# Traffic Safety, Transportation Related Air Pollution, and Public Health.

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### **Terminology Important and Varied**

- Inter-disciplinary collaboration requires good communication, but jargon and language varies among disciplines
- Examples:
  - Accidents versus crashes
  - Public safety versus public health
  - Global versus international issues
  - Collaboration, science, etc.

### Global Issue with International Cooperation

- Numerous global stakeholders (airlines, vehicle manufacturers, smartphone apps, etc.)
- Global perspective helpful, rather than domestic/international split.
- Example: crash rates on native American reservations similar to developing world.
- Example: European actions to achieve zero crashes.

#### Motor Vehicle Air Emissions Remain a Significant Health Problem

- Acute problems in developing world (e.g. Beijing recent alerts).
- Need innovation for:
  - Large emission vehicles
  - Emissions reduction technology
  - Enforcement

#### Behavioral and Cultural Change is Hard

- Ambitious goals can help, such as zero fatalities.
- Behavioral changes requires multiple levers: carrots, sticks, environmental change, etc.
- Culture of compliance versus culture of prevention.

# New Technology Promising

- Automation can aid crash avoidance and improve vehicle efficiency.
- Lots of implementation issues to solve:
  - Human computer interaction
  - Reliability and cyber security
  - Transition with mixed traffic
- Good opportunity for TRB.

#### Synergies among ExComm Task Forces

- Example: Technology Task Force:
  - Shared service infrastructure for extreme events.
  - Automation for crash avoidance and vehicle efficiency.
  - Roundtables to attract new TRB participants and funding.