

In Pursuit of Toll Interoperability

Report from the IBTTA Interoperability (IOP) Committee

Martin Stone, Ph.D., AICP, Committee Chairman
Director of Planning
Tampa Hillsborough Expressway Authority
Tampa, Florida

IBTTA Interoperability Sub-Committees

(A) Transponder/Reader Technology

Tom Knuckey (Atkins) + JJ Eden (AECOM) + PJ Wilkins (IAG)

(B) License Plate and Violation Enforcement

Dave Kristick (E-470) + Rosa Rountree (Aegis)

(C) Transaction Settlement

Jack Opiola (D'artagnan) + JJ Eden (AECOM/ATI)

(D) The Business Case

Scott Stewart (IBI) = Ed Regan (Wilbur Smith)

(E) Operations/Implementation

Tim McGuckin (OmniAir) = Greg Lefrois (HNTB)

Steering Committee – Vision and Plan

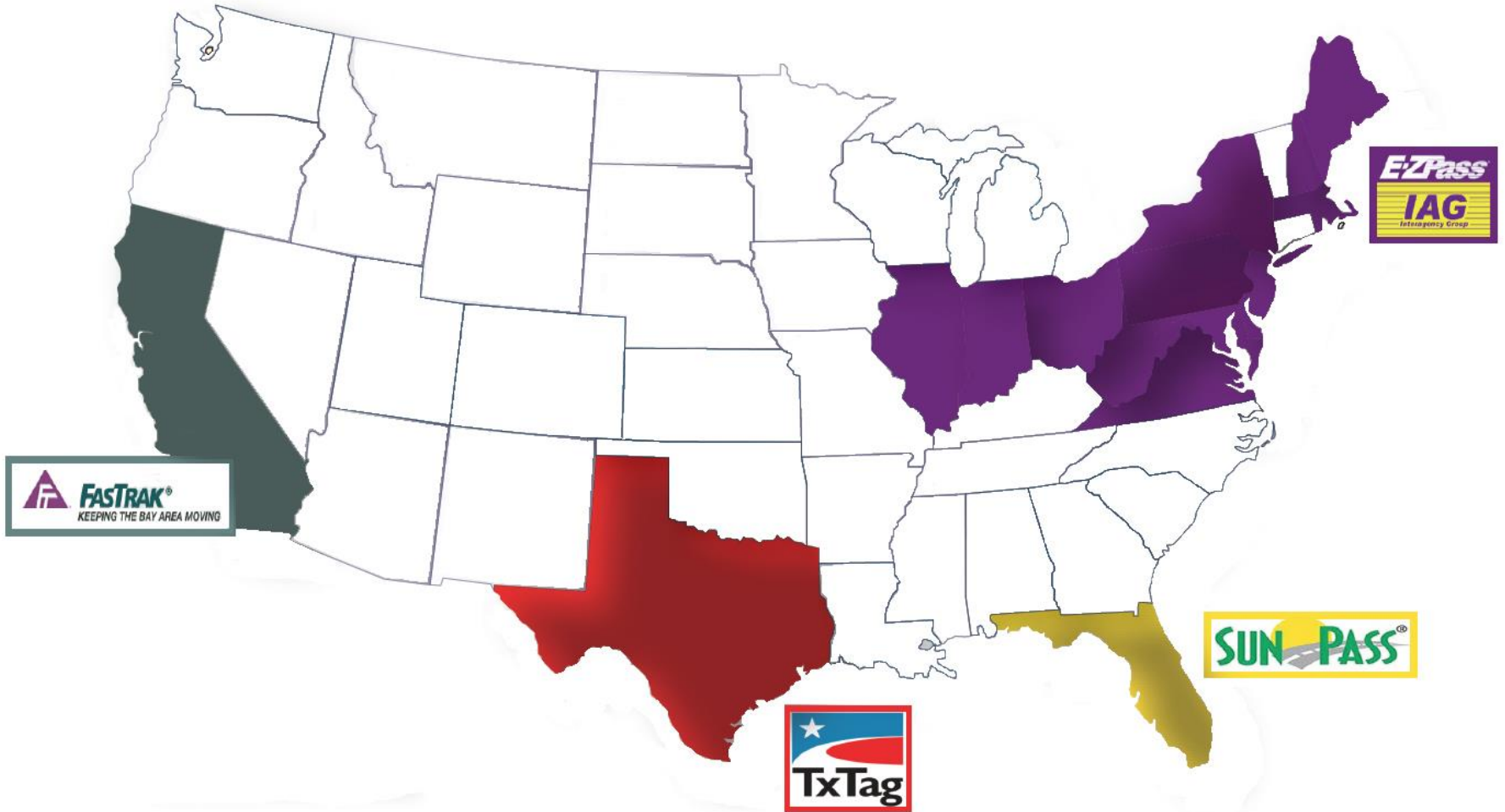


Where Are We?

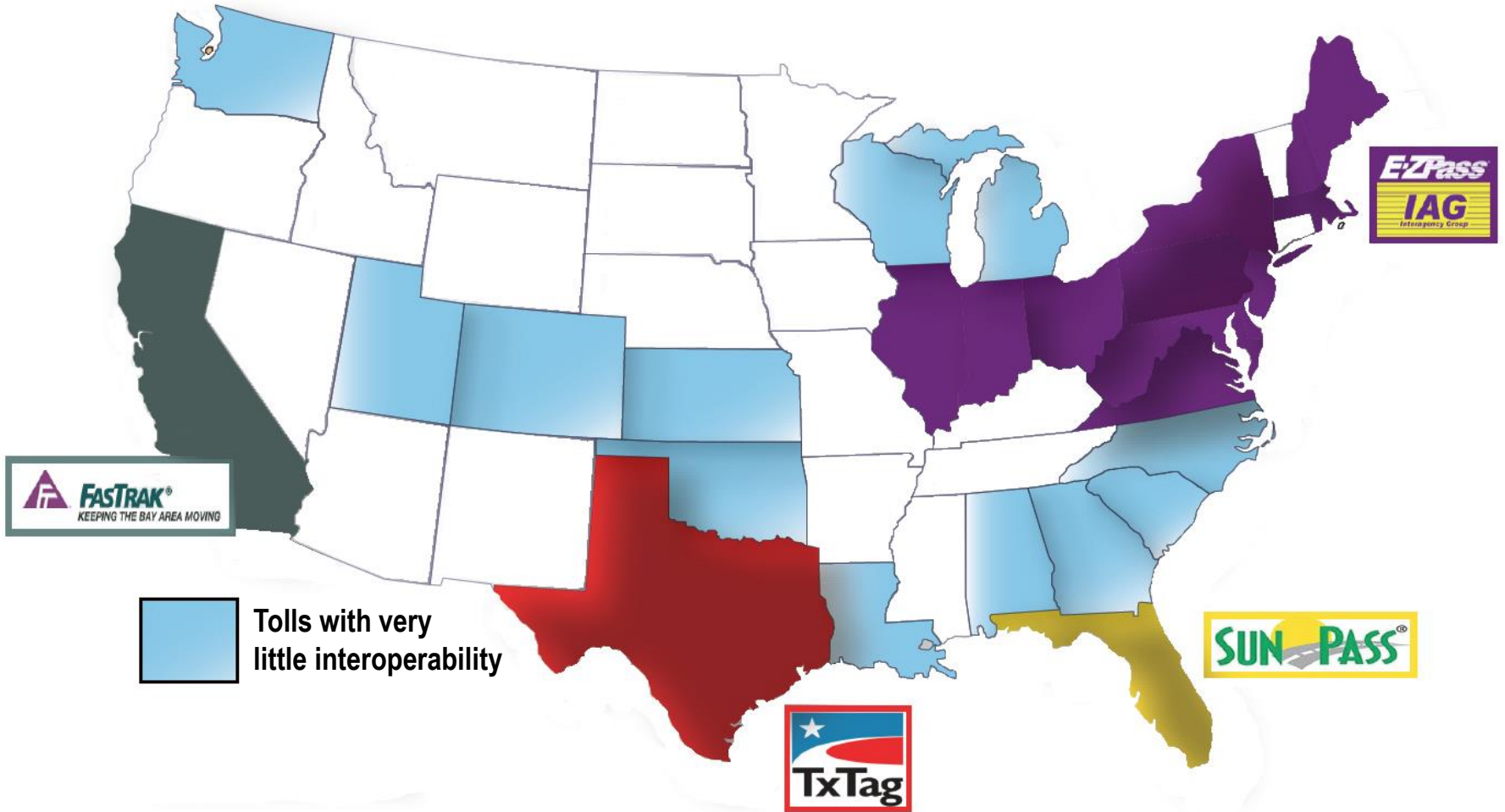
Where Are We Going?

