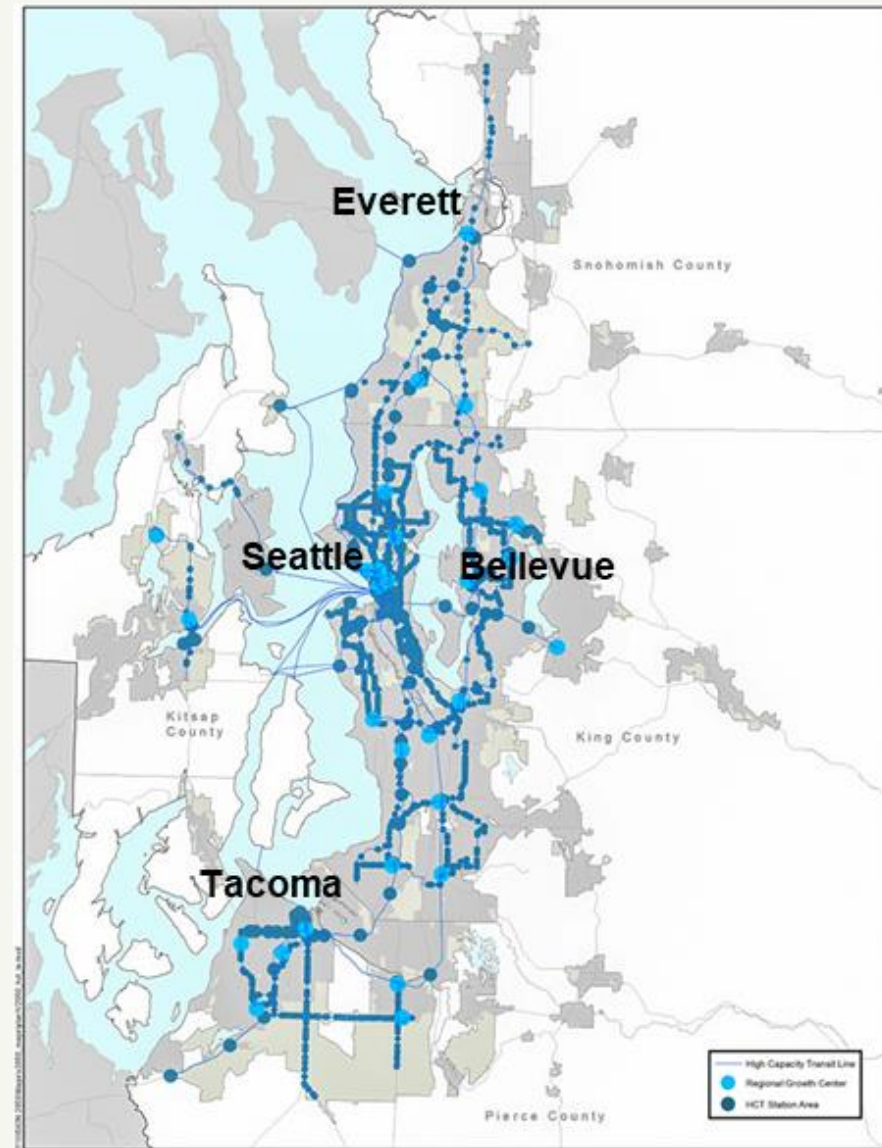
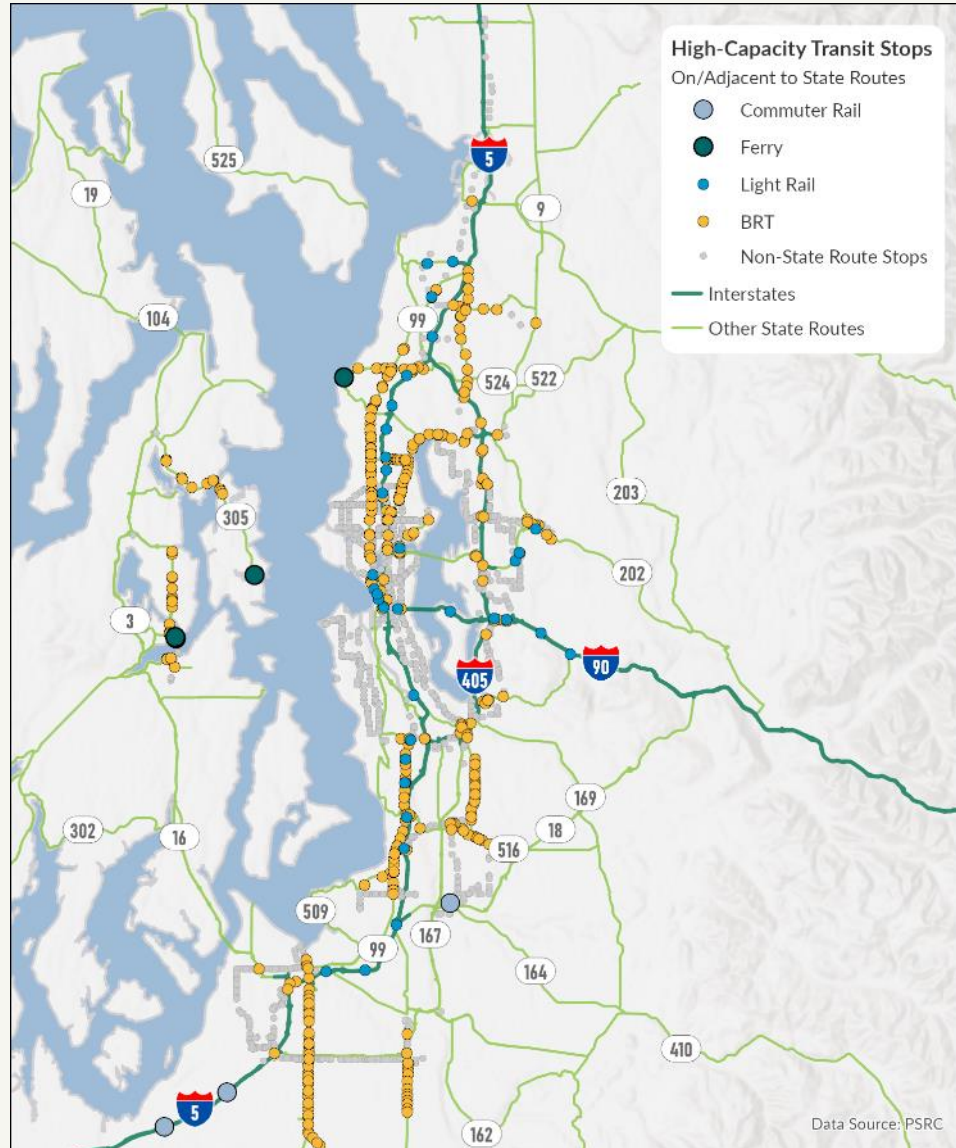
ACCESS TO TRANSIT



