



# **The Path to Toll Interoperability**

## **IBTTA IOP Committee Report Vancouver**

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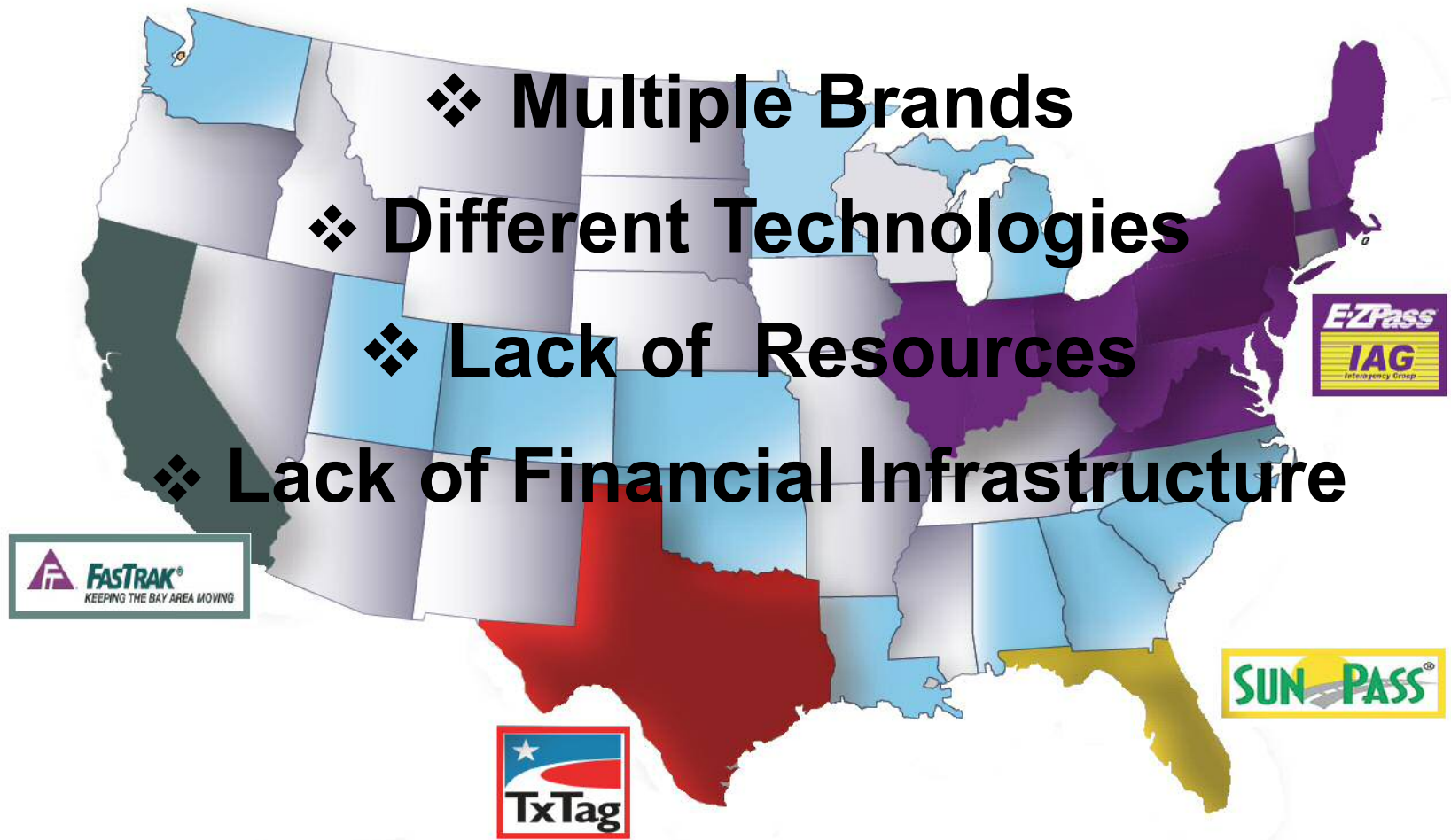
# The Objective

**Interoperability means ...**

**pre-paid electronic toll  
customers may pay for travel  
across jurisdictions with a  
**single account** and a choice of  
payment methods.**

