



Emerging Technologies Impact Assessment (ETIA) Update for COACT



March 14, 2019

ETIA Overview

Project Background and Purpose

The ETIA is intended to consider how emerging transportation technologies such as Connected/Automated Vehicles (CV/Avs) and Mobility as a Service (MaaS) could specifically transform Oregon's transportation system, address Oregon-specific transportation challenges, and evaluate the range of possible impacts for which ODOT should prepare.

Phase 1:

- Identification and analysis of key trends in emerging transportation technologies
- Implications of the trends from Oregon perspective and with regards to how this may impact the statewide transportation system.

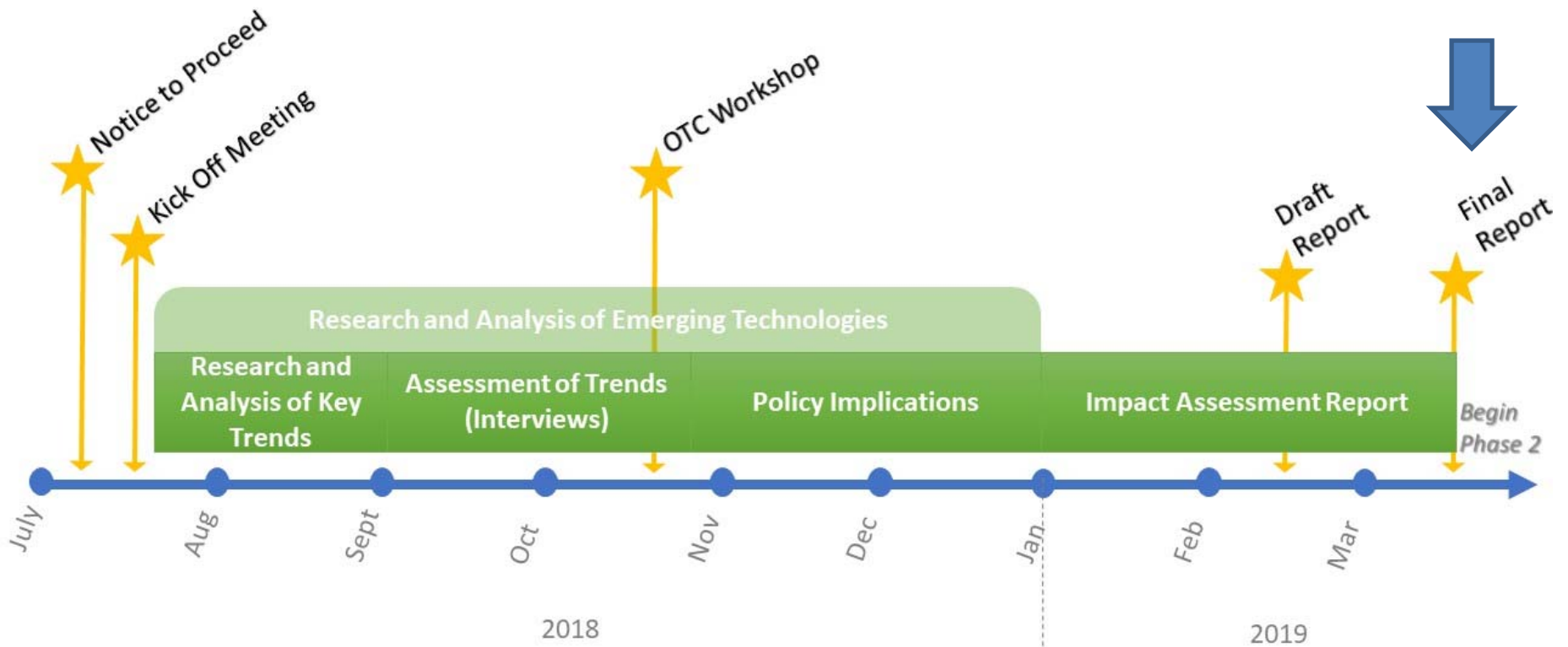
Phase 2:

- Development of planning scenarios to explore a broader range of considerations in preparation of updates to the Oregon Transportation Plan (OTP) and likely the Oregon Highway Plan (OHP).



