GETTING THERE:

THE TRANSITION TO AUTONOMOUS, ELECTRIC, AND RIDE-SOURCING VEHICLE TECHNOLOGIES & HOW WE WORK TOWARD POSITIVE OUTCOMES

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KITTELSON & ASSOCIATES, INC.

Camilla & Bryan

Emerging Technologies are ACES…

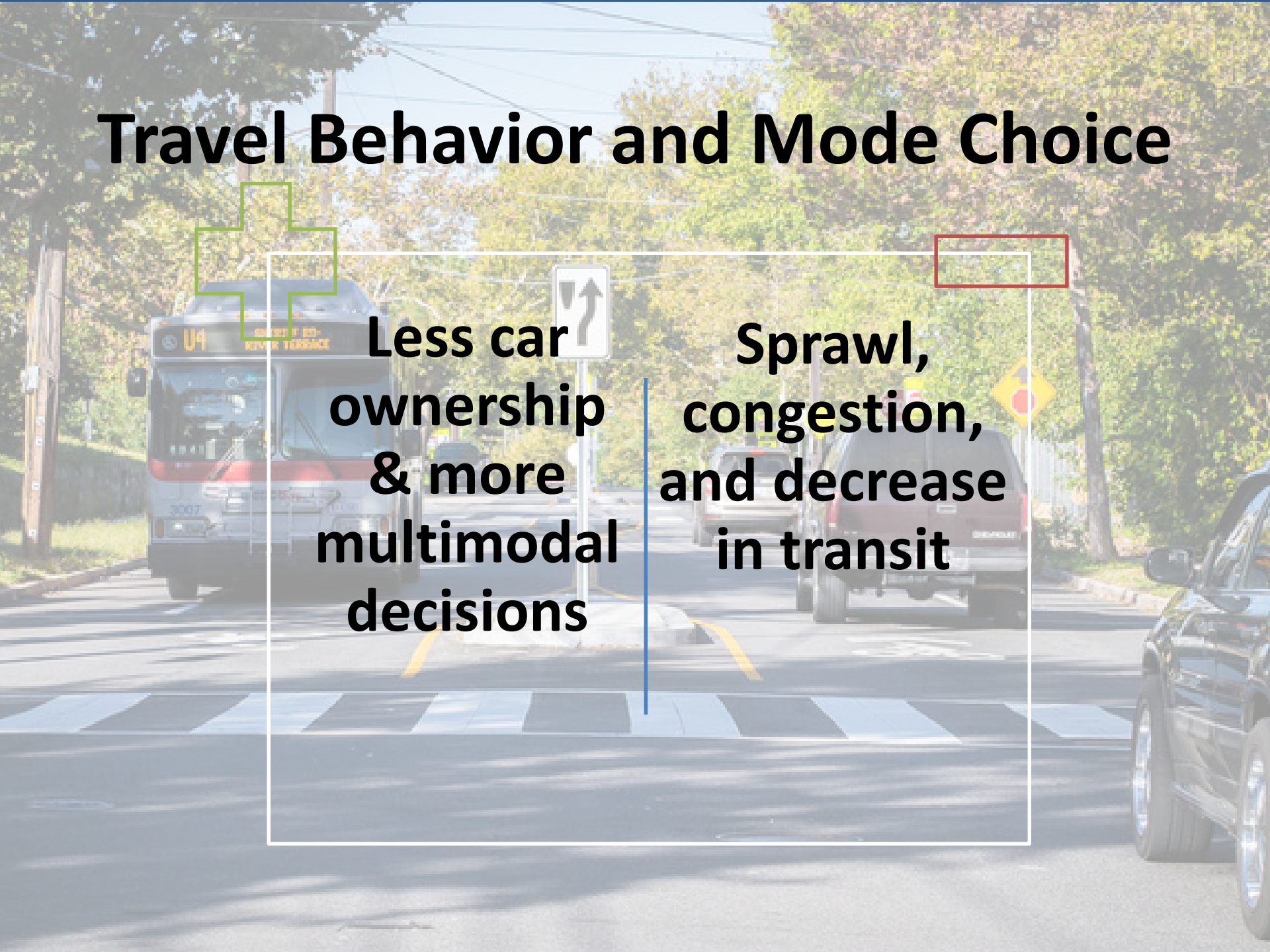
AUTOMATED

CONNECTED

ELECTRIC

SHARED

Travel Behavior and Mode Choice



Less car ownership & more multimodal decisions

