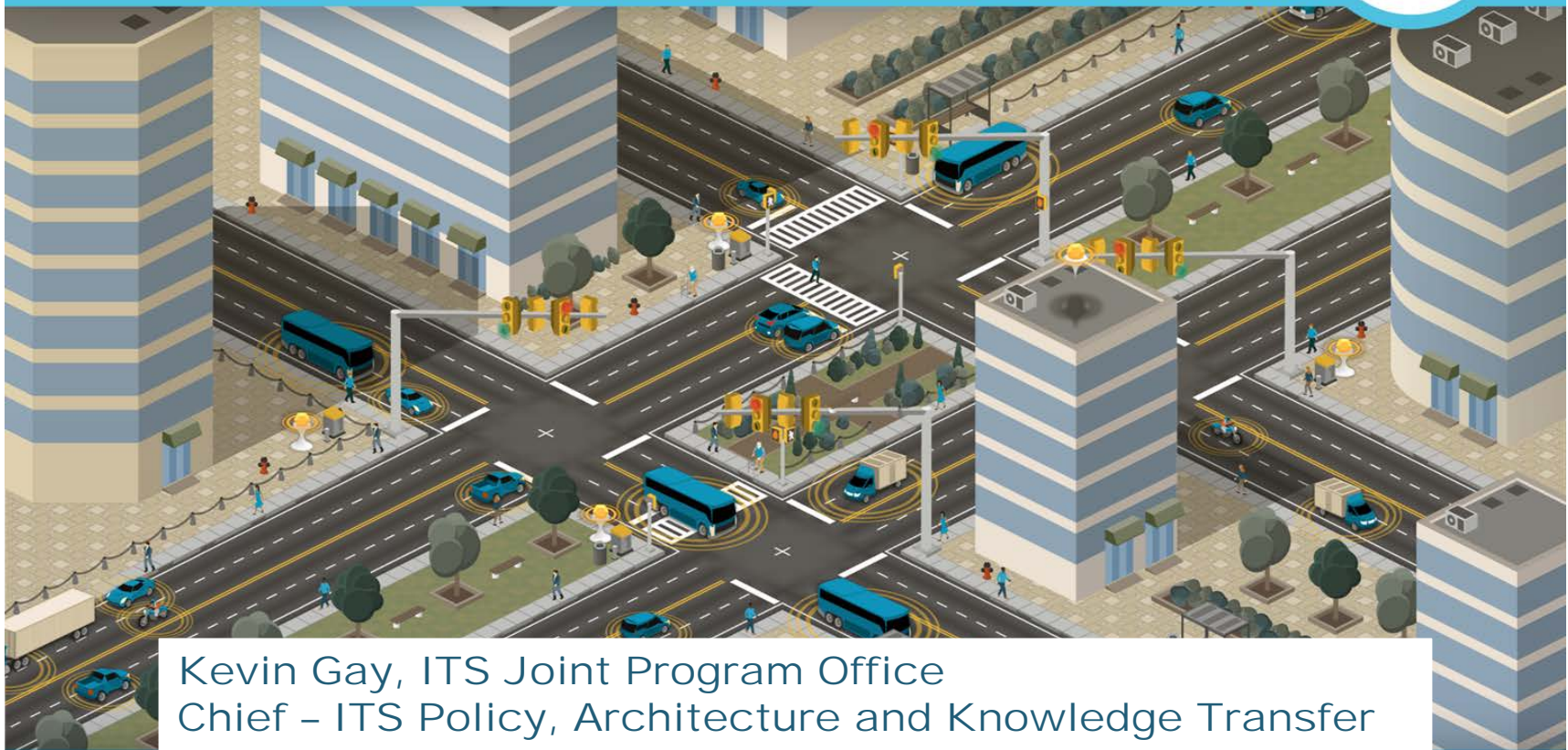# ITS POLICY: ACCELERATING DEPLOYMENT

Kevin Gay, ITS Joint Program Office
Chief – ITS Policy, Architecture and Knowledge Transfer