Where We Are Now

ETIA Phase 1 Schedule



ETIA Final Report

Last task that completes ETIA Phase 1

Main sections/components of report:

Executive Summary

Emerging technologies
and trends

Policy implications for
Oregon



ETIA Final Report

Overview of technologies and trends

Report groups emerging technologies into three categories:

Vehicle technology (AVs, CVs, EVs)

Mobility options (bike and e-scooter share, ride-hailing services)

Freight logistics and local delivery applications



ETIA Final Report

Overview of technologies and trends

Report identifies three overarching technological trends:

Improvements in computing power

Communications and networking

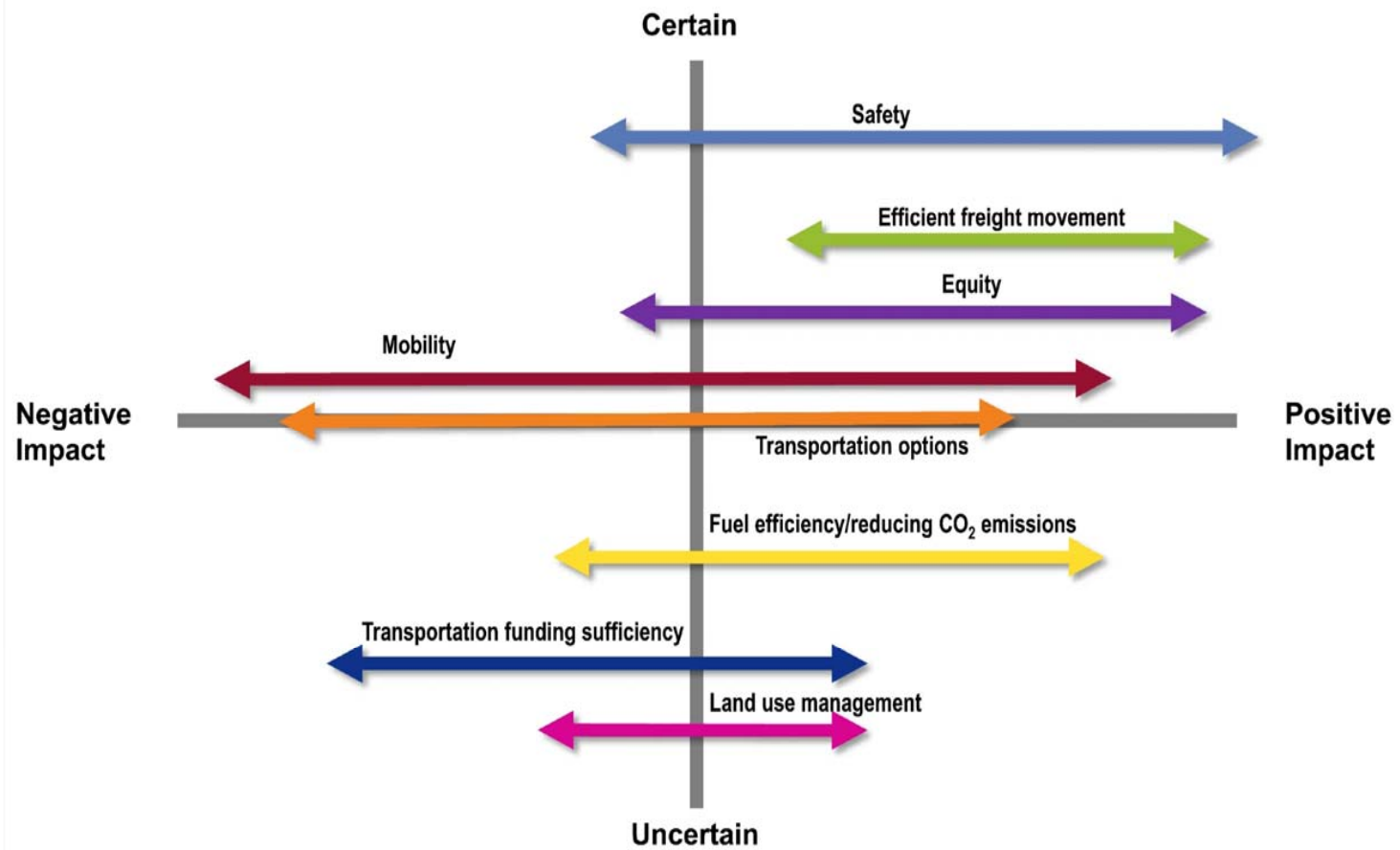
Increase of available data ("big data")