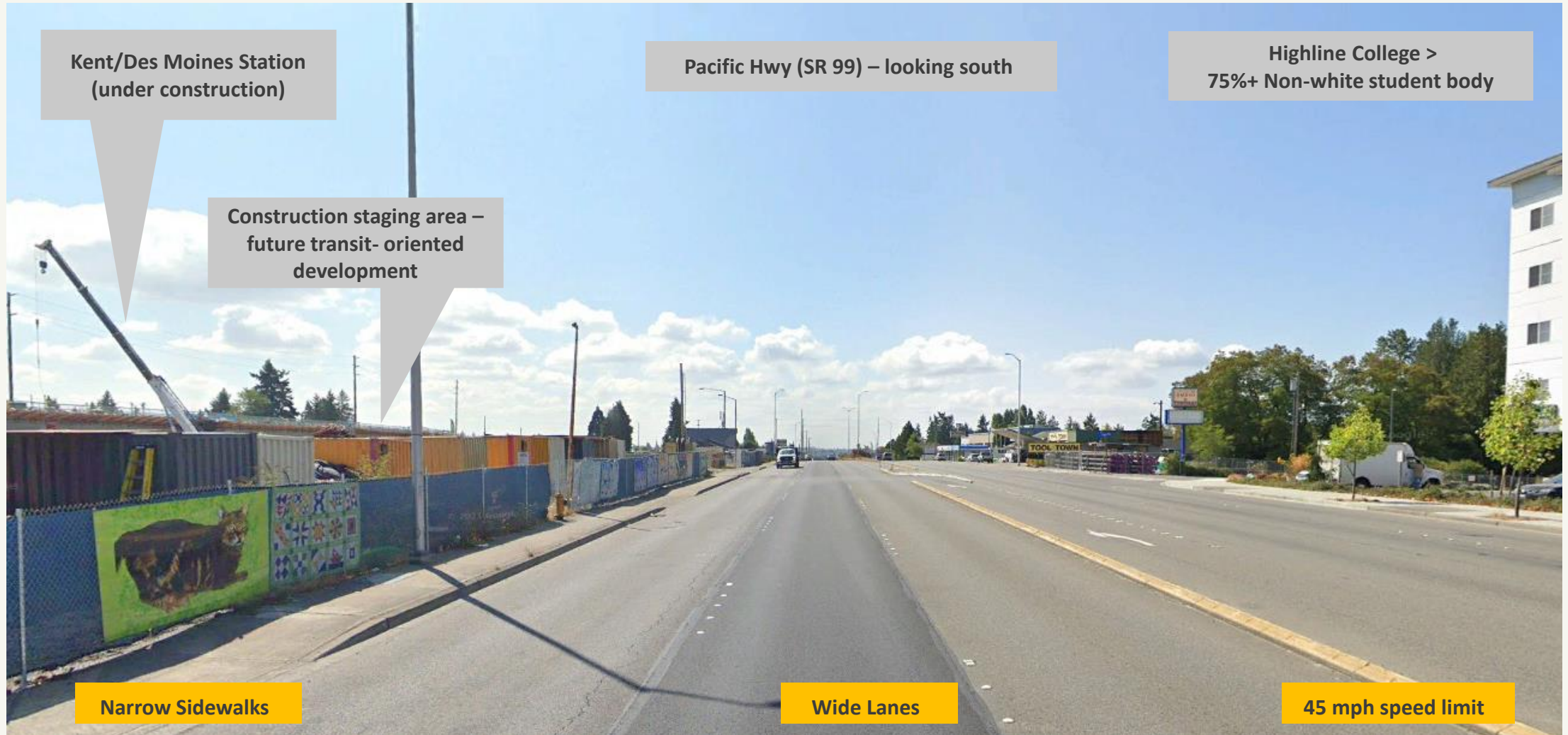
More than 83% of all trips accessing transit (90% of trips accessing light rail) were made by nonmotorized modes of travel (pedestrians and bicyclists) in 2018

