

"I never thought I'd be a bike commuter. But with an e-bike and Portland's bike boulevards, my commute is often the best part of my day."

A) What could it look like if we plan our city for greater affordability and mobility?

TriMet increases rapid bus service to provide 10-minute access to the entire Portland Metro area, significantly increasing ridership.

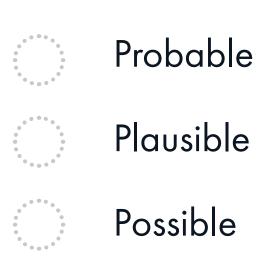
Design competition seeks to reimagine long-empty downtown parking garages.

With funding in hand for the Eugene to Vancouver (Canada) high-speed rail line, north-south tunnel construction begins along Portland's inner eastside.

Dynamic pricing discourages single car travel during peak times.

Neighborhood-scale electric utilit the landscape.

The only automobiles in the city ce of autonomous electric vehicle flee by public/private partnerships.





"The cost of taking my car downtown is enough to make me think twice about driving to work"



Downtown street parking is replaced with curb spaces for easy drop off /pick up for transit shuttles, delivery vehicles, and autonomous ride shares.

Dedicated bike boulevards criss-cross the city, expanding to reach Portland's outer neighborhoods.

Regional town centers (e.g. St. Johns, Lents, Sellwood, Multnomah Village) and innercity districts (e.g. Alberta, Division, NW 13th and 23rd) all host regular car-free weekend festivals





4. WE ENGAGE WITH STAKEHOLDERS. Residents, workers, businesses, and other stakeholders may feel direct impacts on their lives, their investments and their economic livelihoods by the unfolding transition to shared, zero-emission, and ultimately autonomous vehicles. We commit to actively engage these groups in the decision-making process and support them as we move through this transition.

B) What could it look like if our policies incentivize an equitable, clean-energy transportation future?

Renewables, along with 4th generation nuclear, power the Portland region. Battery storage and smart grid interconnectivity smooth out supply and demand.
City offers free bikes and scooters for use in downtown Portland to discourage car use.
80% of transportation options are electric and city's electrical infrastructure provides charging docks throughout the city.

6. WE LEAD THE TRANSITION TOWARDS A ZERO-EMISSION FUTURE AND RENEWABLE ENERGY. Public transportation and shared-use fleets will accelerate the transition

to zero-emission vehicles. Electric vehicles shall ultimately be powered by renewable energy to maximize climate and air quality benefits.

7. WE SUPPORT FAIR USER FEES ACROSS ALL MODES. Every vehicle and mode should pay their fair share for road use, congestion pollution, and use of curb space. The fair share shall take the operating, maintenance and social costs into account

> 8. WE AIM FOR PUBLIC BENEFITS VIA OPEN DATA. The data infrastructure underpinning shared transport services must enable interoperability, competition and innovation, while ensuring privacy, security, and accountability.

9. WE WORK TOWARDS INTEGRATION AND SEAMLESS CONNECTIVITY. All transportation services should be integrated and thoughtfully planned across

operators, geographies, and complementary modes. Seamless trips should be

10. WE SUPPORT THAT AUTONOMOUS VEHICLES (AVS) IN DENSE URBAN AREAS SHOULD BE OPERATED ONLY IN SHARED FLEETS.

Due to the transformational potential of autonomous vehicle technology, it is critical that all AVs are part of shared fleets, well-regulated, and zero emission. Shared fleets can provide more affordable access to all, maximize public safety and emissions benefits, ensure that maintenance and software upgrades are managed by professionals, and actualize the promise of reductions in vehicles, parking, and congestion, in line with broader policy trends to reduce the use of personal cars in dense urban areas.

For more information on the Shared Mobility Principles for Livable Cities visit **sharedmobilityprinciples.org**

PDX Mobility Futures

INSPIRED BY NUMO'S 10 SHARED MOBILITY PRINCIPLES FOR LIVABLE CITIES

5. WE PROMOTE EQUITY. Physical, digital, and financial access to shared transport services are valuable public goods and need thoughtful design to ensure use is possible and affordable by all users, regardless of age, gender, race, ethnicity, income, ability, or other characteristic/identity

facilitated via physical connections, interoperable payments, and combined information. Every opportunity should be taken to enhance connectivity of people and vehicles to wireless networks.

C) What could it look like if we design with and for equity?

City operated autonomous vehicle fleets provide quick and low-cost rides for residents (many of which are low income) who live in neighborhoods outside of the city center.

People receiving government assistance automatically qualify for free transit services.

New low-interest investment options funnel local wealth into transit-serviced affordable housing.

Citizen councils grapple with equitable policies for road pricing.

A Port of Portland implemented landing fee on PDX airport passengers funds TriMet's operating budget, enabling fare-free, highfrequency transit.

Autonomous vehicle companies that specialize in assisted transport (for elderly, disabled, and others with special service needs) access car-free areas of the city.

D) What could it look like if we design a data ecosystem to serve the public good?

PDPA (Portland Data Protection Agency) A city-wide deliberative process examines: What would a "smart city" that is also forms to strengthen the fundamental rights equitable and climate-friendly look like? of individuals and ensure that the public has agency over personal data. Following Uber and Lyft bankruptcies, newly For anyone willing to allow location tracking formed Portland Cab Cooperative launches an and view ads in-auto, autonomous vehicles are open-source ride-hailing app. cost-free. Transportation app shares the fastest option Neighborhood groups team up with hackers to create transportation data "black holes" available and associated costs based on to prevent algorithms from sending traffic into driving (parking, congestion pricing) versus public transportation or biking (both free). their neighborhoods to avoid rush hour traffic.



"All cities should have

like Portland."

inclusive mobility planning



"I can point my phone at any of the city's new roving transit shuttles to display its route map."

> **STRATEGY + FORESIGHT CLASS** Collaborative Design MFA + Design Systems MA Pacific Northwest College of Art

Instructor

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Students Kate Baker, Mijounga Chang, Howard Silverman Simone Crowe, Emilie Jensen, Audrey Lewis, Leah Payne, Jason Redcedar, Katie Scott

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