

Tolling Workshop

Presented to:

Joint Transportation Committee

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Gregory A. Le Frois, PE
Vice President



HNTB

Agenda

General Tolling Overview

- Survey of Toll agencies, Facilities and Operations
- Survey of Toll Technologies
- Interoperability
- What does the future hold?

Current Trends in the Toll Industry

- Managed Lanes / HOT Lanes
- Open Road Tolling
- Interoperability
- Back Office Consolidation



What is Open Road Tolling?

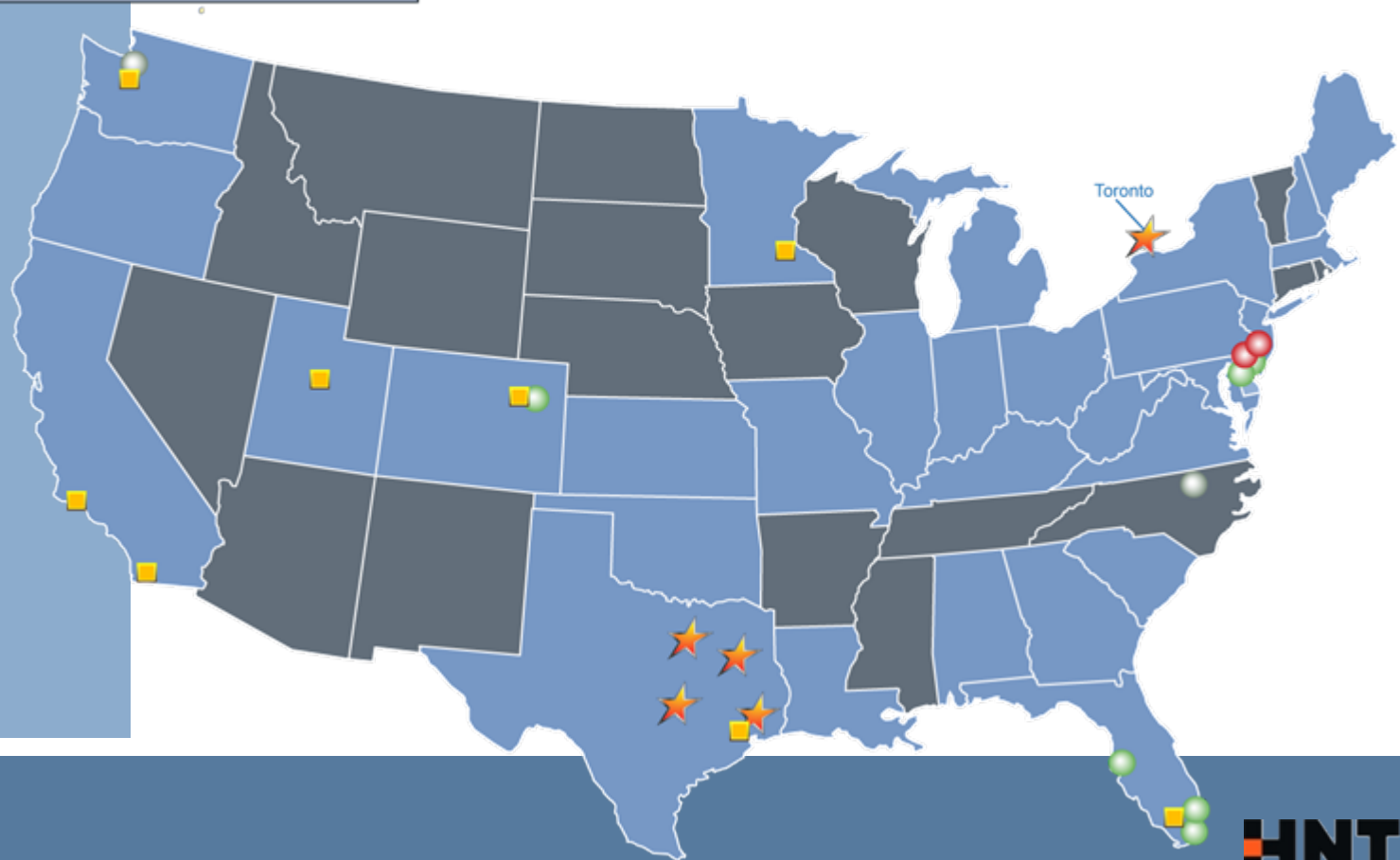
- Electronic Toll Collection and Video Billing
- Requires Electronic Enforcement
- No Toll Booths
- Highway Speed
- Must Provide for Cash/Check Payments Off-System



Status of Open Road Tolling in North America

- Plans for Conversion
- Under Study
- New Facilities
- Operating Managed/High Occupancy Toll Lanes
- Operating Open Road Tolling Facilities

