Applications and Impact Breakouts: Introduction

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Mobility and Environment Workshop
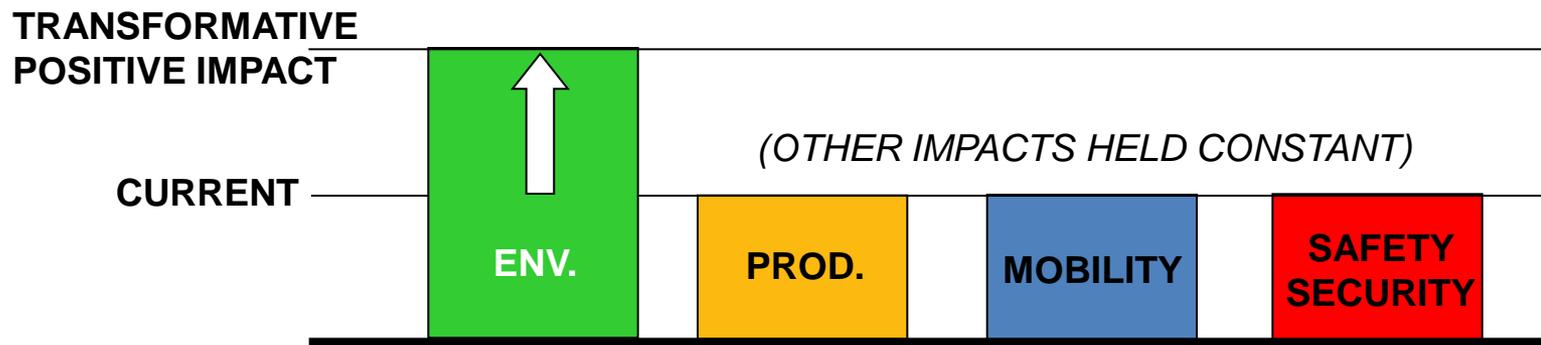Arlington, Virginia

December 1, 2010

Outline

- Impact Area Definitions
- Breakout Exercises: Ground Rules and Background
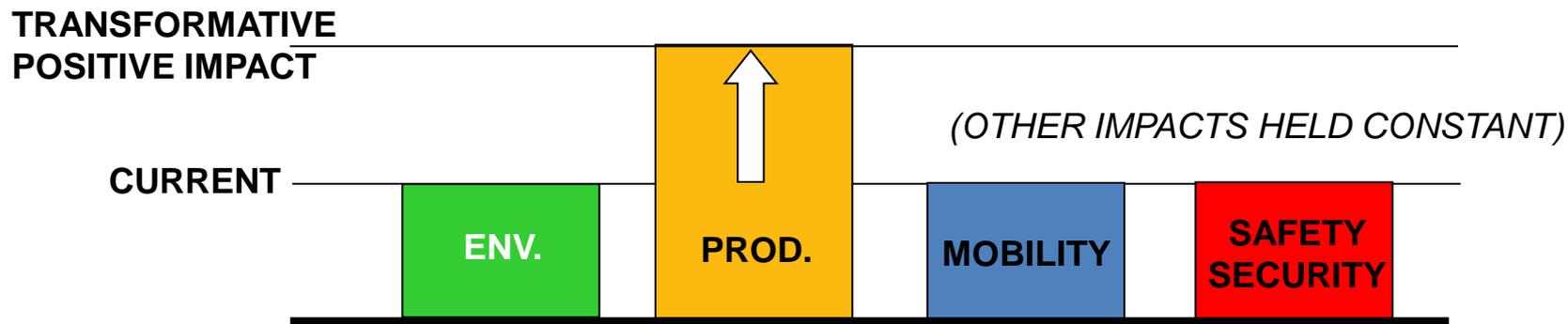- Role of Stakeholder Input
- Breakout Group Organization
- Questions