# The Challenge

## Technical & Institutional



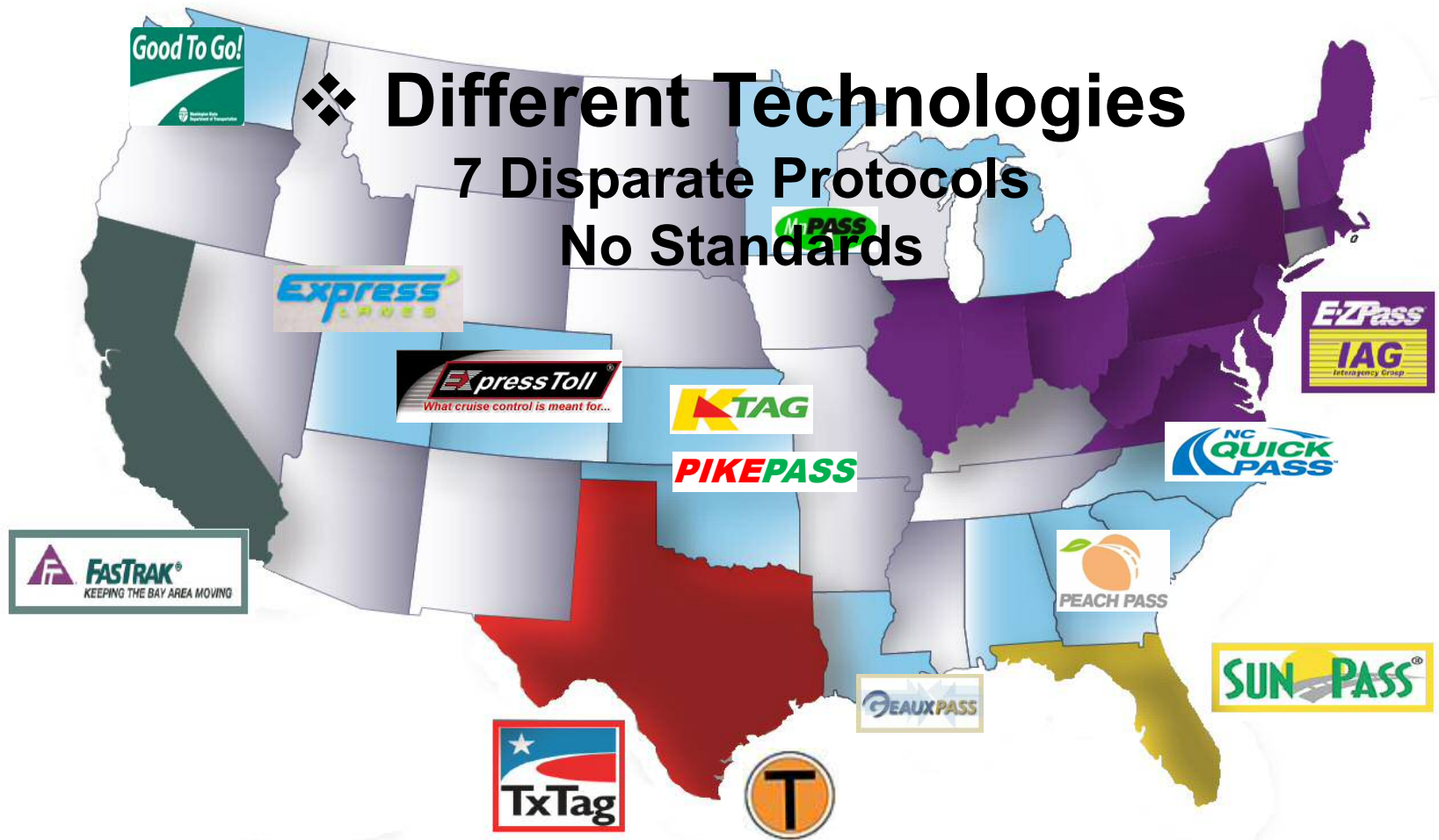
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## Technical & Institutional