ITS Joint Program Office

Program Overview

- **Program Description** – The Program is established to:
  - Identify cross-cutting, critical issues that may hinder or present challenges to transfer of research technology into market adoption and use
  - Analyze options and describe policies and institutional requirements to overcome or resolve issues
  - Work with modal partners to develop the policies and tools necessary to mainstream the technologies into regular practice

- **Program Goal** – Provide Federal policy leadership for successful implementation of ITS technologies along the technology lifecycle (from the R&D stage to end-of-life policies) for the new high-risk, high-reward technologies that the Federal Government chooses to invest in with industry partners and stakeholders due to the significance of National benefits
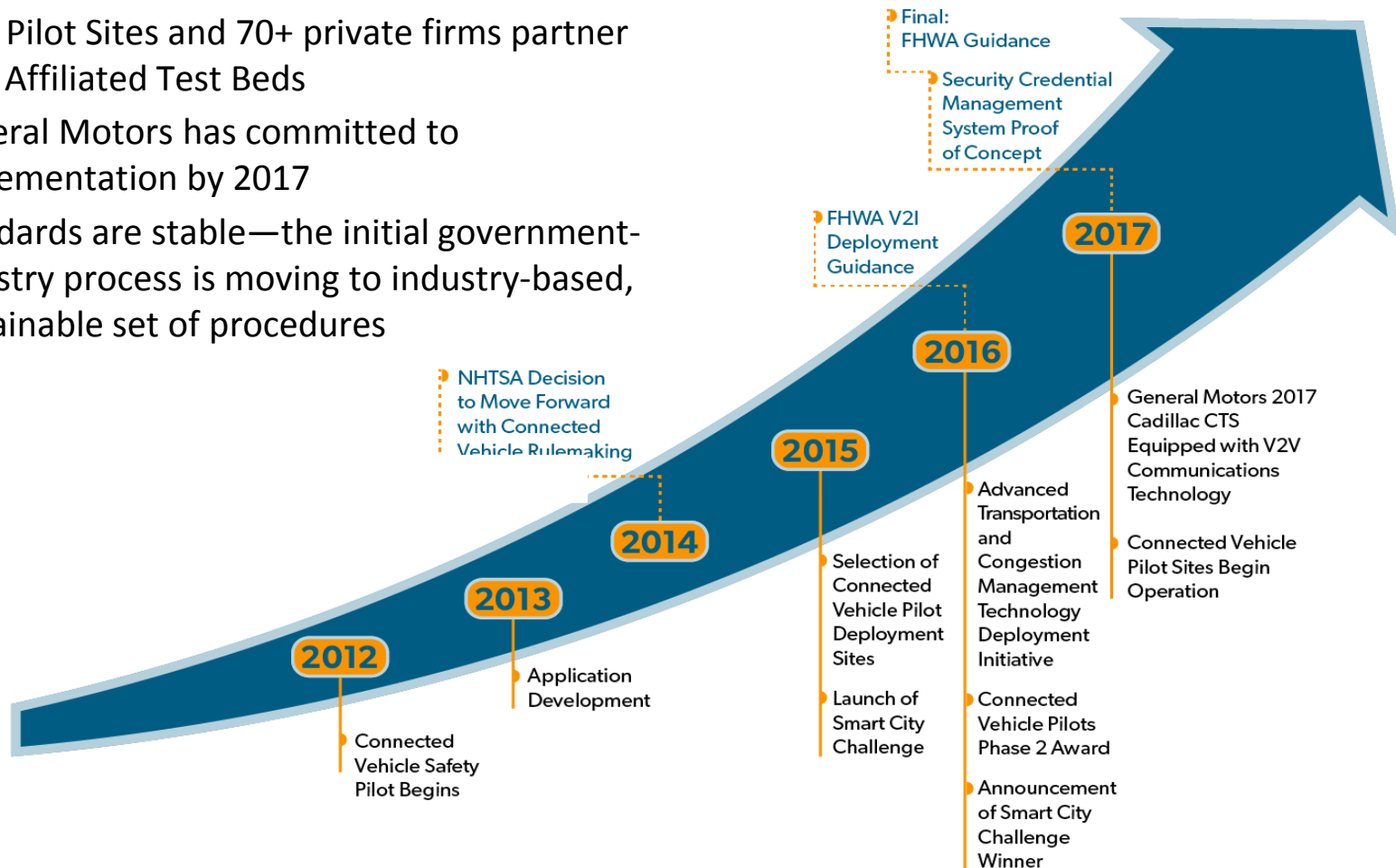
Policy Supports Deployment