ETIA Final Report

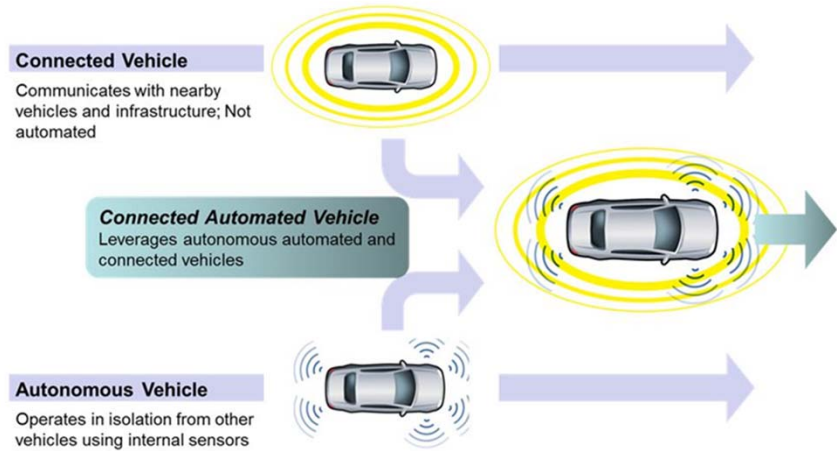
Policy Implications for Oregon

*Framework for understanding possible outcomes – 12
“Foundational Goals”*

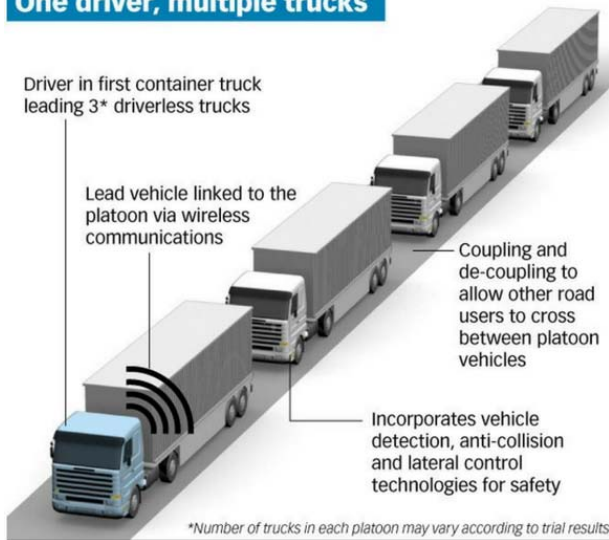


OTC Emerging Technologies Workshop

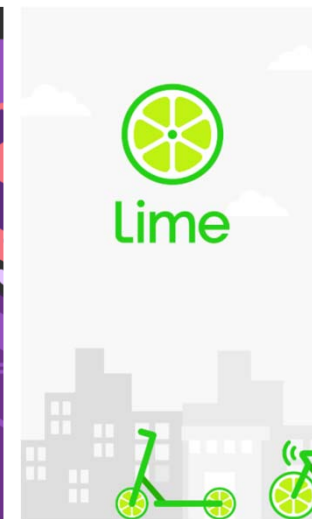