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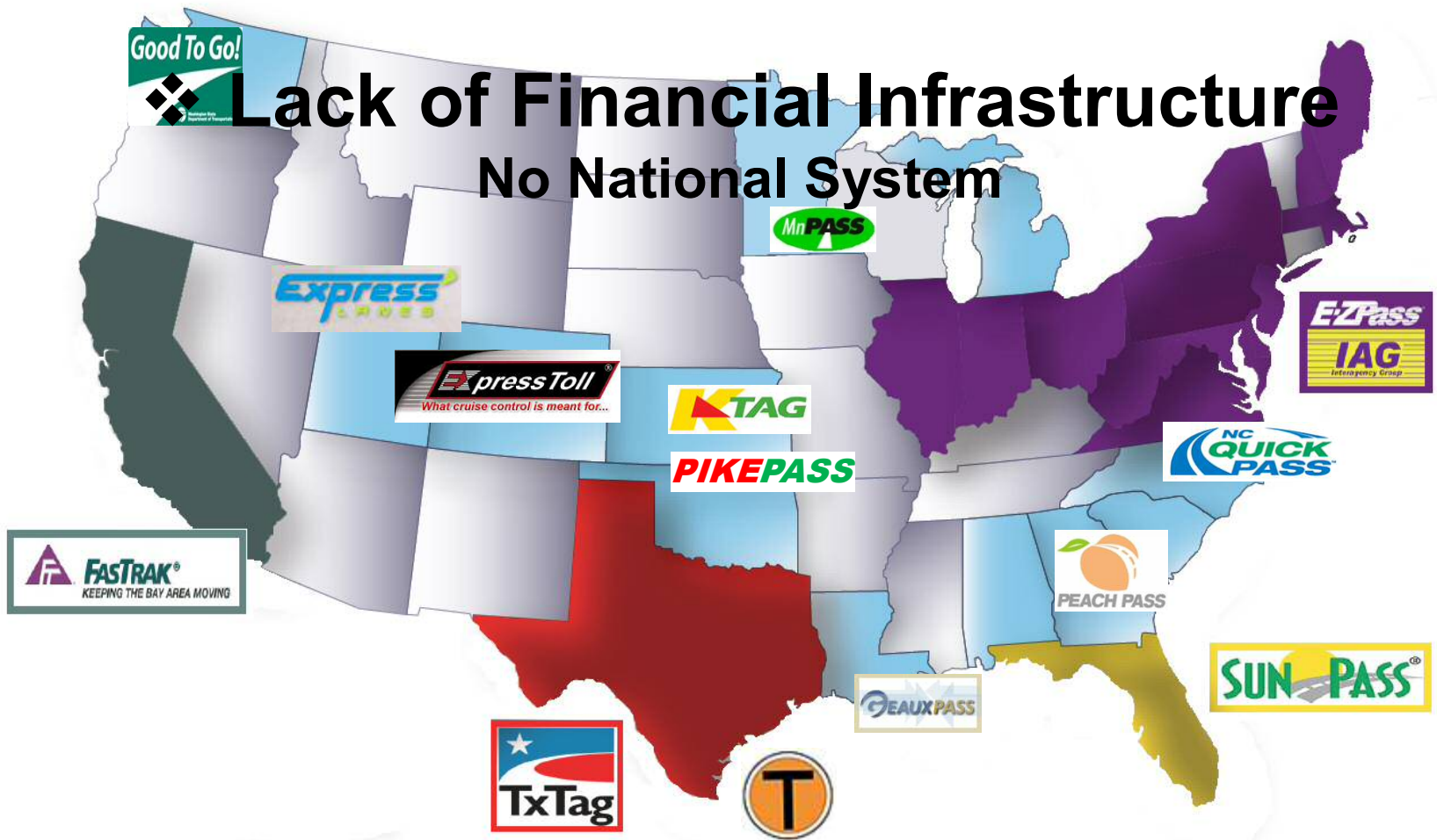
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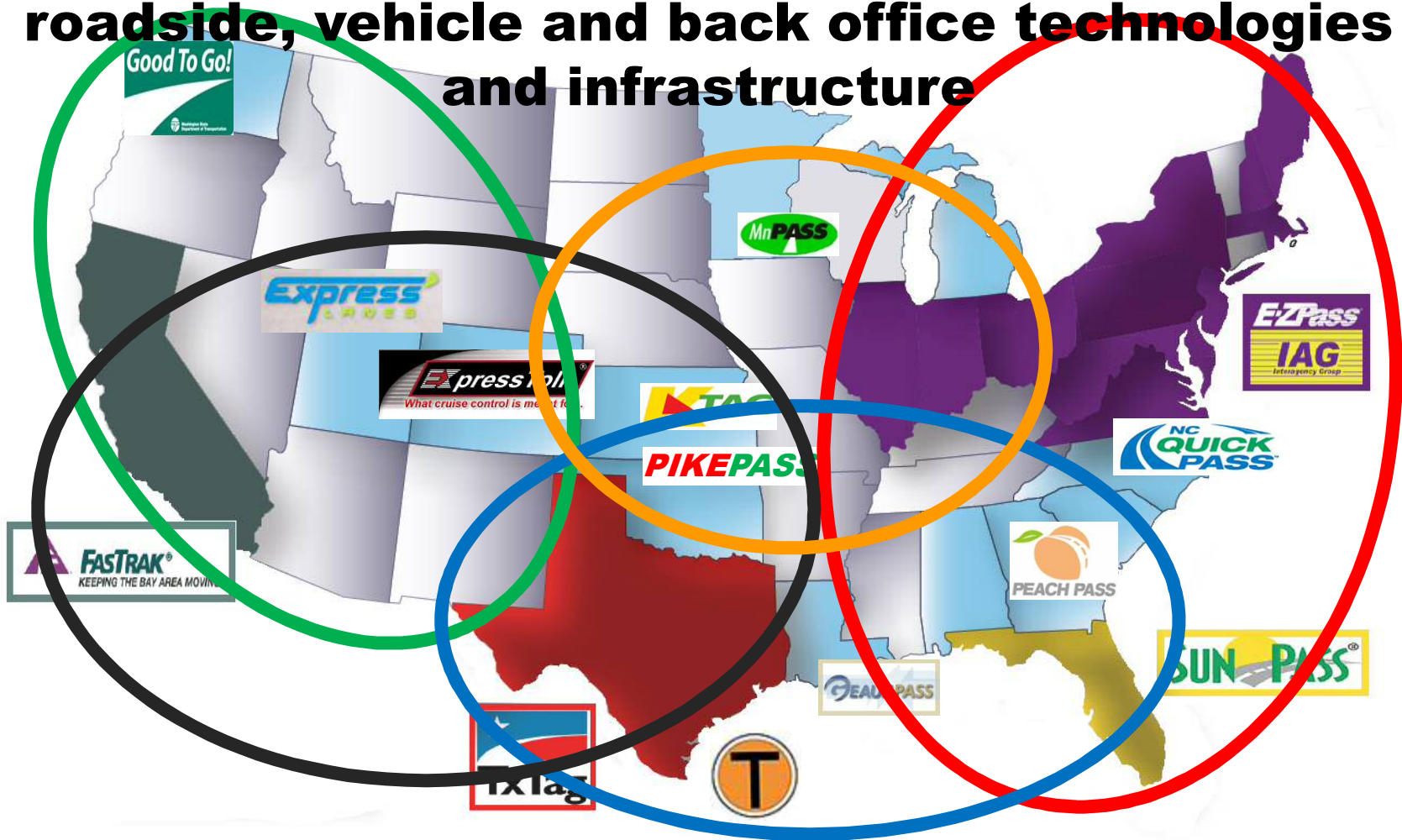
# The Solution

**Find an evolutionary path to interoperability that takes advantage of the large investment in roadside, vehicle and back office technologies and infrastructure**