Creates Market Certainty and Momentum Toward Deployment Beyond USDOT Activities:

- 3 CV Pilot Sites and 70+ private firms partner with Affiliated Test Beds
- General Motors has committed to implementation by 2017
- Standards are stable—the initial government-industry process is moving to industry-based, sustainable set of procedures

Final: FHWA Guidance

Security Credential Management System Proof of Concept

FHWA V2I Deployment Guidance

2017

2016

2015

2014

2013

2012

NHTSA Decision to Move Forward with Connected Vehicle Rulemaking

General Motors 2017 Cadillac CTS Equipped with V2V Communications Technology

Connected Vehicle Pilot Sites Begin Operation

Advanced Transportation and Congestion Management Technology Deployment Initiative

Selection of Connected Vehicle Pilot Deployment Sites

Launch of Smart City Challenge

Connected Vehicle Pilots Phase 2 Award

Announcement of Smart City Challenge Winner

Application Development

Connected Vehicle Safety Pilot Begins

Key ITS Policy Program Focus Areas

I.   SECURITY POLICY

II. COMMUNICATIONS POLICY

III. DATA POLICY

IV. INTEROPERABILITY POLICY

V.   DEPLOYMENT STRATEGIES and DEPLOYMENT READINESS

VI. FEDERAL ROLE IN POLICY

I. SECURITY POLICY

The Policy Program has performed or is performing analysis on:

- ❑ **Trust and Organizational Models**
    - ✓ Comparative analyses on models fed into NHTSA's ANPRM and upcoming NPRM (http://www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf)
    - ✓ International harmonization on cooperative ITS security policies (https://ec.europa.eu/digital-single-market/en/news/harmonized-security-policies-cooperative-intelligent-transport-systems-create-international)

- ❑ **Extensibility**
    - ✓ Analysis on extending the Security Credential Management Systems (SCMS) to V2I and V2X to ensure that needs are or will be addressed (ongoing)

- ❑ **Cybersecurity**
    - ✓ Strategic roadmap under development

- ❑ **Governance and Operational Policies**
    - ✓ Will be moving into development with stakeholder input in the near future

> **Security is a key element in consumer acceptance of new technologies**

II. COMMUNICATIONS POLICY

The Policy Program has performed or is performing analysis on:

- ❑ **Spectrum Needs for Cooperative Transportation Environments**
  - ✓ DSRC Report to Congress

    http://www.its.dot.gov/research_archives/connected_vehicle/pdf/DSRCReportCongress_FINAL_23NOV2015.pdf

  - ✓ Recommended Practices for DSRC Licensing and Spectrum Mgmt. (http://ntl.bts.gov/lib/56000/56900/56950/FHWA-JPO-16-267.pdf)
  - ✓ Upcoming White Paper on DSRC as a Complete Package
  - ✓ Future Spectrum Strategies

- ❑ **Interference and Spectrum Sharing Feasibility**
  - ✓ Research Sites at Army Aberdeen Test Center and ITS Boulder

- ❑ **Data Delivery Systems and Cost Models**
  - ✓ Comparative Analysis of Media from a cost, coverage, and delivery capability (https://www.regulations.gov/#!docketDetail;D=NHTSA-2014-0022)
  - ✓ Footprint Analysis (http://stsmo.transportation.org/Documents/CV%20Tech%20Memo%20FINAL_with%20CT.pdf and http://www.itsdocs.fhwa.dot.gov/itspac/Dec2014/AASHTO_FootprintAnalysis.pdf)