Improved access via nonmotorized and other last-mile improvements = 40% increase in transit boardings

STATION AREAS & ACCOMMODATING REGIONAL GROWTH



BARRIERS TO TRANSIT ACCESS – KENT/DES MOINES



BARRIERS TO TRANSIT ACCESS – JUDKINS PARK, SEATTLE

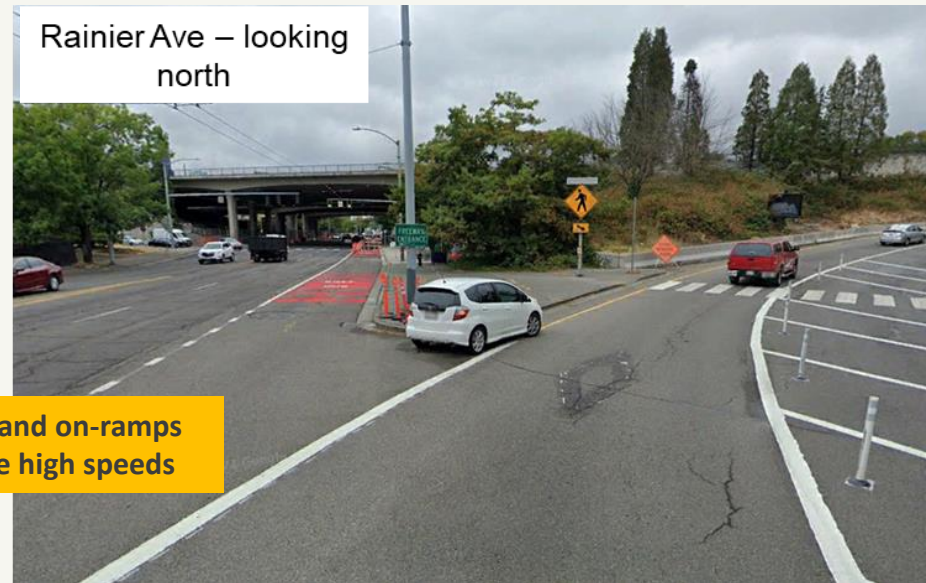


I-90 – looking east

By SounderBruce - Wikipedia



Rainier Ave – looking south