**How Are We Going
to Get There?**

Where Are We?



Where Are We?



Where Are We?



Where Are We Going?



Where Are We Going?



Interoperability means...



Interoperability means...

Toll customers



Interoperability means...

Toll customers

Drivers or vehicle & business owners who are willing to pay

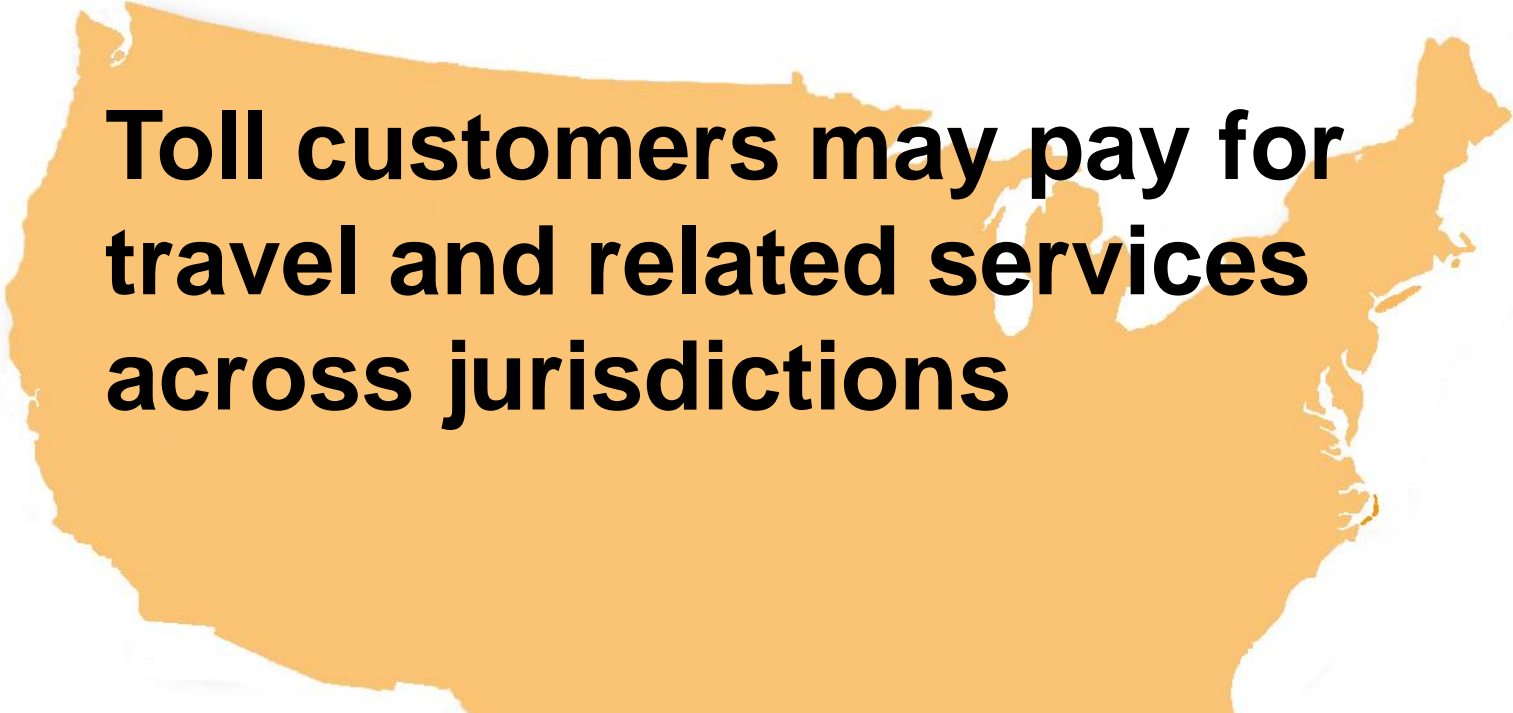
Interoperability means...