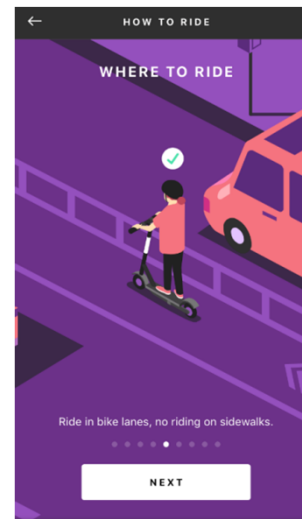
1. Overview of technologies and trends



One driver, multiple trucks



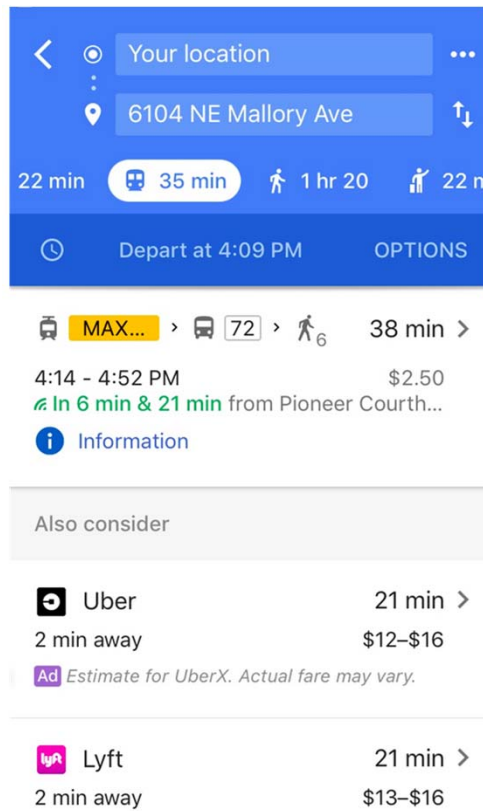
Source: PSA and Ministry of Transport



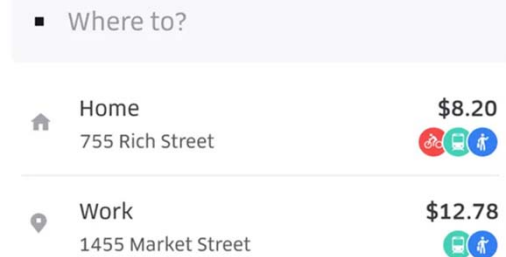
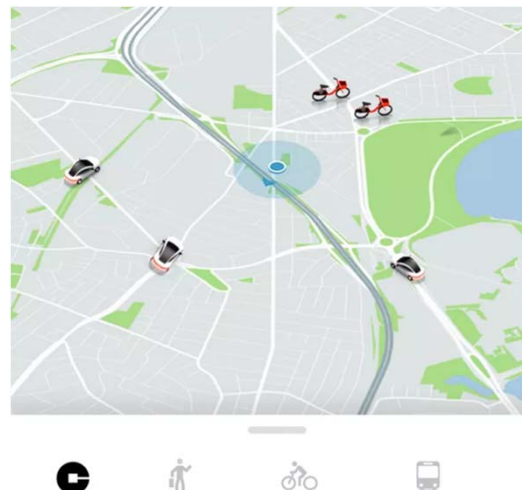
OTC Emerging Technologies Workshop