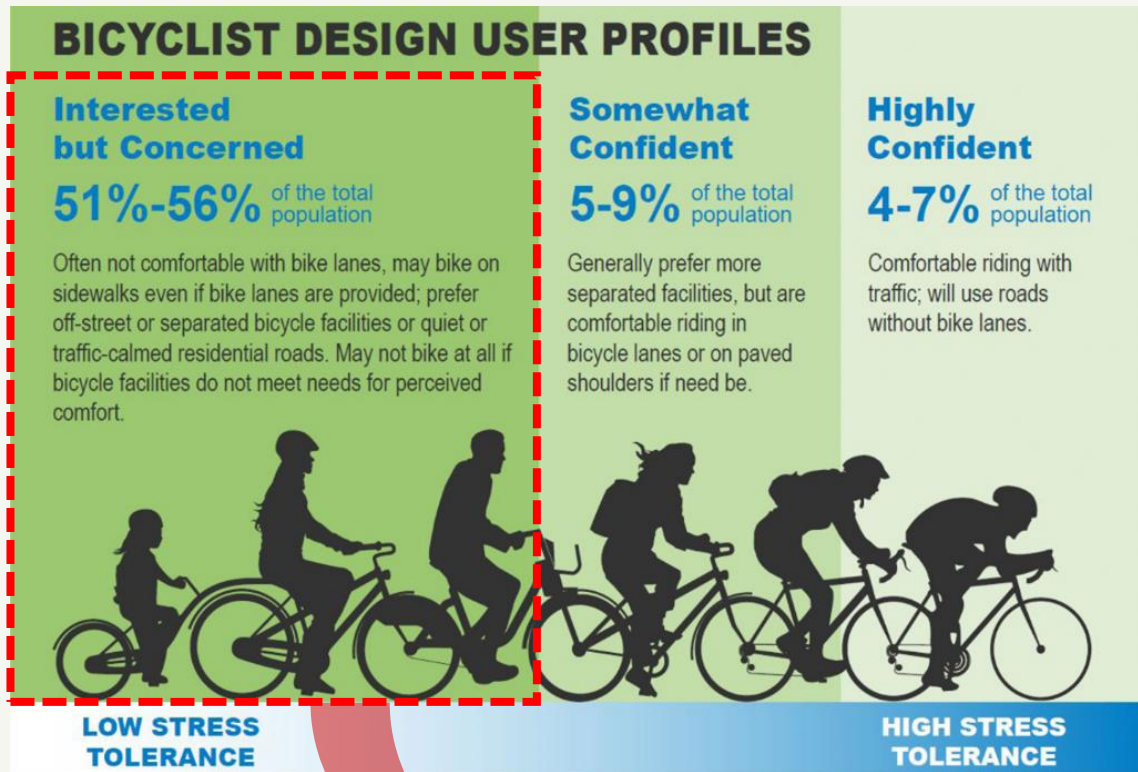
Rainier Ave – looking north

Wide off- and on-ramps encourage high speeds

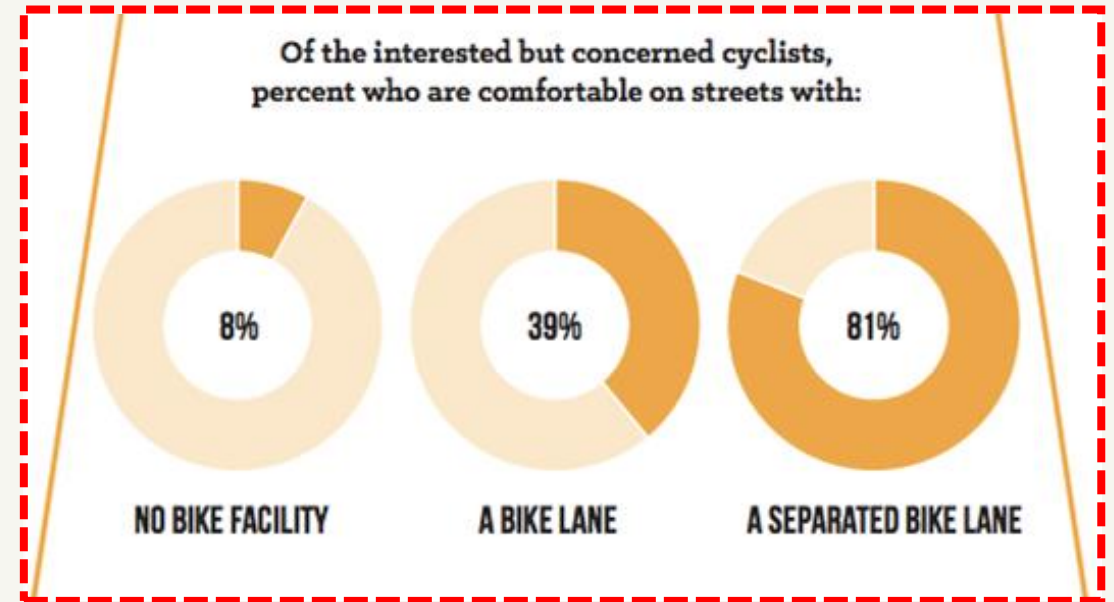
NORTHGATE STATION AREA – FUTURE VISION



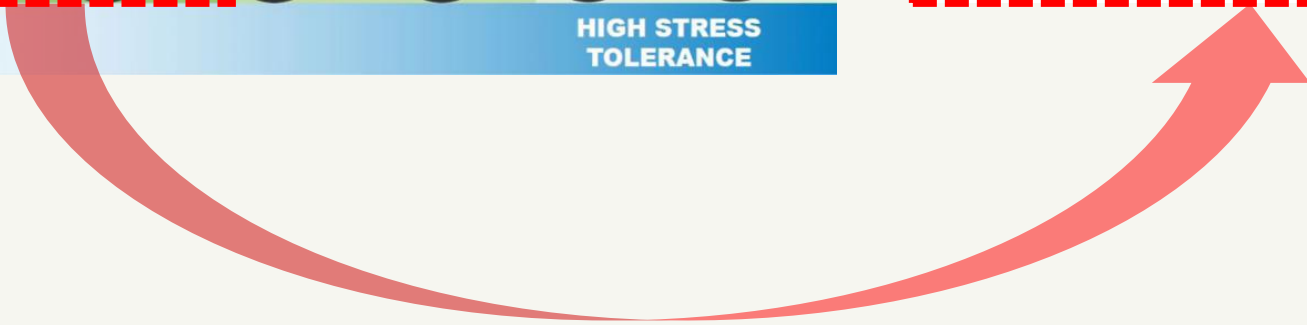
ACTIVE TRANSPORTATION – USER EXPERIENCE



Source: FHWA

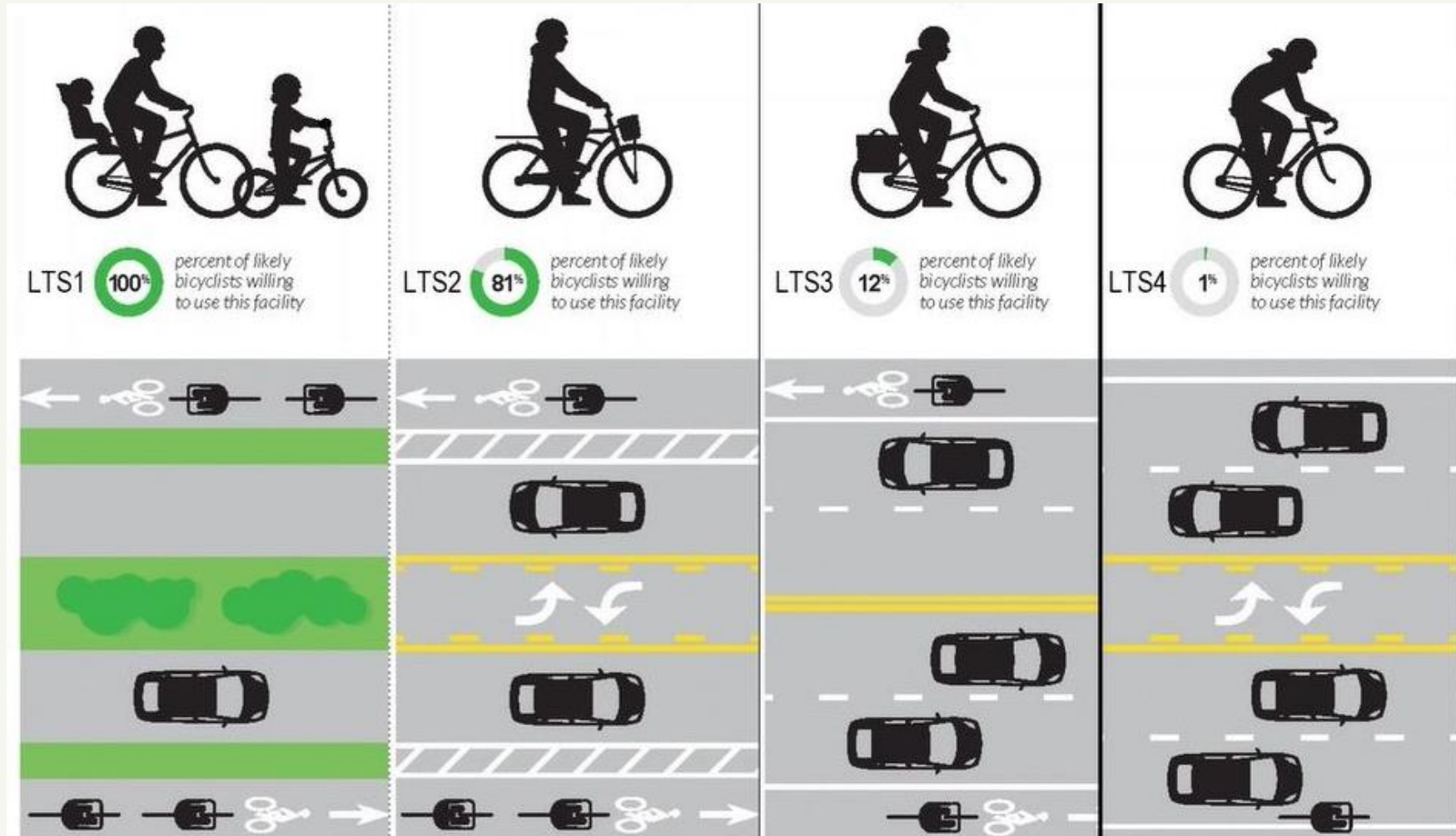


Source: Roger Geller (2009) and Jennifer Dill (2012)