Toll customers may pay for travel and related services

Fees for roadways, bridges, tunnels, managed lanes as well as parking, food, gas, etc.

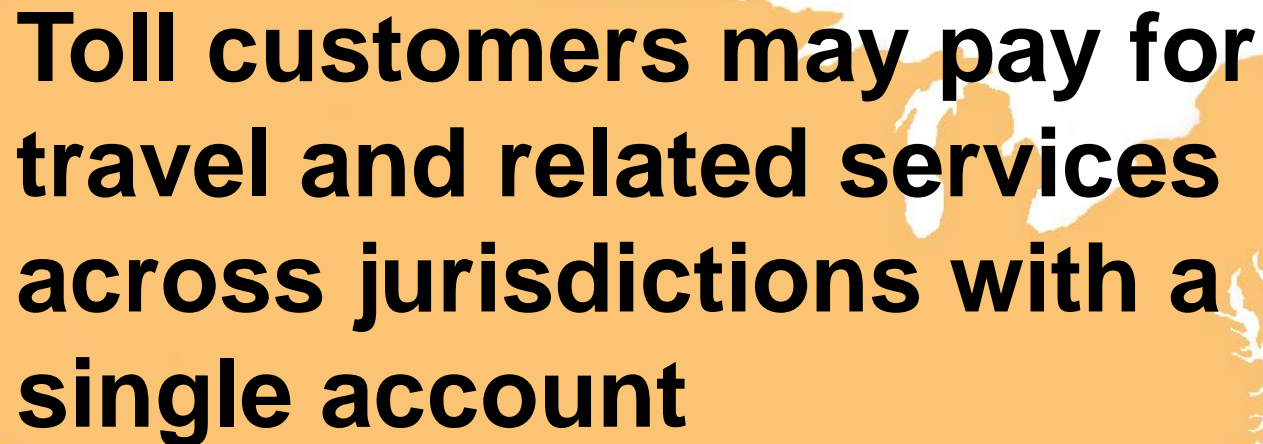
Interoperability means...

A light orange map of the United States with a torn paper edge effect, serving as a background for the text.

Toll customers may pay for travel and related services across jurisdictions

Countries, regions, states (interstate and intrastate), counties, cities, and agencies

Interoperability means...

An orange silhouette of the United States map with a torn-edge effect, serving as a background for the text.

Toll customers may pay for travel and related services across jurisdictions with a single account

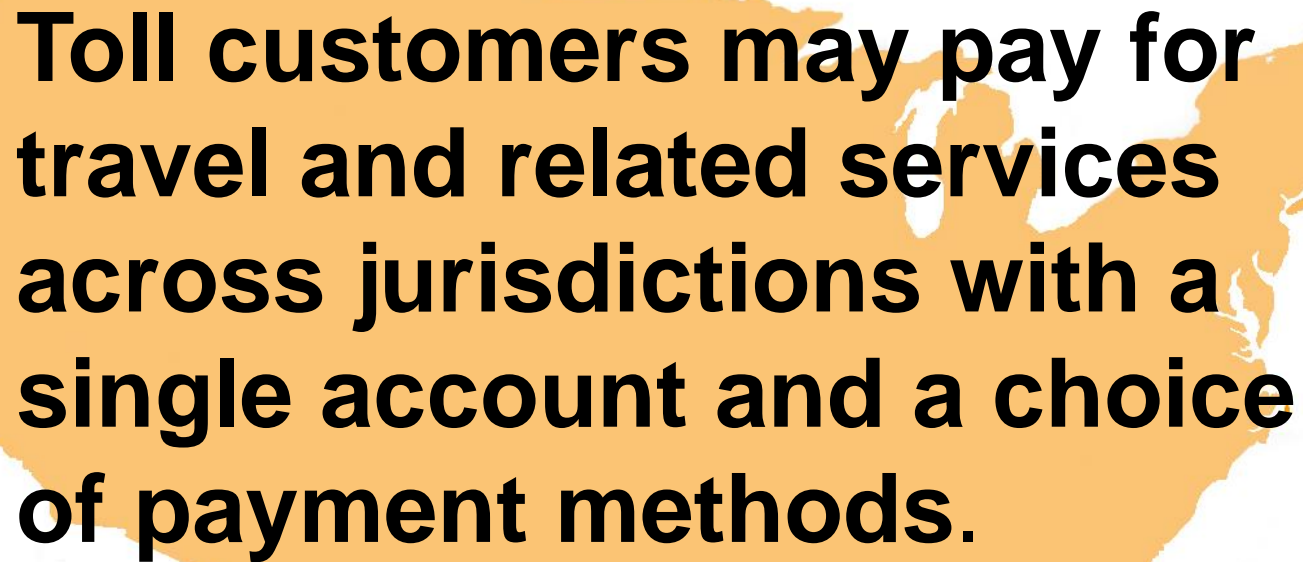
One account - serviced by a transaction settlement system open to multiple providers