- Toll Facilities
- No Toll Facilities



Status of Open Road Tolling in North America

Plans for conversion

- E-470 - Denver
- Miami-Dade Expressways - Miami
- President George Bush Turnpike - Dallas
- Homestead Extension of Florida's Turnpike - Miami
- Atlantic City Expressway – NJ
- Crosstown Expressway - Tampa
- New Jersey Turnpike

Under study

- Port Authority of New York & New Jersey Bridges and Tunnels
- Metropolitan Transportation Authority Bridges & Tunnels – New York

New/Planned facilities

- Triangle Expressway - Raleigh
- SR 520 - Seattle

Operating Managed/HOT Lanes

- Route 91 Express Lanes – Orange Co., CA
- I-15 Express Lanes – San Diego
- I-15 Express Lanes – Salt Lake City
- I-394 Express Lanes - Minneapolis
- I-95 Express - Miami
- Katy Freeway (I-10) Managed Lanes - Houston
- I-25 HOV/Express Lanes - Denver
- SR 167 HOT Lanes – Seattle

Operating Open Road Tolling Facilities

- Loop 49 – Tyler, TX
- State Highway 121 – Dallas
- Westpark Tollway - Houston (Electronic Toll Collection-only)
- 183A - Austin
- 407 Express Toll Route – Toronto, ON

Open Road Tolling – Benefits

- Higher Performance and Safety
- Greater Efficiencies in Cost and Traffic
- Sustainability
- Reduced Right-of-Way



Open Road Tolling - Challenges

Payment Options

- Kiosks
- Third parties
- Anonymous Electronic Toll Collection accounts
- Video accounts



Open Road Tolling - Challenges

Higher Reliance on Technology

- Push toward Electronic Toll Collection
- Cameras



Open Road Tolling - Challenges

Business Rules and Finance

- Revenue stream delay
- Fees
- Rating agencies

Run Date: 2004W02 14:28:22

CREDIT CARD JOURNAL DETAIL
For Dates 2004-04-04 to 2004-04-04

Clerk	Post Date	Account No	Credit Card #	Type	Amount	Auth Code	Exp	Agency	Balance
6048	2004-04-02 15:50	5362813	xxxxxxxxxxxx2004	A	\$39.25	13931	1205	FTC	
6048	2004-04-02 20:19	5330214	xxxxxxxxxxxx1010	A	\$55.50	143246	1907	FTC	
6048	2004								
6048	2004								
6048	2004								

AGENCY DEPOSIT REPORT
Date: 2003-03-10 to 2003-03-12

Inventory Equipment Requests

Equipment Type	Count

Transaction

Trans	Trans Code	Deposit Bank
ADJUST	A51	FTC
PAYMENT	B	FTC

BAD CHECK REPORT
Date: 2005-01-01 to 2005-01-20

Transaction	Trans Code	Deposit Bank	Total
ADJUST-BAD CHECK FEE	A51	FTC	38543130
BAD CHECK FEE	B	FTC	38552594
			38571540
			38571802
			38575070
			38578001
			38581806
			38587080
			38587087
			38414494
			38415205

Run Date: 2005/08/16
Run Time: 12:38:08

VIOL #	DATE	PLATE
38543130	2003-09-27 01:17:11	CA-4NU
38552594	2003-09-27 11:13:53	CA-4NU
38571540	2003-09-27 18:14:45	CA-4NU
38571802	2003-09-27 18:21:29	CA-4NU

VIOL #	DATE	PLATE	Location	Amount	Agency	Balance
38575070	2003-09-27 20:45:04	CA-4NU	Tornado Springs N Lane 11	\$91.75	2003-09-04	2003-09-09
38578001	2003-09-28 02:05:55	CA-4NU	Antlers Parkway Off Lane 2	\$90.25	2003-09-04	2003-09-09
38581806	2003-09-28 11:16:44	CA-4NU	Tornado Springs N Lane 12	\$91.75	2003-09-04	2003-09-09
38587080	2003-09-28 14:56:16	CA-4NU	Tornado Springs S Lane 11	\$91.75	2003-09-04	2003-09-09
38587087	2003-09-28 15:05:11	CA-4NU	Antlers Parkway Off Lane 2	\$90.25	2003-09-04	2003-09-09
38414494	2003-09-29 01:38:23	CA-4NU	Tornado Springs N Lane 11	\$91.75	2003-09-09	2003-11-13
38415205	2003-09-30 00:07:07	CA-4NU	Tornado Springs S Lane 11	\$91.75	2003-09-13	2003-11-13

Total outstanding on 21 Violations: \$1902.25

ACCOUNT	ACCOUNT	PAYMENT	PLANID	STATUS	AMOUNT
007483	COLLECTION	4828			
008100	OPEN	1981			
010824	COLLECTION	1901			
011044	MAIL	4936			
011216	COLLECTION	4708			
011424	COLLECTION	4698			
TOTAL		60	240.00	240.00	0.00