ACTIVE TRANSPORTATION – USER EXPERIENCE

Level of Traffic Stress (LTS)



ACTIVE TRANSPORTATION – USER EXPERIENCE

DIRECTNESS: Creating short and fast routes
Minimising detours



- Fast
- Less physical effort
- Competitive alternative

A



B



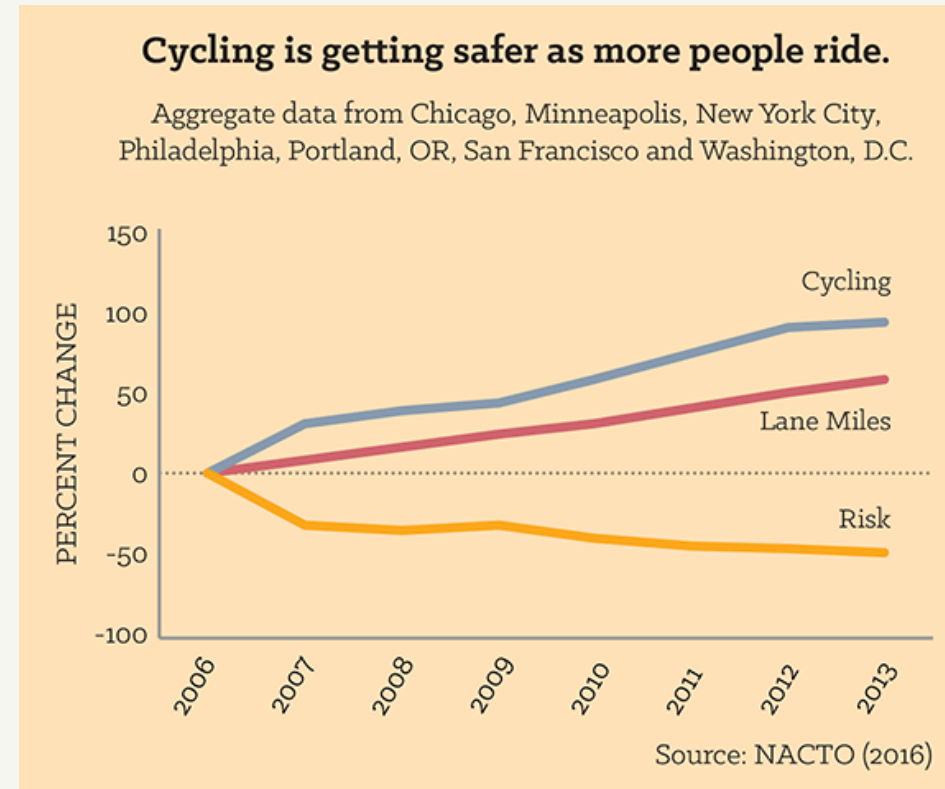
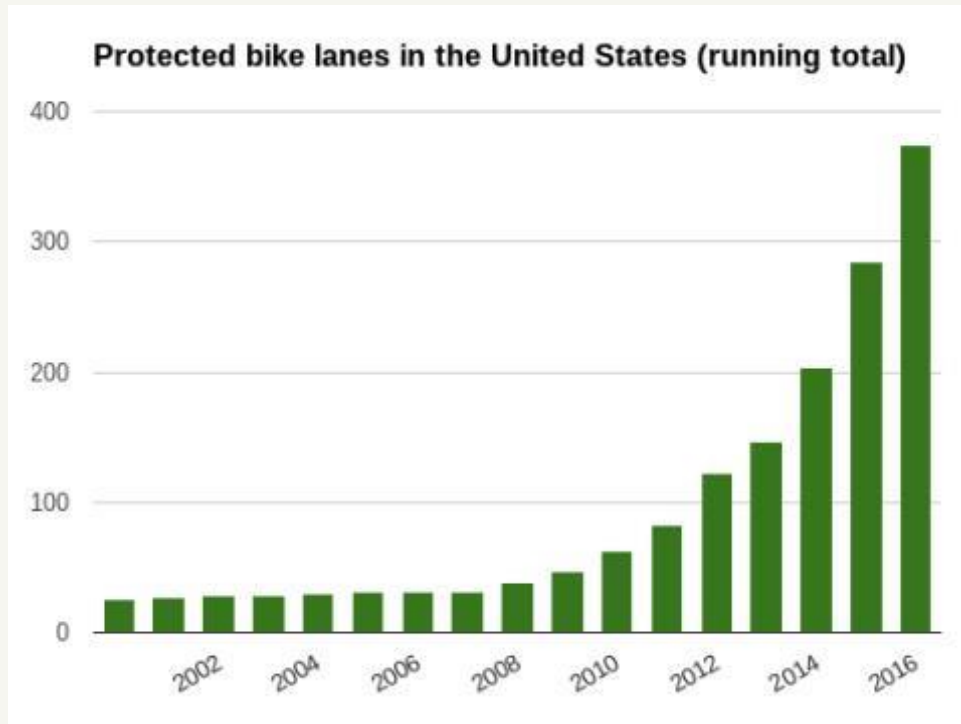
- Slow
- More physical effort
- Uncompetitive alternative