Interoperability means...

Toll customers may pay for travel and related services across jurisdictions with a single account and a choice of payment methods.

Customers choose multiple payment options offered by account & service providers

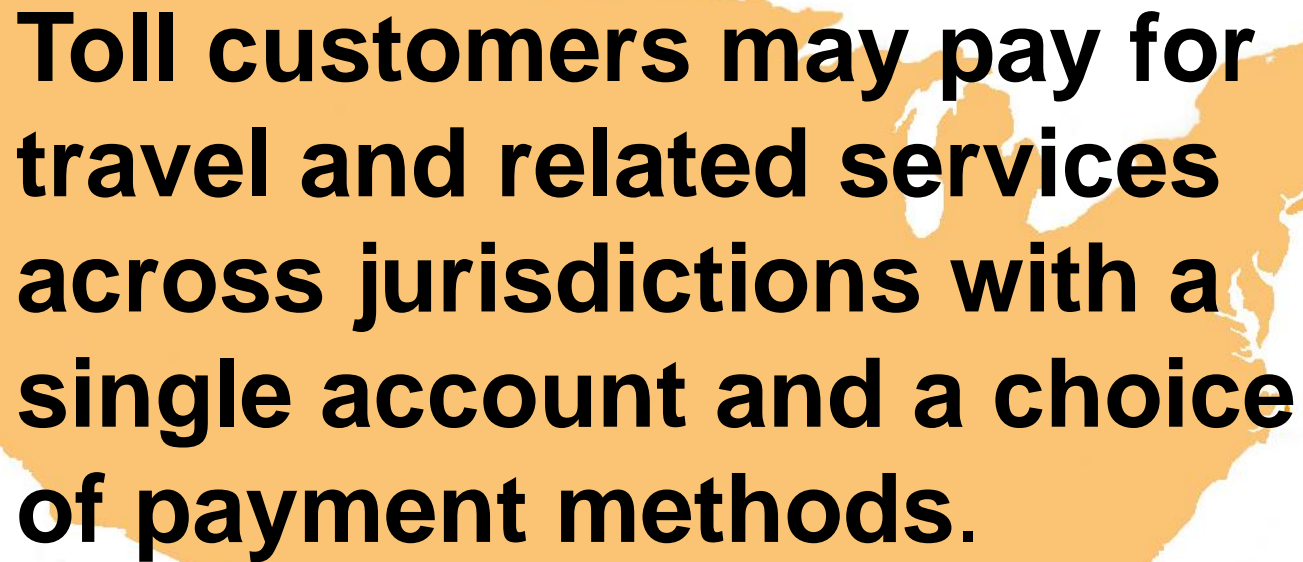
Interoperability means...

A light orange map of the United States is positioned behind the text. The map shows the outlines of the states and is centered on the continent.

Toll customers may pay for travel and related services across jurisdictions with a single account and a choice of payment methods.

Your Toll Account is Accepted Here.