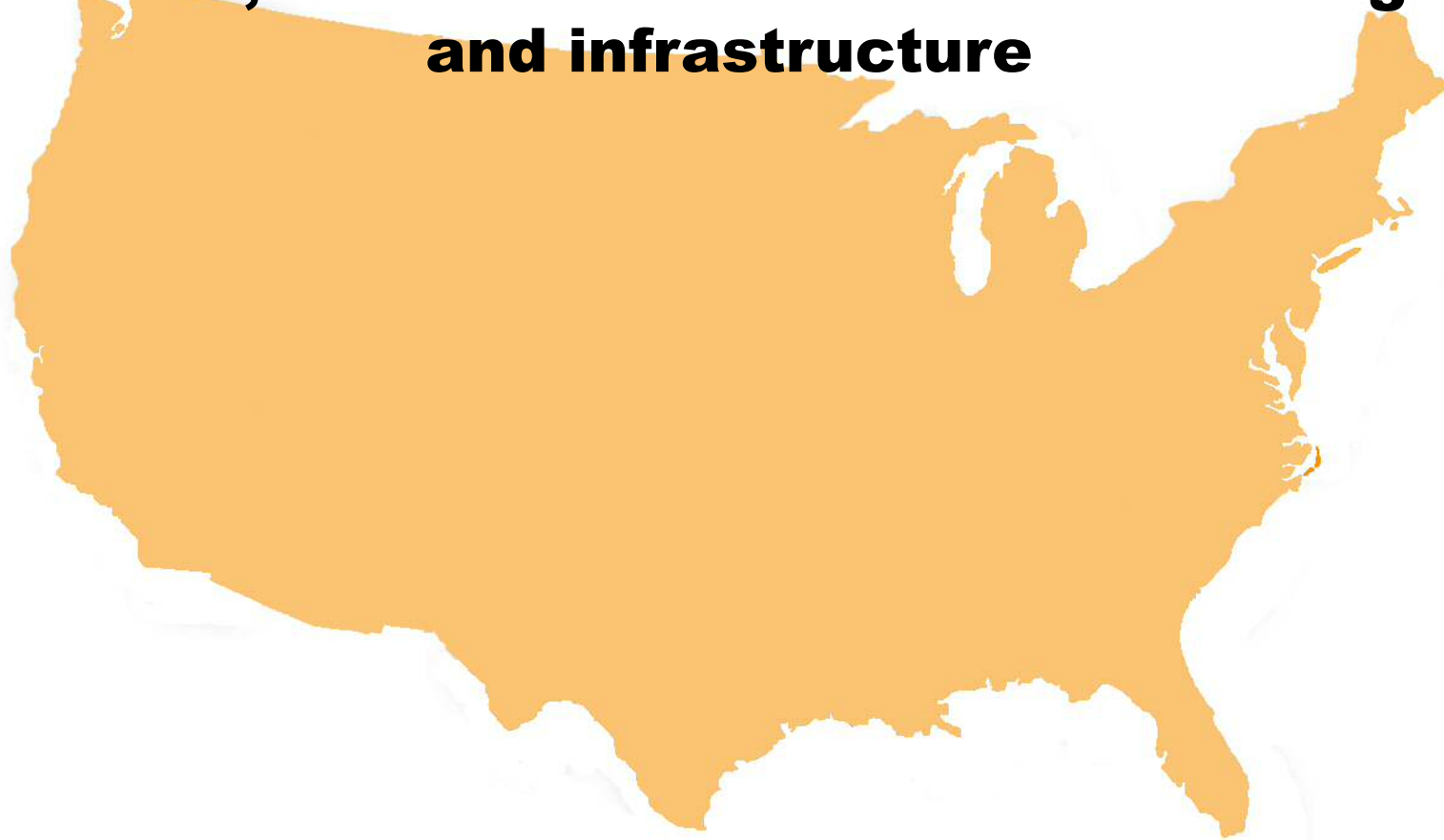
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**Issues: (1) Technology  
(2) Institutional**

**Solutions:**

- Independent Evaluation of Operating and Economic Information**
- Standards for Testing & Certification**
- Competitive Marketplace**

# 1. Overcoming the Technology Disparity

To provide interoperability for customers with pre-paid ETC accounts ...

- **Readers and transponders using multiple protocols**
- **Video** (based on existing toll industry business processes for image tolling for valid pre-paid ETC accounts that do not get a proper tag read in the lane – an option for those agencies already equipped for I-Tolling)



# **1. Overcoming the Technology Disparity**

**Primary Strategies for dealing with our existing disparate toll protocols ...**

- Identification of uniform operating requirements for tag/reader protocols with the goal of identifying a “national” protocol (if possible)**
- IOP candidate protocols must be “open”**
- Testing program leading to evaluation of candidate tags and readers in dual and multi-protocol environments with the goal of IOP certification program**

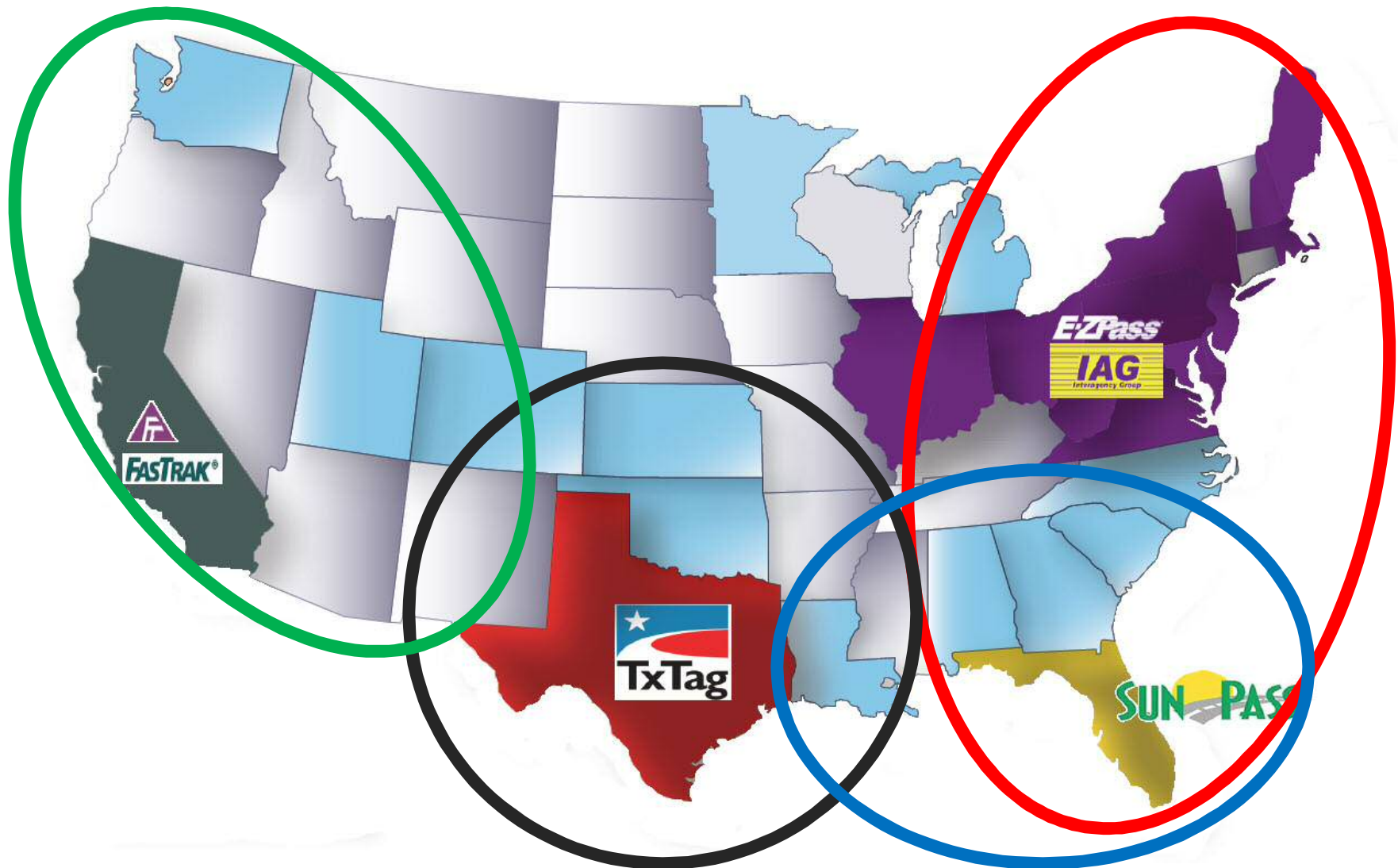
# 1. Overcoming the Technology Disparity