Sprawl, congestion, and decrease in transit

Parking and Curb Space

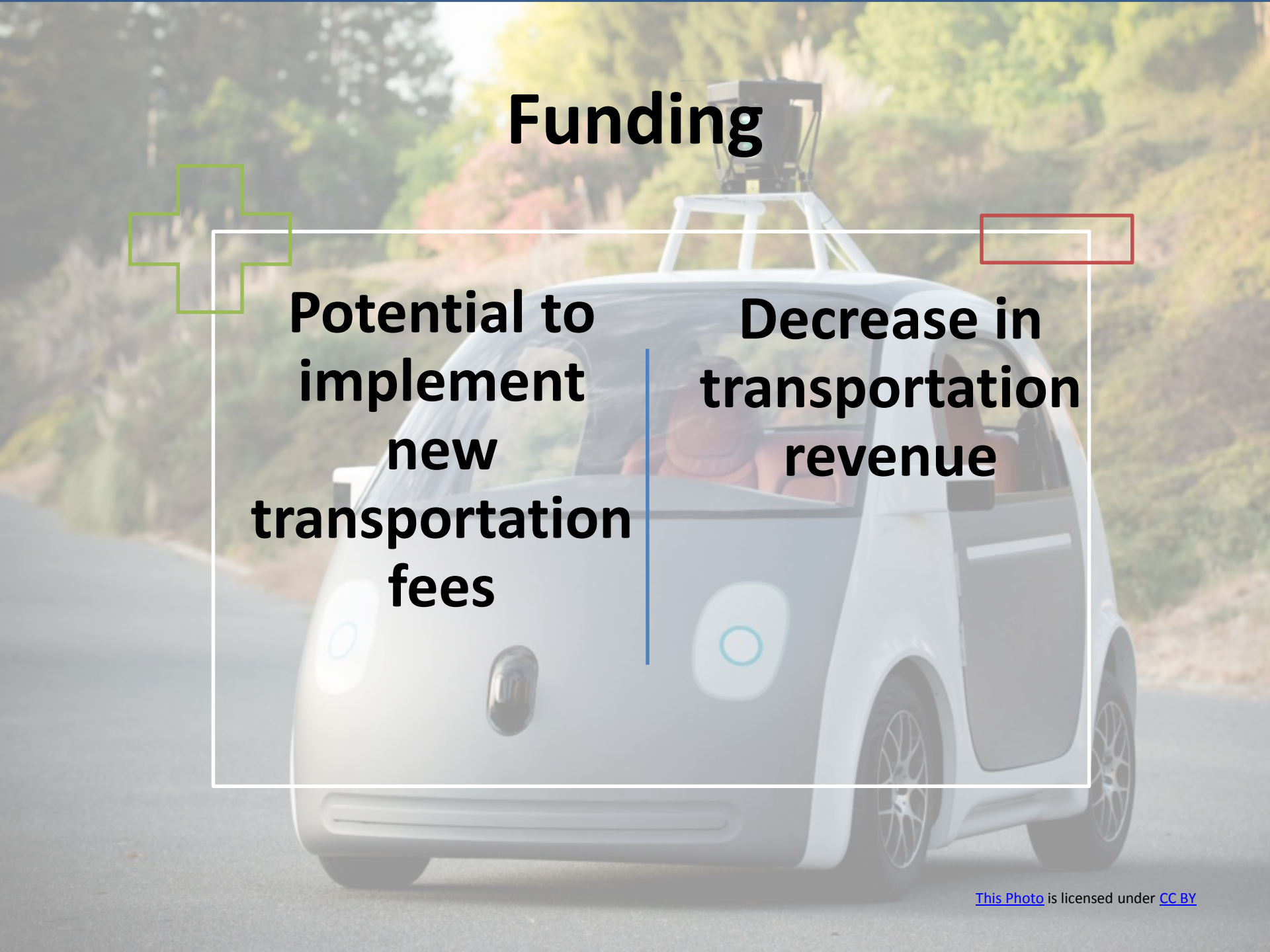
Reduced need for parking

Need for pick-up & drop-off space

Funding

Potential to implement new transportation fees

Decrease in transportation revenue



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Safety

Long term: improved safety performance

Insufficient detection of vulnerable users

How should we prepare?