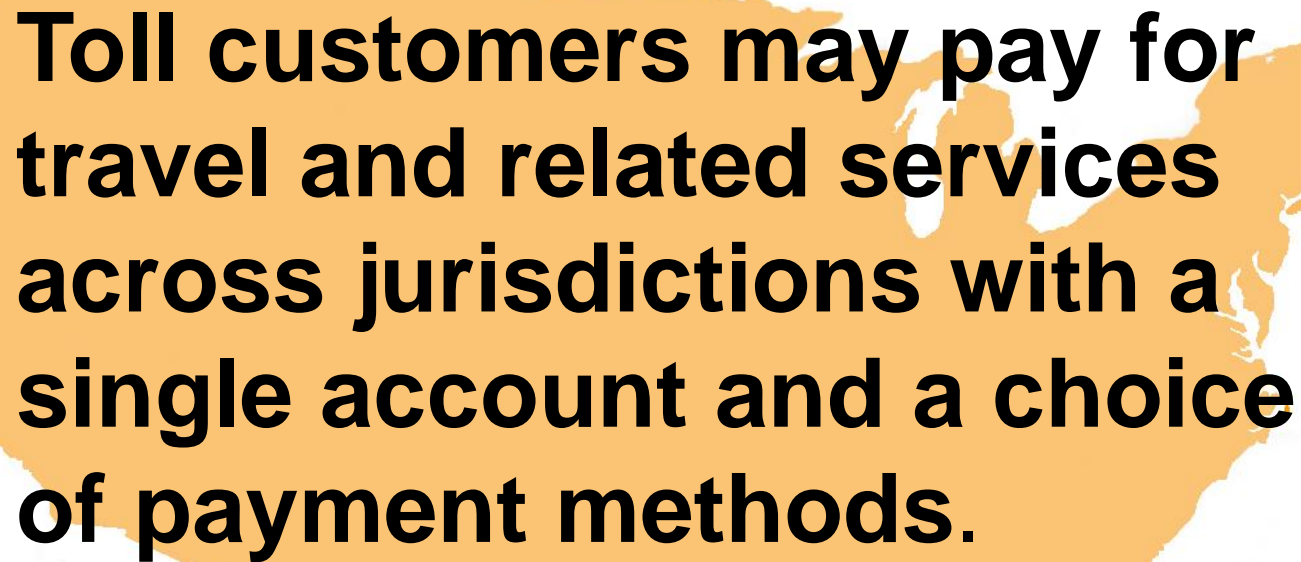
Interoperability means...

An orange-colored map of the United States is positioned behind the text. The map shows the outlines of the states and is centered on the continent.

Toll customers may pay for travel and related services across jurisdictions with a single account and a choice of payment methods.

No Account? We will find you and collect.

Interoperability means...

An orange-colored map of the United States is positioned behind the text. The map shows the outline of the country, including the states and the Gulf of Mexico.

Toll customers may pay for travel and related services across jurisdictions with a single account and a choice of payment methods.

Toll operators must have choices of identification & payment technologies based on open standards

Interoperability means...

Toll customers may pay for travel and related services across jurisdictions with a single account and a choice of payment methods.