Impact Area Definitions

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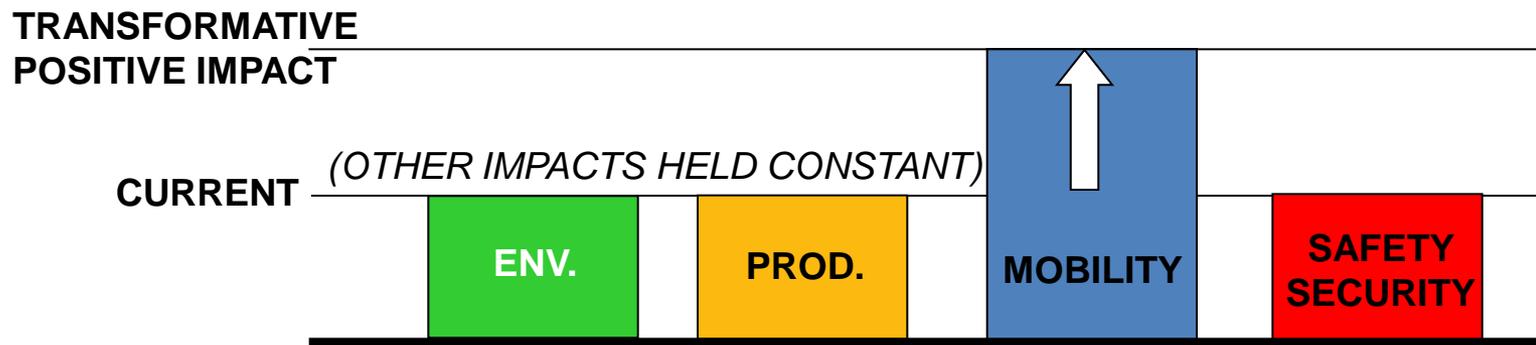Research and Innovative Technology Administration

IntelliDrive

- One breakout group will identify promising applications to achieve goals related to transportation-related environmental impacts.

- For the purposes of this breakout, transformative environmental impacts have occurred when the transportation system has:

  - the capability to reliably deliver goods and passengers safely through the transportation system at current levels with *transformative reductions in environmental impacts resulting from transportation-related emissions and fuel consumption*.

TRANSFORMATIVE POSITIVE IMPACT

CURRENT

(OTHER IMPACTS HELD CONSTANT)

| ENV. | PROD. | MOBILITY | SAFETY SECURITY |

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Transformative Productivity Impacts

- One breakout group will identify promising applications to achieve goals related to overall system productivity

- For the purposes of this breakout, transformative productivity impacts have occurred when the transportation system has:

  - *a transformative capability to reliably deliver the largest aggregate net value of goods and passengers through the transportation system* within the current system footprint and without increased environmental impact, fuel use, or safety risk.

TRANSFORMATIVE POSITIVE IMPACT

(OTHER IMPACTS HELD CONSTANT)

CURRENT

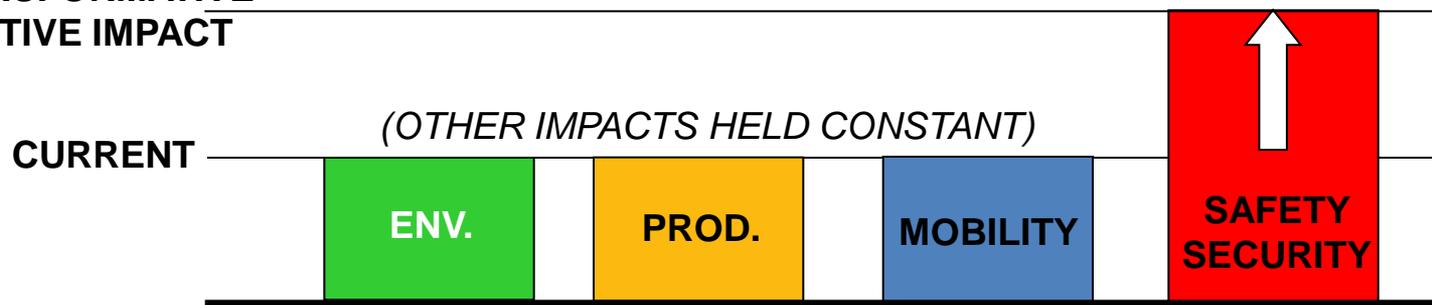| ENV. | PROD. | MOBILITY | SAFETY SECURITY |