1. Overview of technologies and trends (cont.)

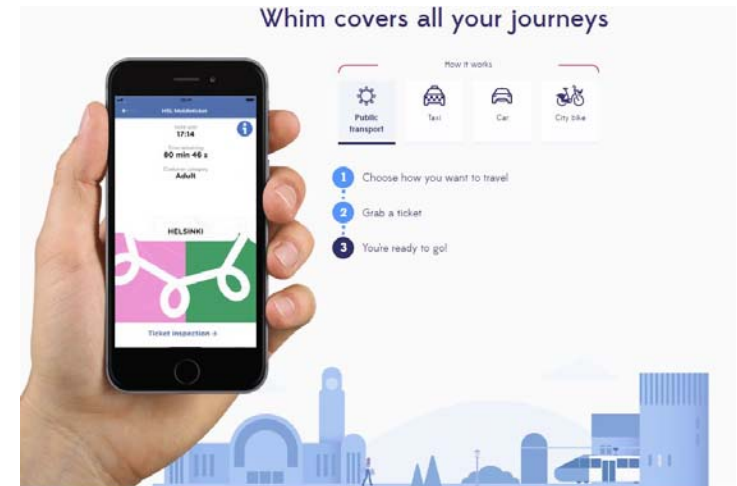
Mobility as a Service (MaaS) – “transportation market of the future”



Source: Google maps



Source: Uber



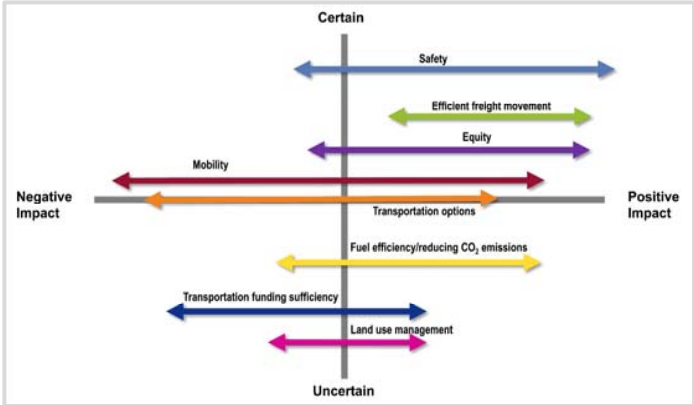
Source: Whim



OTC Emerging Technologies Workshop

Policy Implications and OTC Brainstorming Session

Policy Implications for Oregon



Policy area/issue

Prioritization of issues



OTC Emerging Technologies Workshop

Common themes/top concerns:

Understanding of
funding impacts

Aligning ODOT's
efforts with other
state and local
agencies

Understanding
anticipated
settlement patterns

Developing
skills/experience
within ODOT to
address E.T. impacts



OTC Emerging Technologies Workshop

Identified actions and items for follow-up:

Brief OTC March 21– Approach to scenario planning and sequencing of work

Consider potential pilot projects throughout the state

Leverage the Road User Charge (RUC) program

Develop a 3-5 year strategic plan and begin to set benchmarks



What is Anticipated for 2019?

ETIA Phase 2/Scenario Planning Work

Spring and early summer:

ETIA Briefings in Bend, Redmond (COACT) and Eugene

“Emerging Technologies Peer Exchange” in Salem with other state agencies

Scope new contract: statewide long-range planning services



What is Anticipated for 2019?

ETIA Phase 2/Scenario Planning Work (continued)

Mid-summer to fall:

Begin RFP and consultant selection for new contract

Define a range (3-5) of alternative futures/planning scenarios

OTC approves approach to OTP and OHP Updates



What is Anticipated for 2019?

ETIA Phase 2/Scenario Planning Work (continued)

Fall to winter (and into 2020):

Kickoff OTP and OHP Updates

- Initiate Public Involvement process
- Form advisory groups

Continue background and research on key topics, e.g.:

- Transportation Systems Management & Operations (TSMO)
- Mobility as a Service (MaaS)
- Demographics, resiliency (going broader than technology)



Thank You

Adam Argo, AICP
Principal Planner, ODOT
Transportation Development Division
503.986.3510
Adam.ARGO@odot.state.or.us