**COMPETITIVE
ENVIRONMENT**

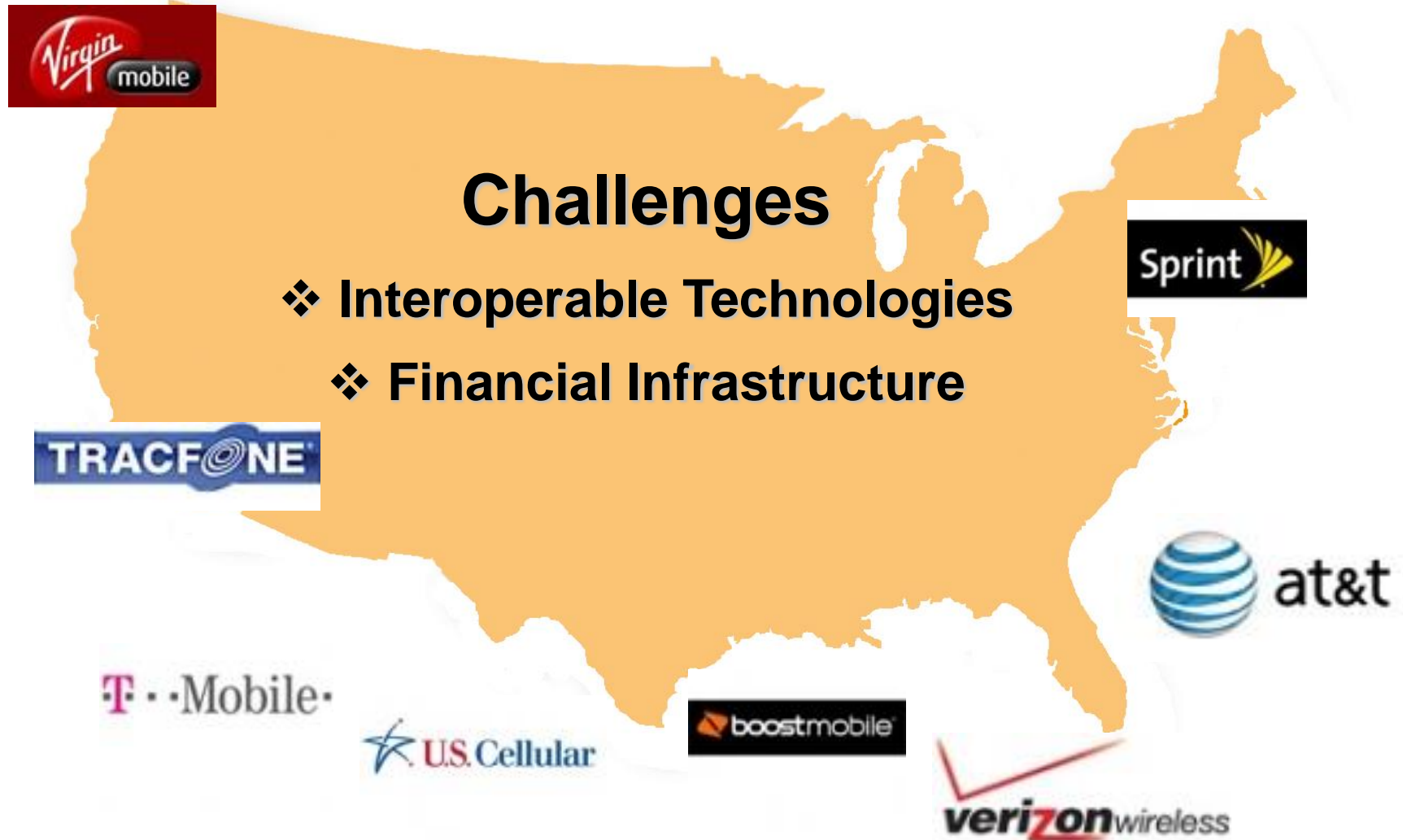
Interoperability means...



Interoperability means...



Interoperability means...



The image features a map of the United States in a light orange color. Overlaid on the map are several mobile carrier logos: Virgin mobile (top left), Sprint (top right), TRACFONE (middle left), at&t (bottom right), T-Mobile (bottom left), U.S. Cellular (bottom center), boostmobile (bottom center), and verizon wireless (bottom right). In the center of the map, the word "Challenges" is written in a large, bold, black font. Below it, two bullet points are listed, each preceded by a diamond symbol (❖): "Interoperable Technologies" and "Financial Infrastructure".