A

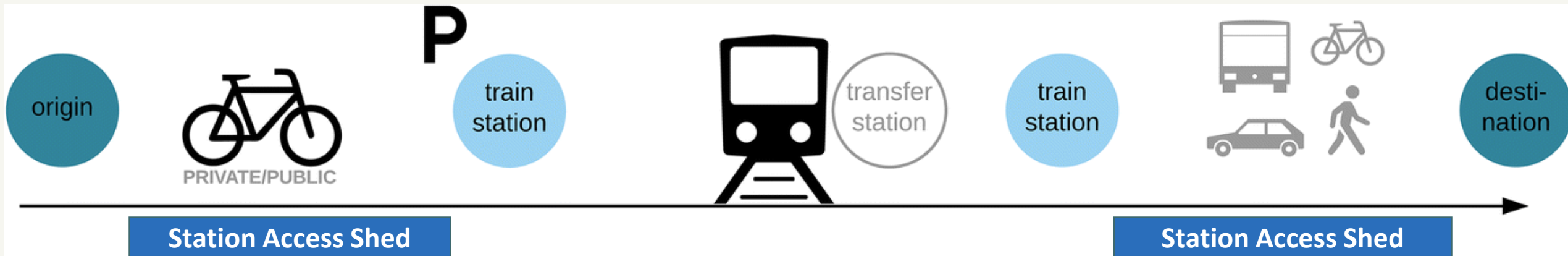
B



ACTIVE TRANSPORTATION – USER EXPERIENCE



TRANSIT JOURNEYS



Barriers:

- Dangerous / unsafe
- Network gaps
- Poor quality infrastructure

Active Transportation Users Need:

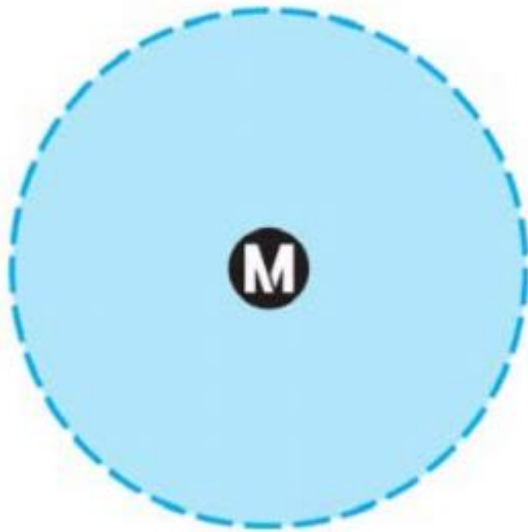
- Safety and reliability
- Efficiency and convenience
- Comfort and experience

Outcomes:

- Improve efficiency of transport system
- Maximize benefit of civic investment in transit system