**Primary Strategies for dealing with our existing disparate toll protocols ...**

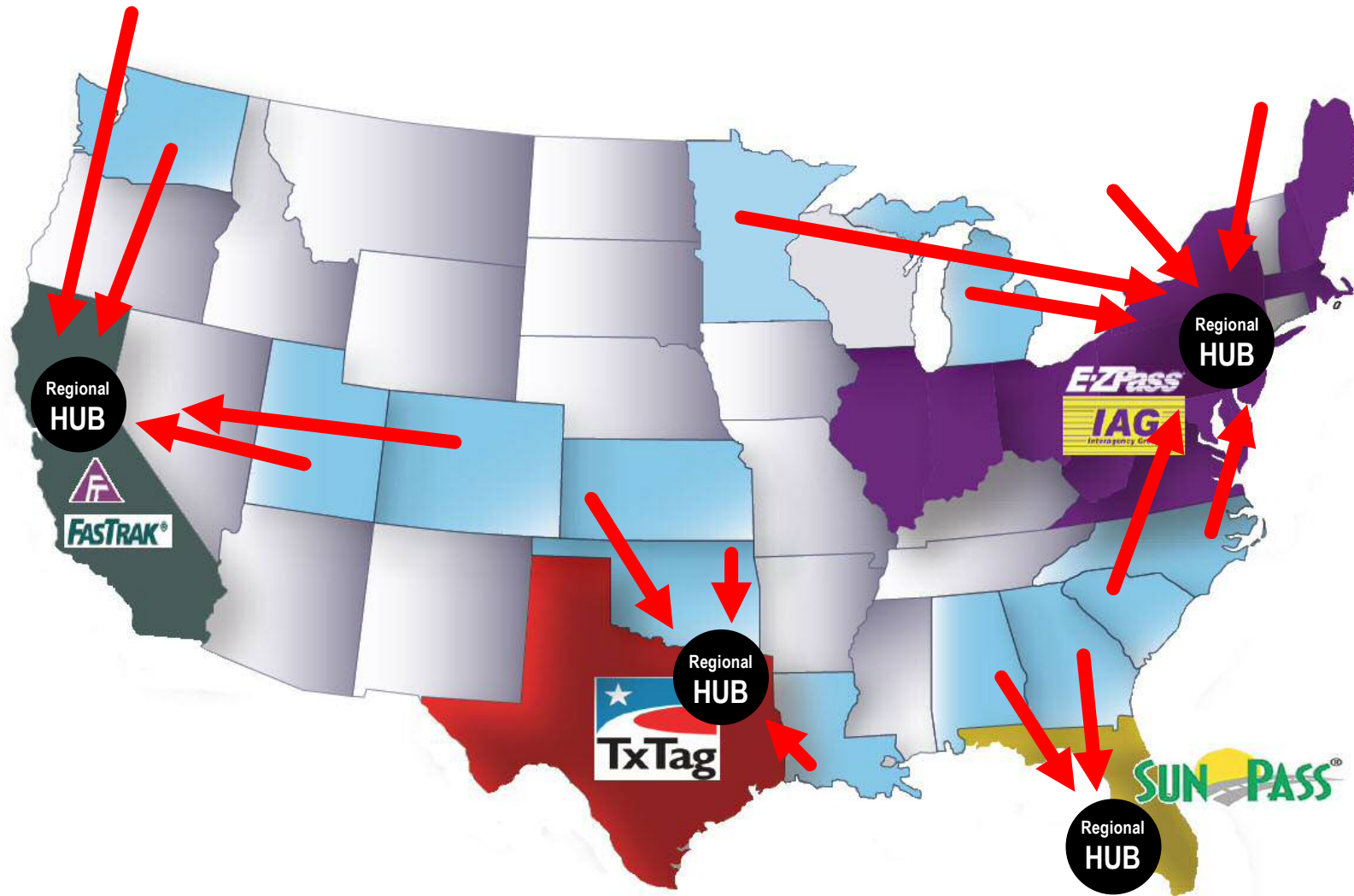
**Inter-regional first -- allowing operators to evolve to national interoperability:**

- **Tag Issuance: National tag(s) may be issued by agencies or certified third party providers**
  - In addition to or in place of primary tag of home agency/region
  - Agencies not required to issue national tags
  
- **Tag Recognition: Each agency chooses how to identify away customers**
  - Dual Protocol: Read local and national IOP tags
  - Multi:-Protocol: Read local, national IOP & neighboring tags
  - Video: Read and process license plate image transactions
  - No technology changes if agencies can do one of the above