Challenges

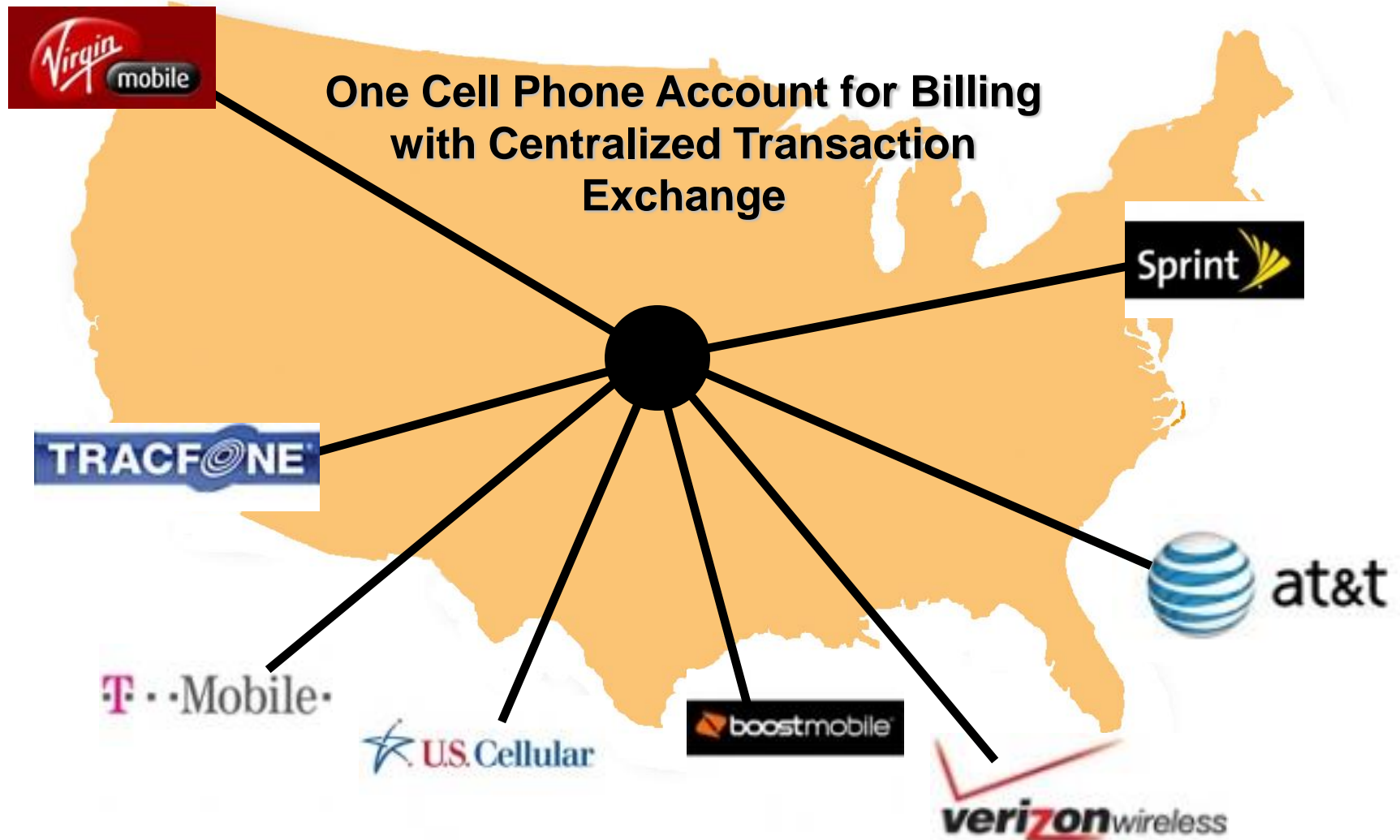
- ❖ Interoperable Technologies
- ❖ Financial Infrastructure

Logos shown on the map include: Virgin mobile, Sprint, TRACFONE, at&t, T-Mobile, U.S. Cellular, boostmobile, and verizon wireless.

Interoperability means...



Interoperability means...



Interoperability means...



**Can We Learn from the
Cell Phone Industry?**

Interoperability means...

Can We Learn from the Cell Phone Industry?

❖ Interoperable Technologies

- Multi-Protocol Readers
- Open-Protocol Tags
- Other Technologies

Interoperability means...



Can We Learn from the Cell Phone Industry?

- ❖ Interoperable Technologies
- ❖ Financial Infrastructure

Interoperability means...

Financial Infrastructure for Tolls

- ❖ **Video Information Exchange**
- ❖ **Transaction Clearing & Settlement**
- ❖ **Violation Enforcement Support**
- ❖ **Basic Operating Rules & Standards**

Interoperability means...

National Transportation Account?



Interoperability means...

National Transportation Account?



or

Toll Industry Application?



How are we going to get there?

Coordination and Collaboration

- IBTTA IOP Committee
- ATI
- OmniAir
- I-95 Coalition
- US House Transportation Committee
- USDOT/FHWA
- AAMVA
- States, Regions & Agencies**

Involved in Testing and Transponder/Reader Procurements for various technologies including 18000 6C (WashDot, Utah DOT, GDOT/SRTA, E-470, IAG, FLA, etc.)

CONTACT

Martin Stone, Ph.D., AICP

Director of Planning

Tampa Hillsborough Expressway Authority

1104 East Twiggs Street

Tampa, Florida 33602

(813) 272-6740

Marty@Tampa-xway.com