STATION ACCESS SHEDS

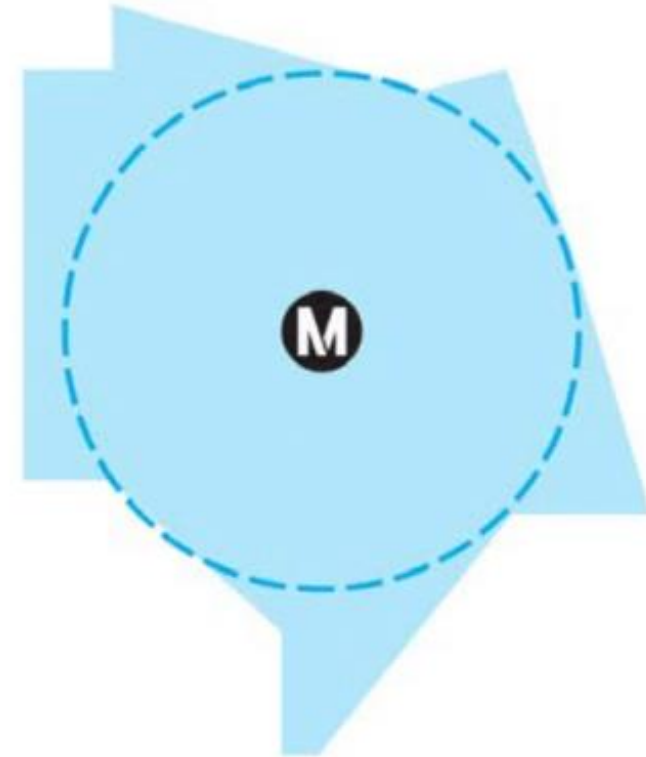
Policy:



Reality:



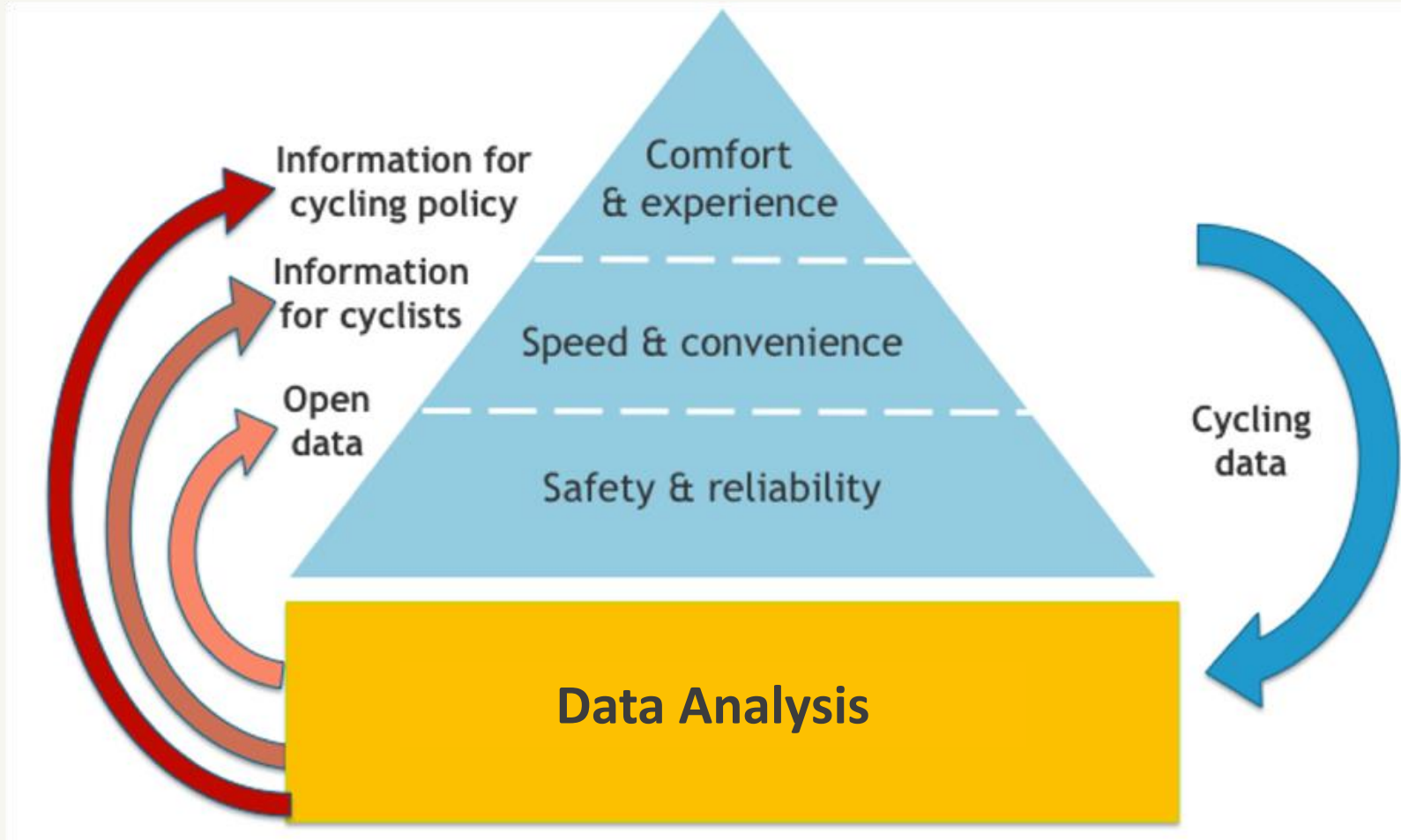
Goal:



LA Metro aspires to do better than the FTA guidelines.