Solutions: Start Big Picture

- LRTP
- Goals & priorities- inform the technology providers
- Policy & design support goals
- Portland's proposed modal priorities:
  1. Walking
  2. Biking
  3. Transit
  4. Taxi/commercial transit/shared vehicles
  5. Zero-emission vehicles
  6. Other single or zero-occupancy vehicles

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Funding

- Infrastructure costs, environmental costs, congestion costs, space costs, etc.
- Road usage charges
- Congestion pricing
- Curb pricing

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Data

- Data will allow better decision making
  - Street usage and conditions
  - Curb occupancy
  - Parking conditions
  - Modal choices
  - Congestion
- Variety of different data sources
  - City collection
  - Private companies

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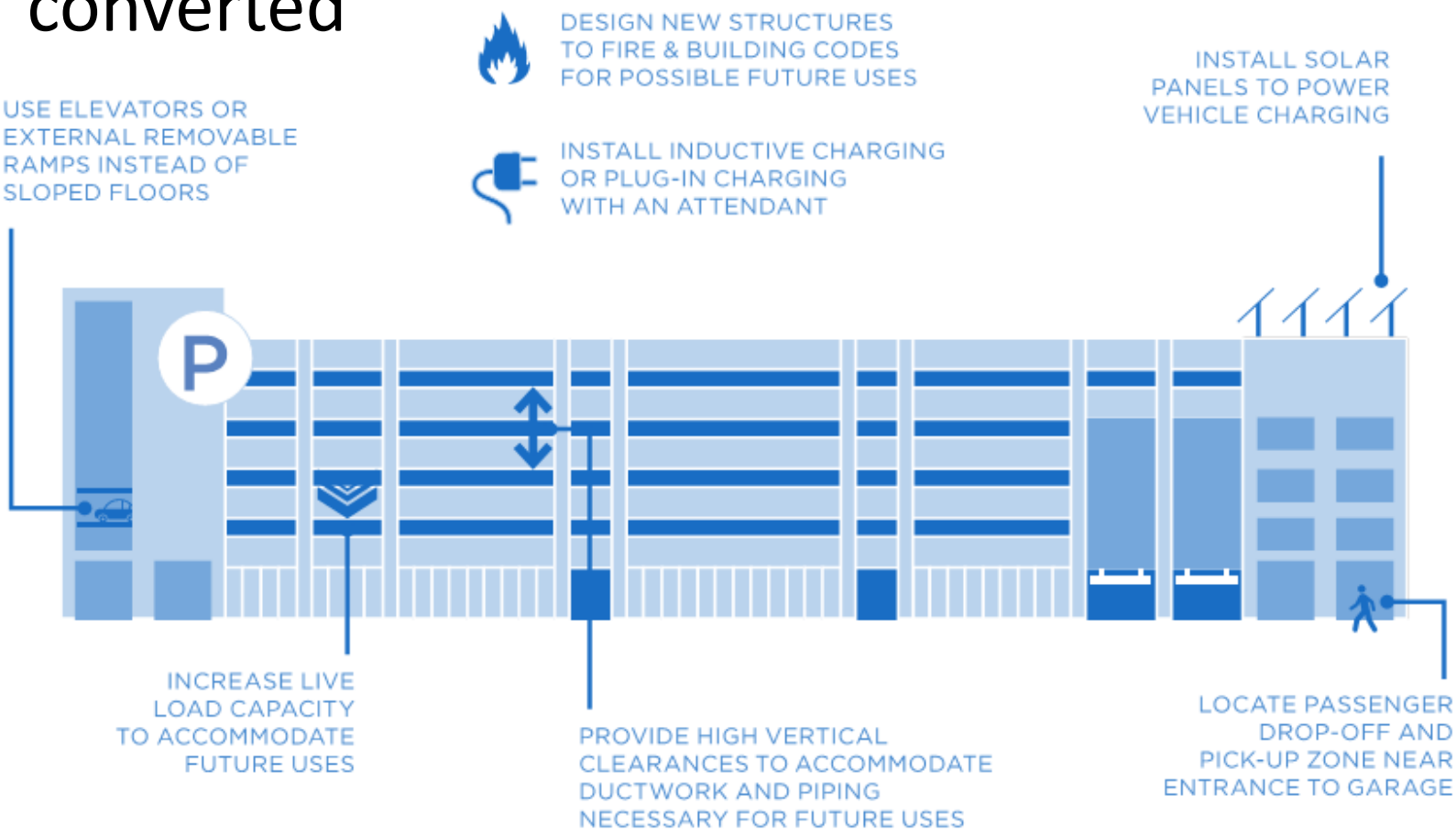
Parking