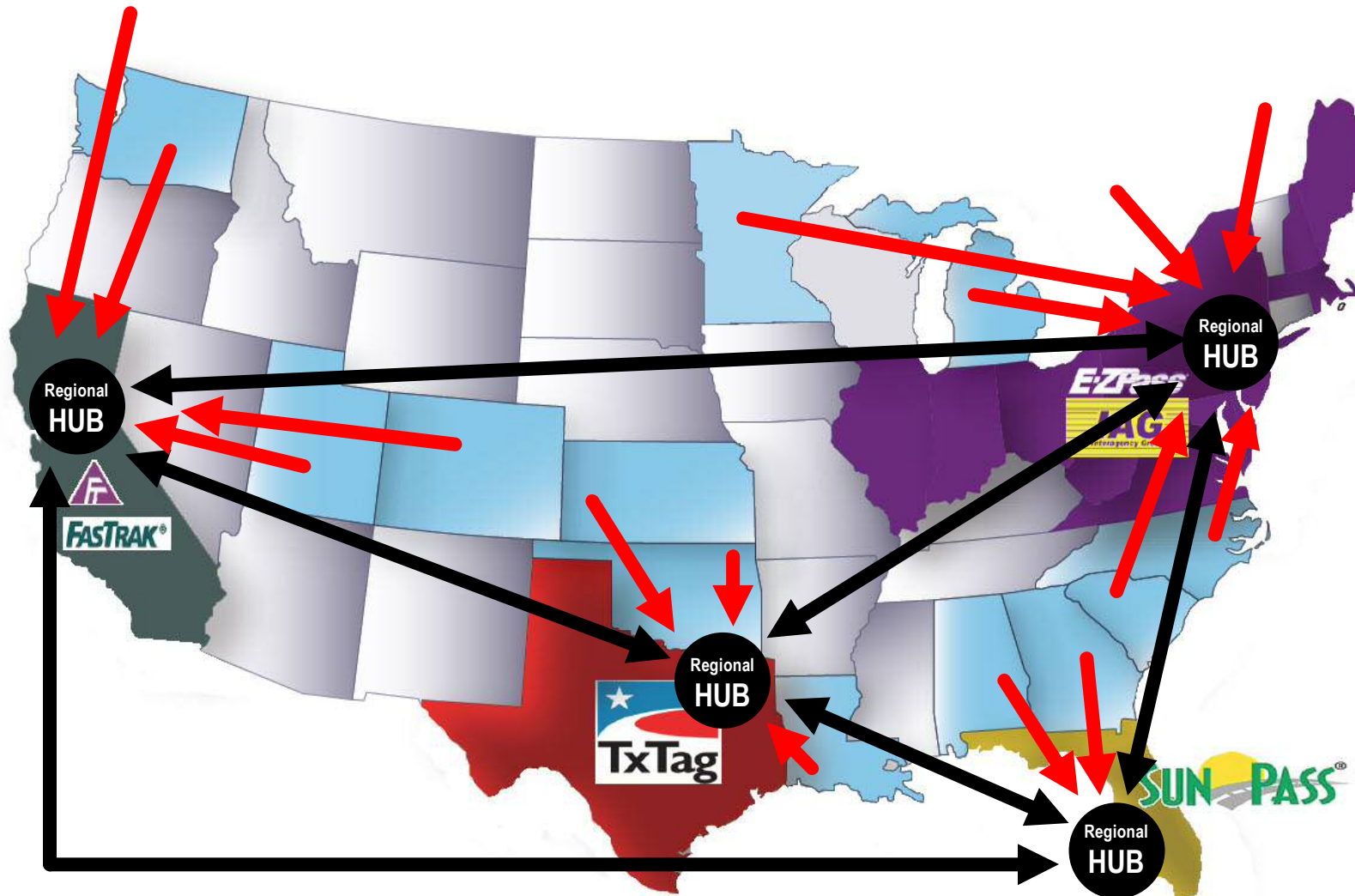
## 2. Solving the Institutional Challenge



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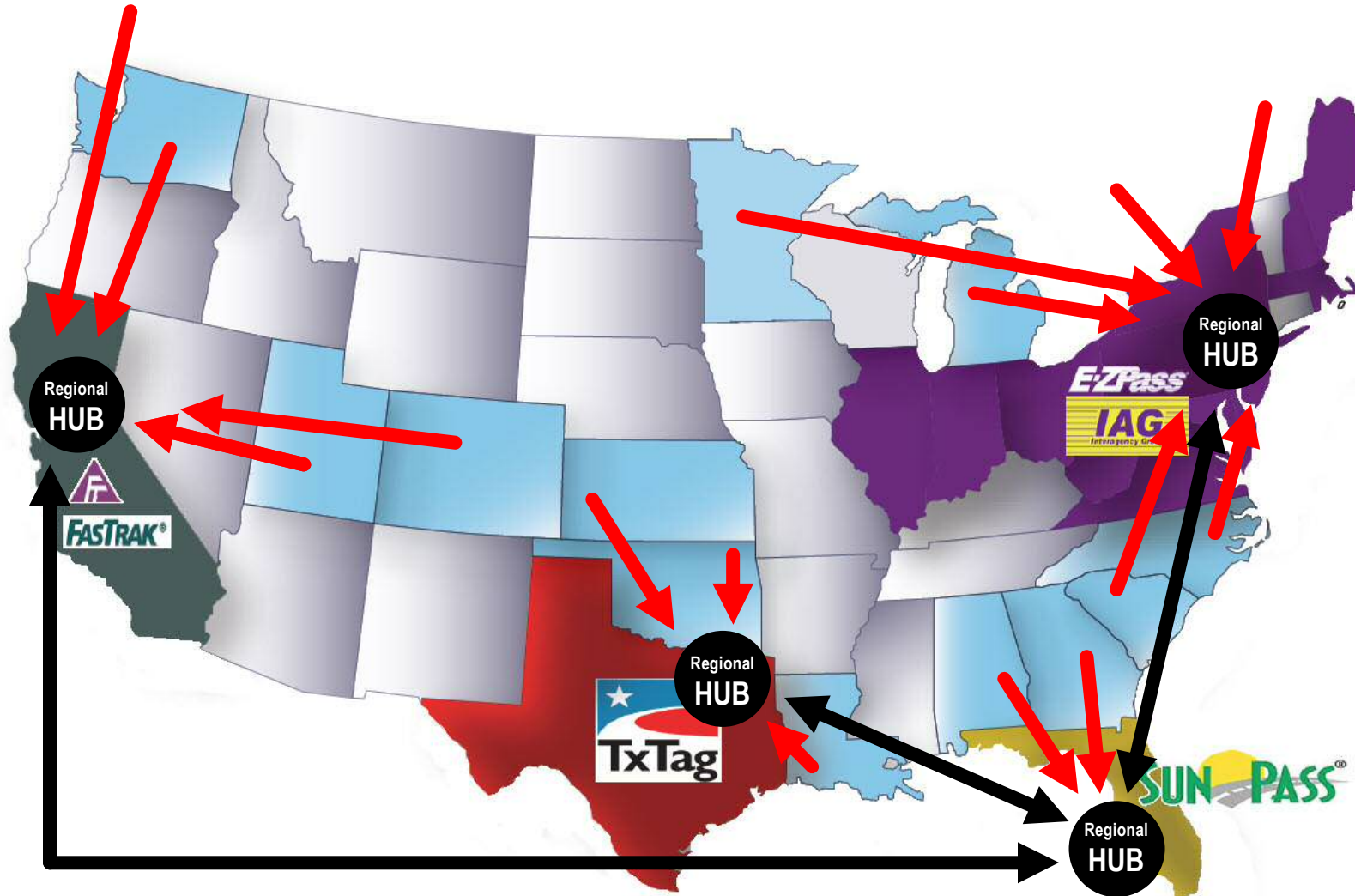