- One breakout group will identify promising applications to achieve goals related to enhancing individual mobility

- For the purposes of this breakout, transformative mobility impacts have occurred when the transportation system has:

  - *a transformative ability for travelers of all types to access the largest possible set of destinations reliably and predictably through the transportation system* without increased environmental impact or safety risk

TRANSFORMATIVE POSITIVE IMPACT

(OTHER IMPACTS HELD CONSTANT)

CURRENT

| ENV. | PROD. | MOBILITY | SAFETY SECURITY |

Transformative Safety and Security Impacts

- One breakout group will identify promising applications to achieve goals related to enhancing traveler and worker safety and security

- For the purposes of this breakout, transformative safety and security impacts have occurred when the transportation system has:
  - *a transformative ability to reduce safety risks for travelers and pedestrians and enhance system security* while maintaining current levels of traveler mobility, system productivity, and without increased environmental impact

- Active safety applications (low-latency V2V applications) are out of scope

TRANSFORMATIVE POSITIVE IMPACT

(OTHER IMPACTS HELD CONSTANT)

CURRENT

| ENV. | PROD. | MOBILITY | SAFETY SECURITY ↑ |

Breakout Exercises: Ground Rules and Background

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- Feedback materials provided in the breakout rooms
  - Application scorecard
  - 3 poker chips (for voting)
- Facilitators preview overall exercise
- Facilitators lead group discussion on measuring transformative impact
  - Three example measures given
  - Participants may suggest others
  - Simple hand-count voting to determine up to three to be further explored
- Flip-chart exercise (group discussion)
  - Measure definition and current baseline (if known)
  - What change represents transformative impact?

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Today's Exercise (Part 2) High Impact Apps

- As we did yesterday, consider up to 10 applications in each impact area
  - One slide per concept, brief clarifying discussion
  - Record High-Medium-Low rating on your scorecard for each of the measures
- 3-2-1 Poker chip voting for the applications most likely to have transformative impact (per your measures)
- Facilitated discussion about the application with the highest vote total
  - Identify key data, communications and research needs for this application
  - How close to transformative will this application get us?
- Repeat facilitated discussion for second highest ranked application (time permitting)
- Reconvene to consider results within each breakout
  - Discuss the implications of your group process
  - Identify a presenter from your group for the breakout report at 11 AM

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Exercise Ground Rules

- For today's exercise, these items can't be changed
  - Breakout group impact area definitions
  - No adding new application concepts
- Data environment assumptions from yesterday can be relaxed, however
  - Assumptions about what data is available can be tailored in this exercise

- Policy-related issues are <u>NOT in play for discussion</u>
  - Intellectual Property, Privacy, Access/Security, Meta-data, Quality, Aggregation, Standards, Financial/Business Models....
  - If these topics come up, we will park the discussion until this afternoon, when we have special session to deal with these in turn

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Role of Stakeholder Input

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- Prioritization Criteria
  - Potential for transformative impact
  - Makes use of IntelliDrive data
  - **Significant stakeholder interest**
    - Your input from this workshop is one measure of stakeholder interest
    - We have conducted similar exercises with several stakeholder groups
  - Can evolve from near-term state to long-term state
  - Potential to be released as open source
  - Cross-modal impact

- The program cannot fund every idea
- Exercises as a part of this workshop inform the federal team understanding of each application, but **do not determine application priority**

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Breakout Group Organization

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Today's Breakouts

- Today's Breakouts
  - Environmental (Breakout Room 332)
  - Productivity (Breakout Room 317)
  - Mobility (Breakout Room 330)
  - Safety and Security (Breakout Room 331)
- Applications considered in each breakout identified in your participant booklet
- Please attend only one breakout, as exercises will be conducted in parallel

- Breakouts will begin as quickly as possible
  - Please move directly to your selected breakout group

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Questions?

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