- Policy: reduce or eliminate parking minimums
- Design: make structured parking able to be converted



Curb Space

- Policy:
  - Flexible curb space
  - Designated pick-up & drop off areas
  - Designated bicycle/scooter parking
- Design:
  - Pick-up/drop-off with amenities

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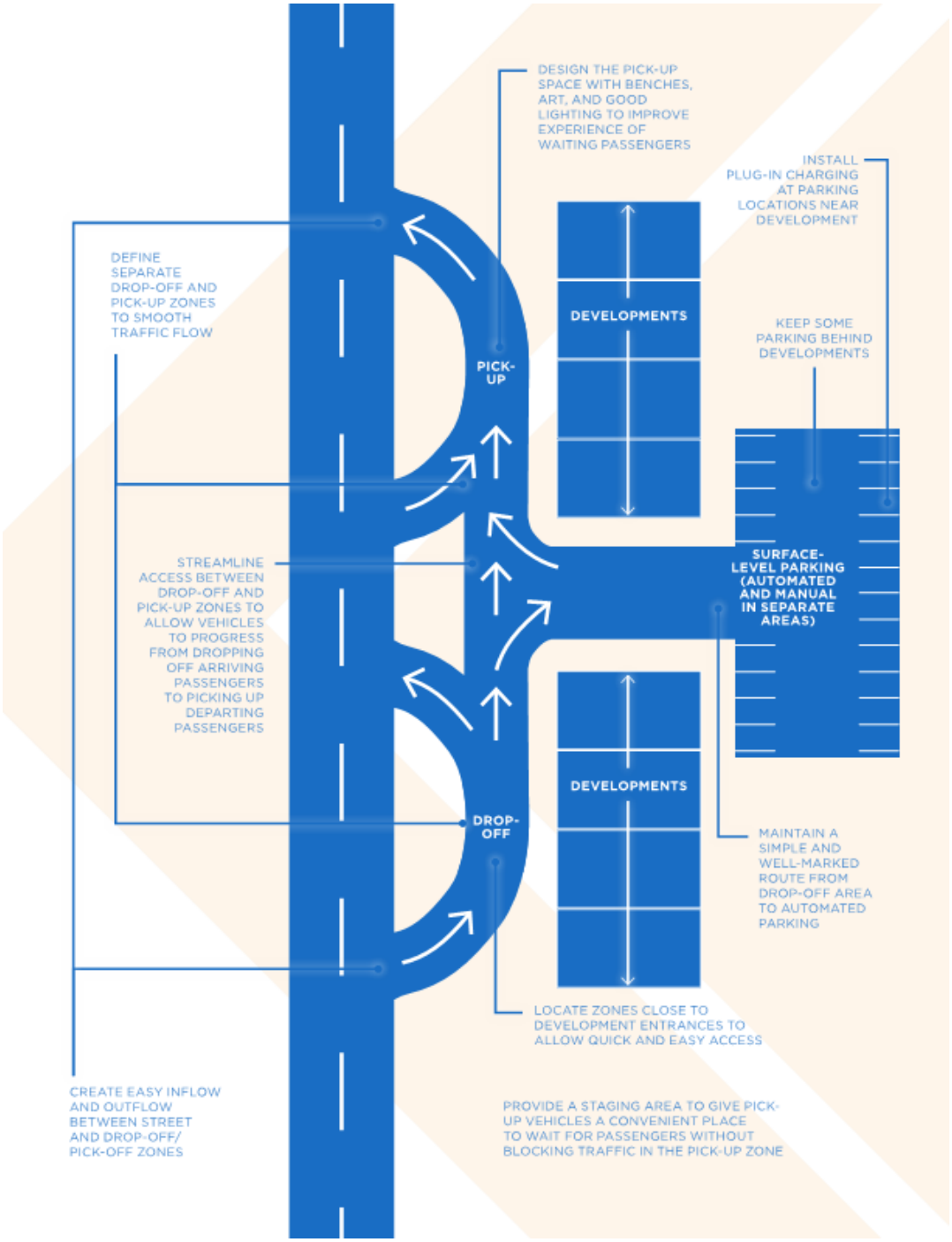
Site Plan Pick-up & Drop-off