Interference-free spectrum = saving lives

Sharing of spectrum = more opportunity

Spectrum Availability = market opportunity

III. DATA POLICY

The Policy Program has performed or is performing analysis on:

❑ **Privacy**

  ✓ Privacy Impact Analysis of the V2V using the Fair Information Privacy Practices for the V2V environment
  (http://www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf, Section VIII, p. 144)

  ✓ Privacy Operational Concept
  (http://www.its.dot.gov/pilots/pdf/CVP_TechAssistWebinar_Privacy_v4.pdf)

  ✓ De-Identification Practices Research (in process)

  ✓ Privacy Modeling (in process)

❑ **Ownership and Liability**
  (http://www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf, Section X, p. 208)

Data policies and tools ensure public acceptance and institutional viability

IV. INTEROPERABILITY POLICY

Policy is most easily enacted when it can be developed in the form of standards or objective test procedures. In cooperation with the technical elements of the ITS Program, the Policy Program will:

❑ **Standards**
  - → Identify when standards strengthen policy efforts
  - → Analyze the connected vehicle environment to identify key gaps in the public interest
  - → Participate in harmonization to achieve global market opportunities

❑ **Certification**
  - ❑ Work with stakeholders to develop a governance capability that ensures that:
    - → New test labs are accredited
    - → Test procedures evolve, as appropriate

Interoperability =

transformative safety, system optimization, mobility, and environment benefits

V. DEPLOYMENT READINESS

The Policy Program has performed or is performing analysis on:

❑ **Institutional Analyses and Deployment Strategies**
- ✓ Infrastructure Analyses (AASHTO Footprint)
- ✓ Institutional, Financial, and Risk Models
  (http://www.its.dot.gov/pilots/pdf/CVP-Tech-Assistance-Webinar-Institutional-Financial1st.pdf)

❑ **Decision Tools, Guidelines** (in process)
- ✓ Economic Development Analysis
- ✓ Capability Maturity Model Guidelines

❑ **Planning** (in process)
- ✓ CV Planning Analysis
- ✓ Transition and Phasing Tool
- ✓ CV Scenario Planning

Policy Research ensures that technologies are institutionally and financial viable

The Policy Program has performed or is performing analysis on:

- ❑ **Systems Engineering** (in process)
  - → Updating Guide Focusing on Agile

- ❑ **Aftermarket, Retrofit Studies**
  (http://www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf)

- ❑ **International Harmonization**
  (http://www.its.dot.gov/research/international_research.htm)
  - → Transport Canada
  - → US-EU Bi-Lateral Agreement
  - → US-EU-JP Tri-Lateral Agreement

Policy Research ensures that technologies are institutionally and financial viable

VI. FEDERAL ROLE IN POLICY

- The Policy Program has performed or is performing analysis for:
  - ✓ **Rulemaking**
    (http://www.nhtsa.gov/staticfiles/rulemaking/pdf/V2V/Readiness-of-V2V-Technology-for-Application-812014.pdf)

  - ✓ **Policy Guidance**
    (http://www.its.dot.gov/meetings/pdf/V2I_DeploymentGuidanceDraftv9.pdf)

  - ✓ **Legislative Analyses** (in process)

**Policy Research enables the USDOT to play a targeted role in advancing transportation technologies for the Nation
and
ensures that the role is within scope of legal authority**

Stay Connected

Visit our website for information on:
- **Webinars**
- **Events**
- **Publications**
- **News**

Free ITS Training

- Increase Your Knowledge of ITS Technologies
- Excel at Your Career
- Advance the Mission of Your Organization

STANDARDS **ITS** TRAINING

the curve and visit **www.its.dot.gov/training**

Twitter: @ITSJPODirector

Facebook: https://www.facebook.com/DOTRITA

Website: http://www.its.dot.gov

Kevin Gay, PMP
Chief – ITS Policy, Architecture and Knowledge Transfer
Kevin.Gay@dot.gov