## 2. Solving the Institutional Challenge

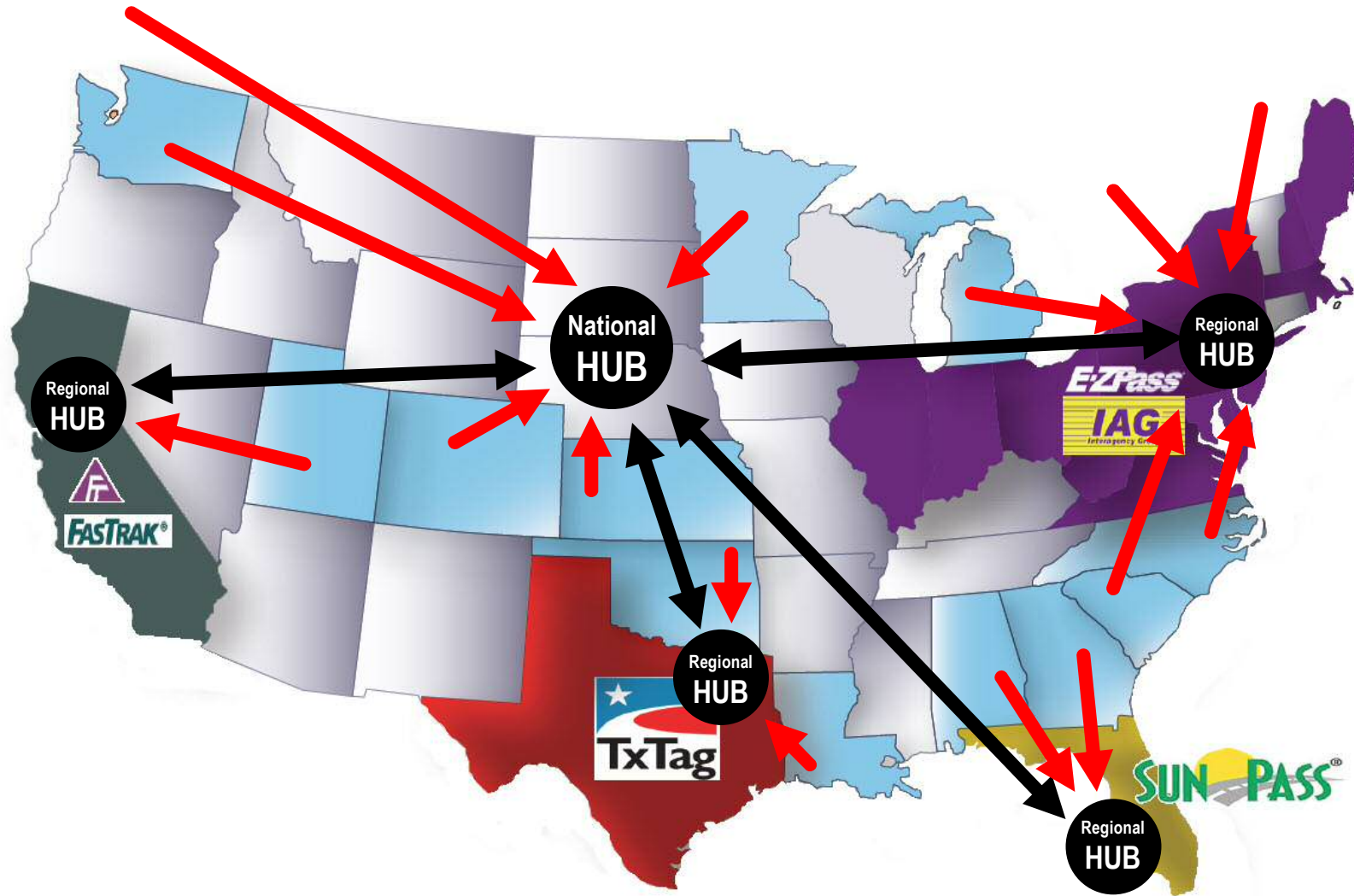




## 2. Solving the Institutional Challenge

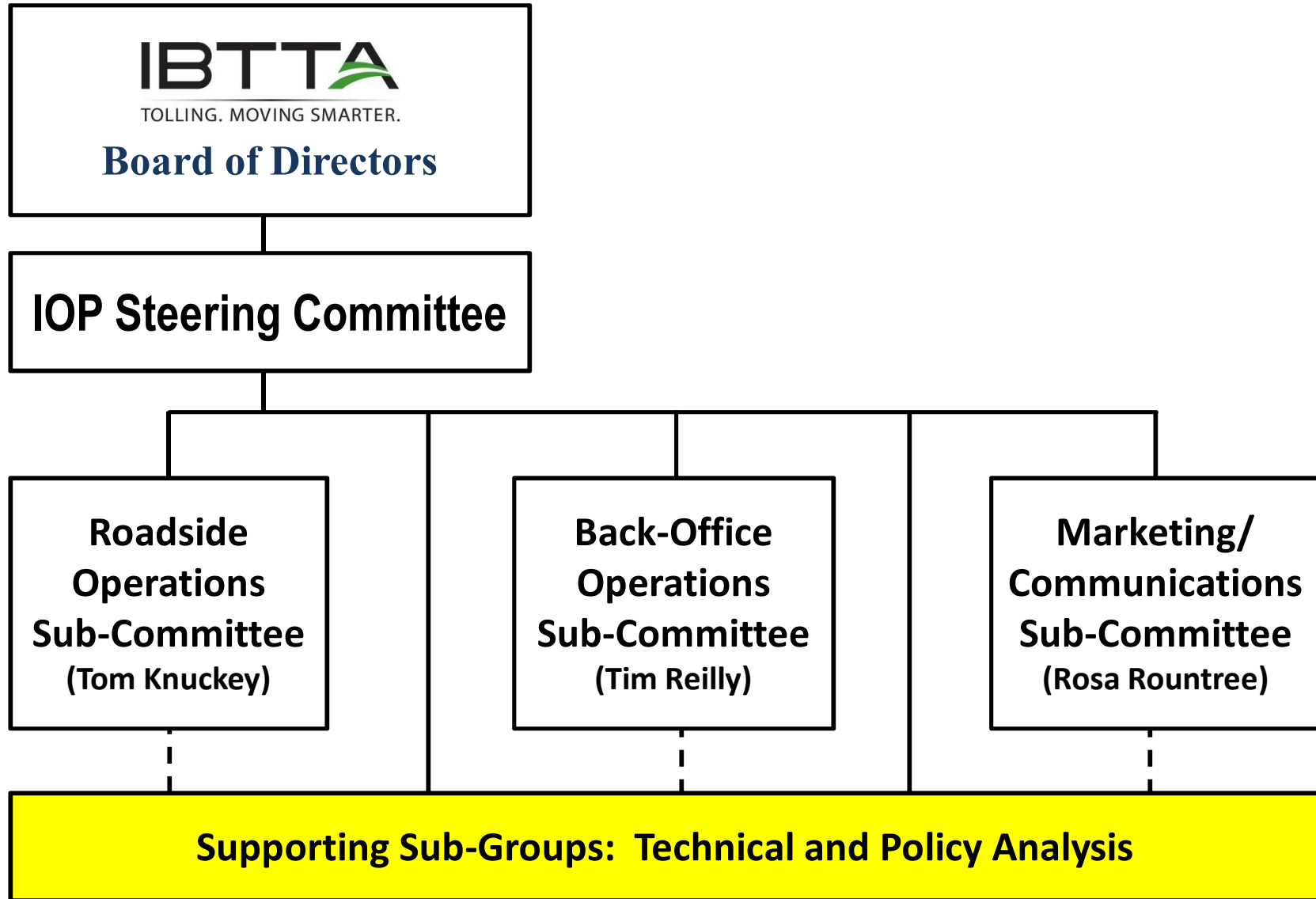


## 2. Solving the Institutional Challenge



# IBTTA Interoperability Committee

(IOP)



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*Today*

## Steering Committee

JJ Eden (AECOM/ATI)

Marty Stone (MSC)

Rosa Rountree (Egis)

Jack Opiola (D'artagnan)

Tom Knuckey (Atkins)

Greg LeFrois (HNTB)

Ed Regan (CDM Smith)

Scott Stewart (IBI)

Dave Kristick (Denver)

PJ Wilkins (IAG)

Neil Gray (IBTTA)

Andy Fremier (Oakland)

Tim Reilly (Texas)

James Gallagher (California)

Ryan Olsen (Indiana)

Jim Trogdon (North Carolina)

Dave Pope (Washington)

Chris Tomlinson (Georgia)

David Moretti (New York)

Kary Witt (San Francisco)

Michael Catolico (Illinois)

Ronnie Hakim (New Jersey)

Steve Andriuk (Miami)

Steve Snider (Halifax)

Diane Scaccetti (Florida)

Suzanne Murtha (OmniAir)

Richard Somerville (Maine)

Samuel Johnson (San Diego)

**IBTTA**

TOLLING. MOVING SMARTER.

# **IBTTA Interoperability Committee**

(IOP)

## **Roadside Operations Sub-Committee (Tom Knuckey):**

- Developing the plan for dealing with the disparate tolling technologies
- Formulating a program for interoperability testing and certification
- Evaluating the economic impact of the possible technology solutions
- Survey to support the economic analysis



# **IBTTA Interoperability Committee**

(IOP)

## **Back-Office Operations Sub-Committee (Tim Reilly):**

- Identifying options for the exchange and settlement of pre-paid toll transactions between IOP regions and agencies
- Investigating the types of financial messaging in use today within the interoperable toll regions to determine a basis for recommending an approach for the future national exchange of transaction information
- Development of a national set of IOP business rules

## **Marketing/Communications Sub-Committee (Rosa Rountree):**

- Developing branding “symbology” for roadway signage and printed materials to communicate interoperability to the motoring public

An orange-colored map of the United States is centered on the page. The map has a slightly distressed, torn-paper edge effect. Overlaid on the map is the text "Technology & Institutional Solutions for Interoperability" in a bold, black, sans-serif font. Below this, the text "Driven by a Competitive Marketplace" is also in a bold, black, sans-serif font, centered under the first line.

**Technology & Institutional  
Solutions for Interoperability**

**Driven by a Competitive  
Marketplace**