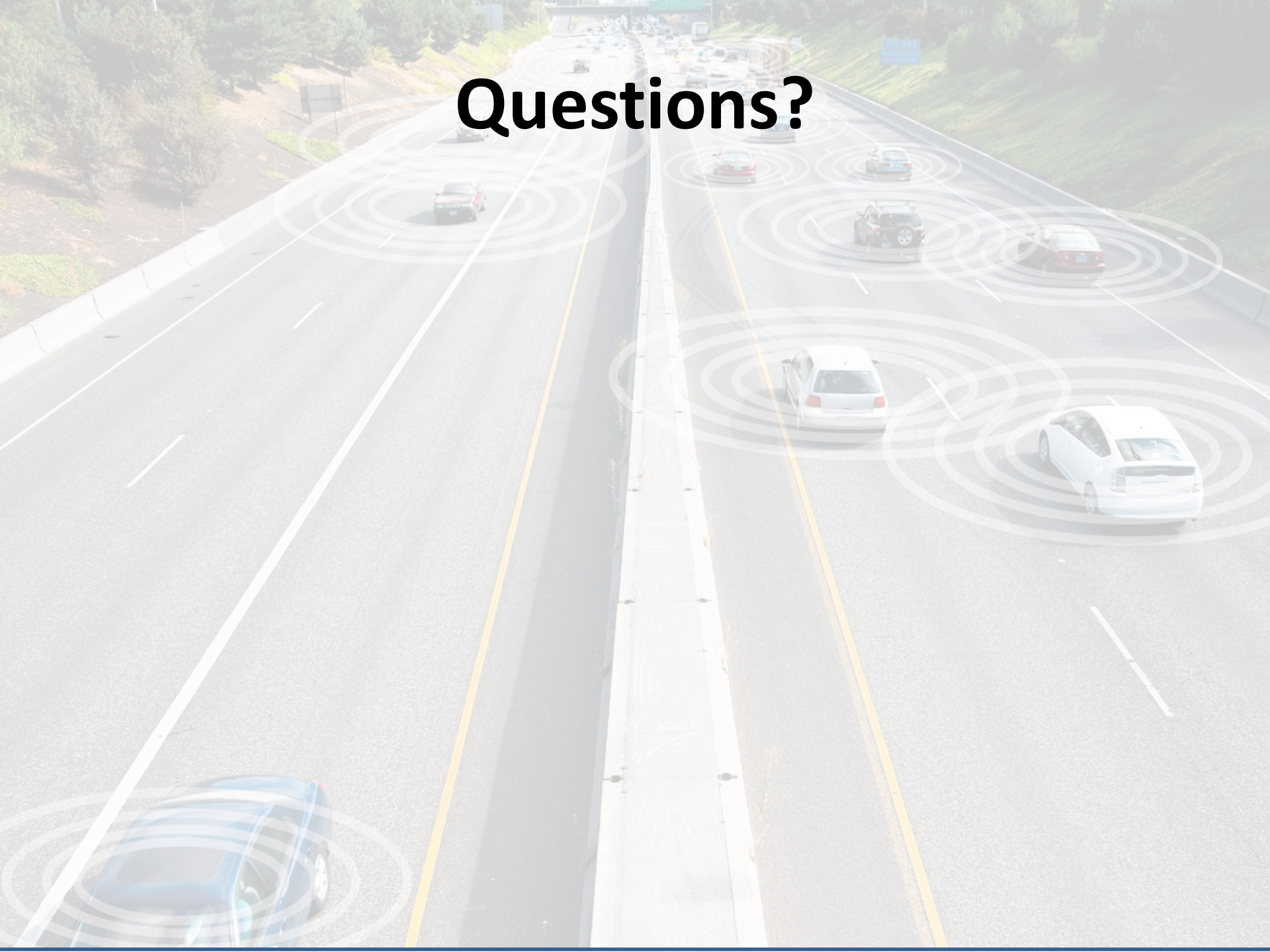


Plan Proactively

Consider other emerging transportation technologies:

- e-scooters
- bikeshare
- delivery bots

Photo: James Martin/CNET


Questions?