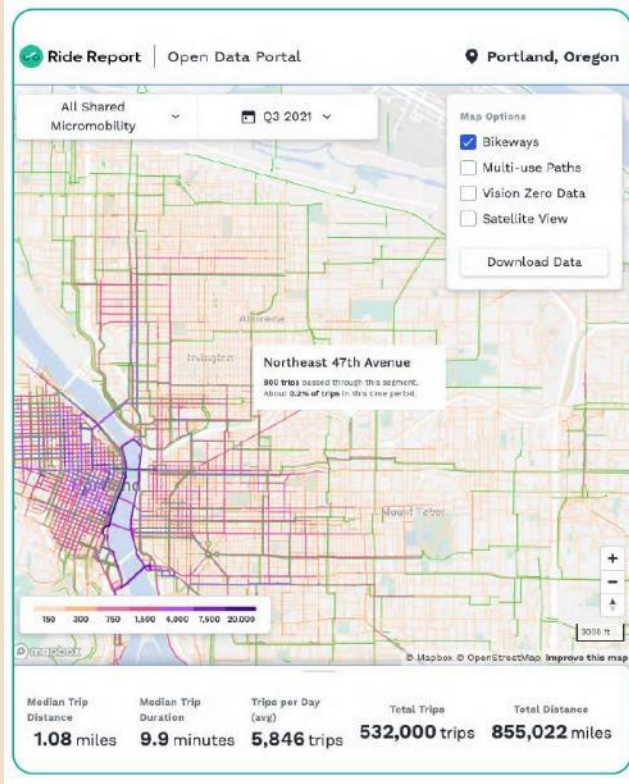
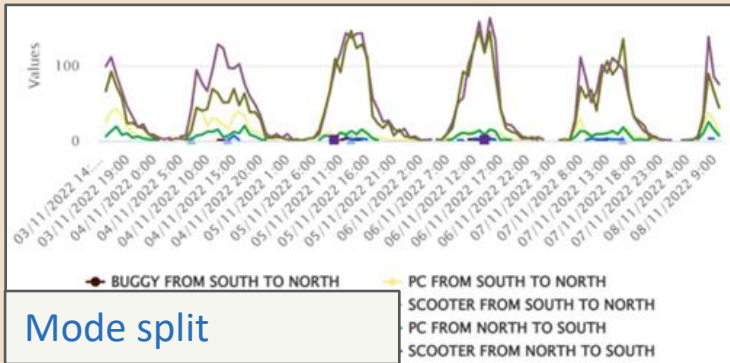
“a proposed county-wide, transit access network designed to **reduce the distance and time** it takes people to travel from their origins to stations and from stations to destinations, while simultaneously **improving the user experience**”

HOW CAN ITS ENHANCE USER EXPERIENCE

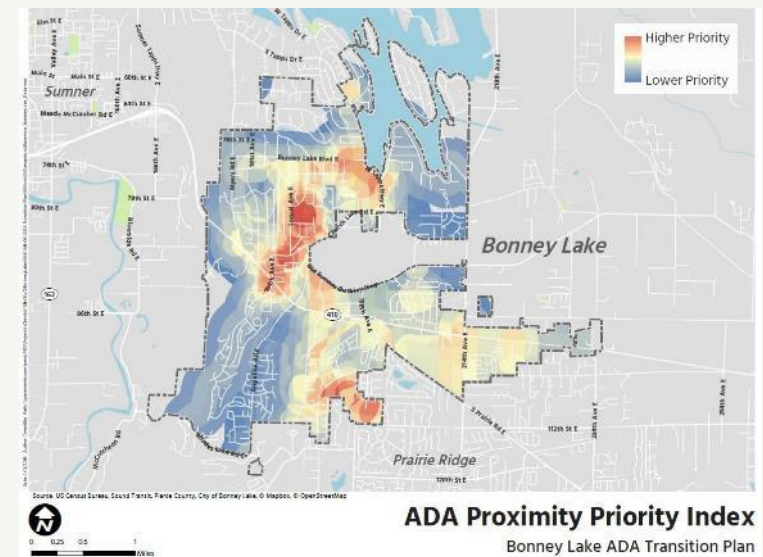


HOW CAN ITS ENHANCE USER EXPERIENCE

User Experience Data

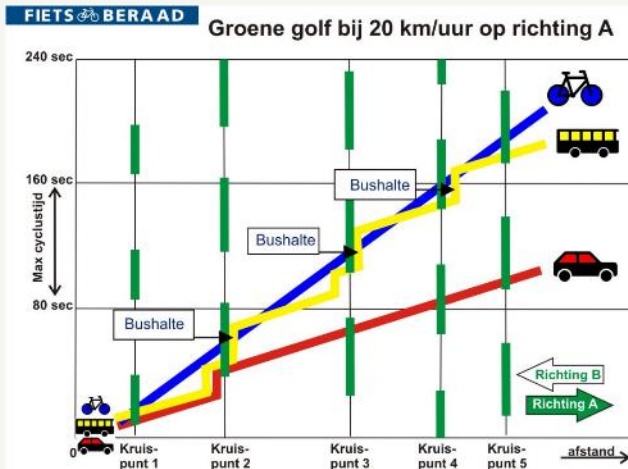


Existing Infrastructure



HOW CAN ITS ENHANCE USER EXPERIENCE

Signals



Low-stress infrastructure



HOW CAN ITS ENHANCE USER EXPERIENCE