TOTAL REC READ: 6 MONEY DUE: 607.27

Subtotal FTE	Subtotal SAH	Total
1192	649	1757

Open Road Tolling – Technology Choice

Transponders/Readers

- 4 vendors currently in US market
- 2 vendors have similar technology

Lane Systems

- 8 – 10 vendors in US
- Each is unique

Back Office Systems

- 5 – 7 vendors in US

Miami-Dade Expressway Authority Toll System Procurement

Firm	ORT Lane System	Back Office System and Operations
Electronic Transactions Consultant Corp. (ETCC)	X	X
TransCore	X	X
ACS State & Local Solutions	X	X
Telvent/Faneuil	X	X
Raytheon	X	
VESystems		X

North Carolina Turnpike Authority Toll System Procurement

Firm	Lane System	Back Office System	Operations
ACS State & Local Solutions	X	X	X
Alltech			X
ETC Corp.	X		
Fanueil, Inc.			X
IBM	X	X	X
Indra USA		X	
Kapsch TrafficCom U.S. Corp.	X	X	
Telvent Caseta, Inc.	X	X	
TransCore, LP	X	X	X
United Toll Systems, LLP	X		
VESystems		X	
Washington Division of URS Corp.			X

Open Road Tolling – Collection Costs

Traditional Cash Collection

- \$0.10 to \$0.30 per transaction

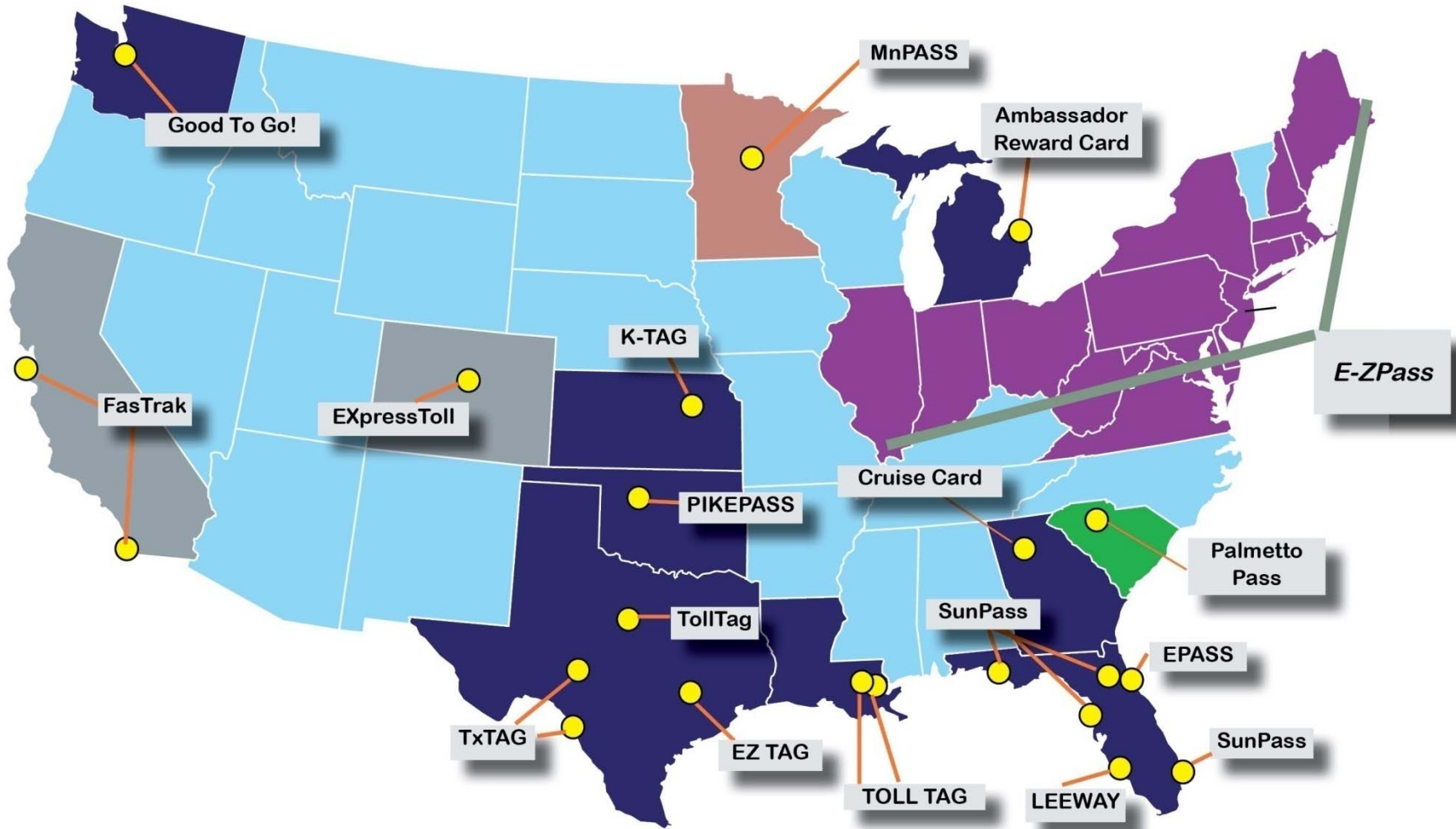
Open Road Tolling

- \$0.03 to \$0.15 per transaction

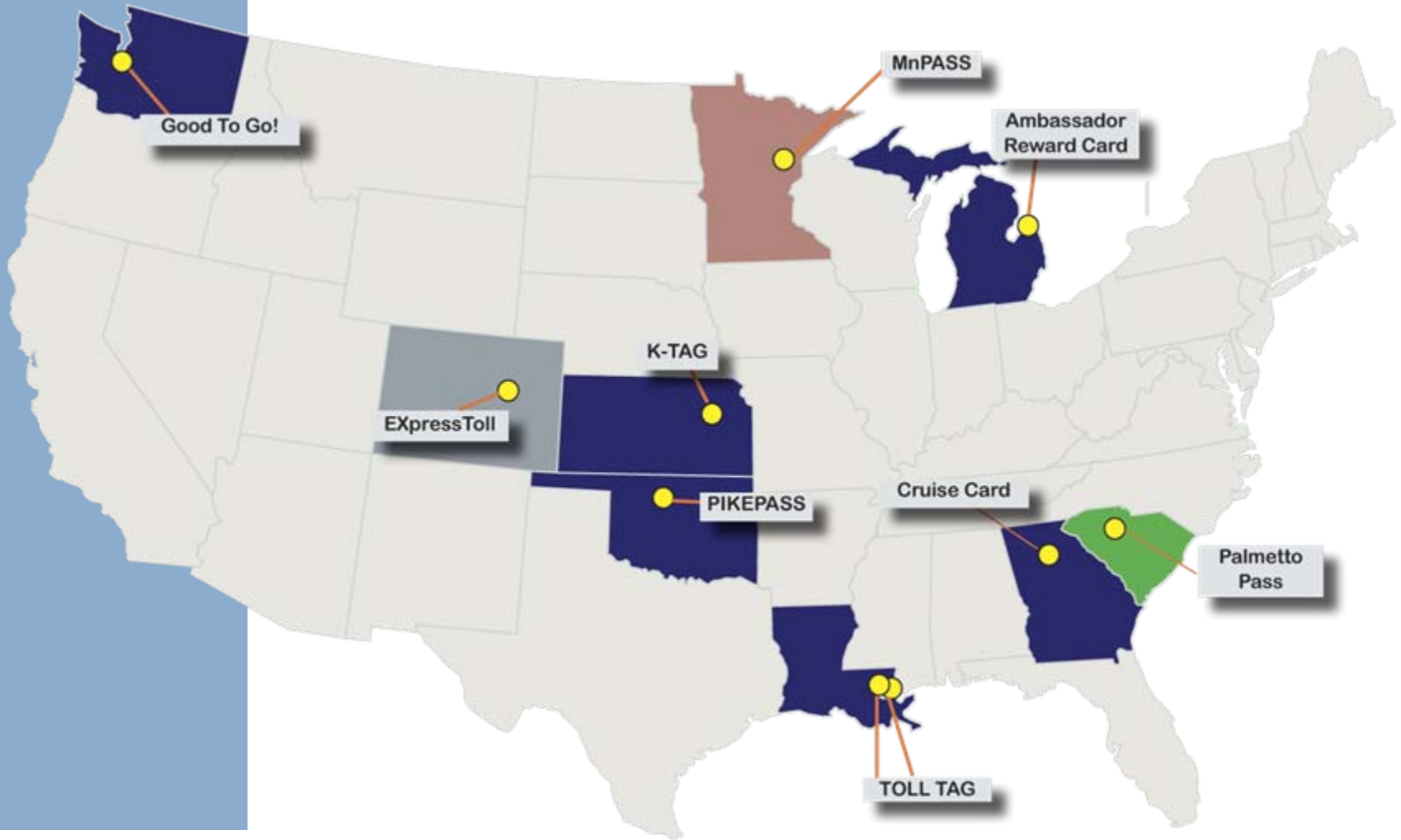
Cost Drivers

- Transponder cost
- Back Office Operations (small vs. large consolidated)
- Credit Card Fees
- Enforcement/Collections
- Average toll, transaction #'s

Interoperability



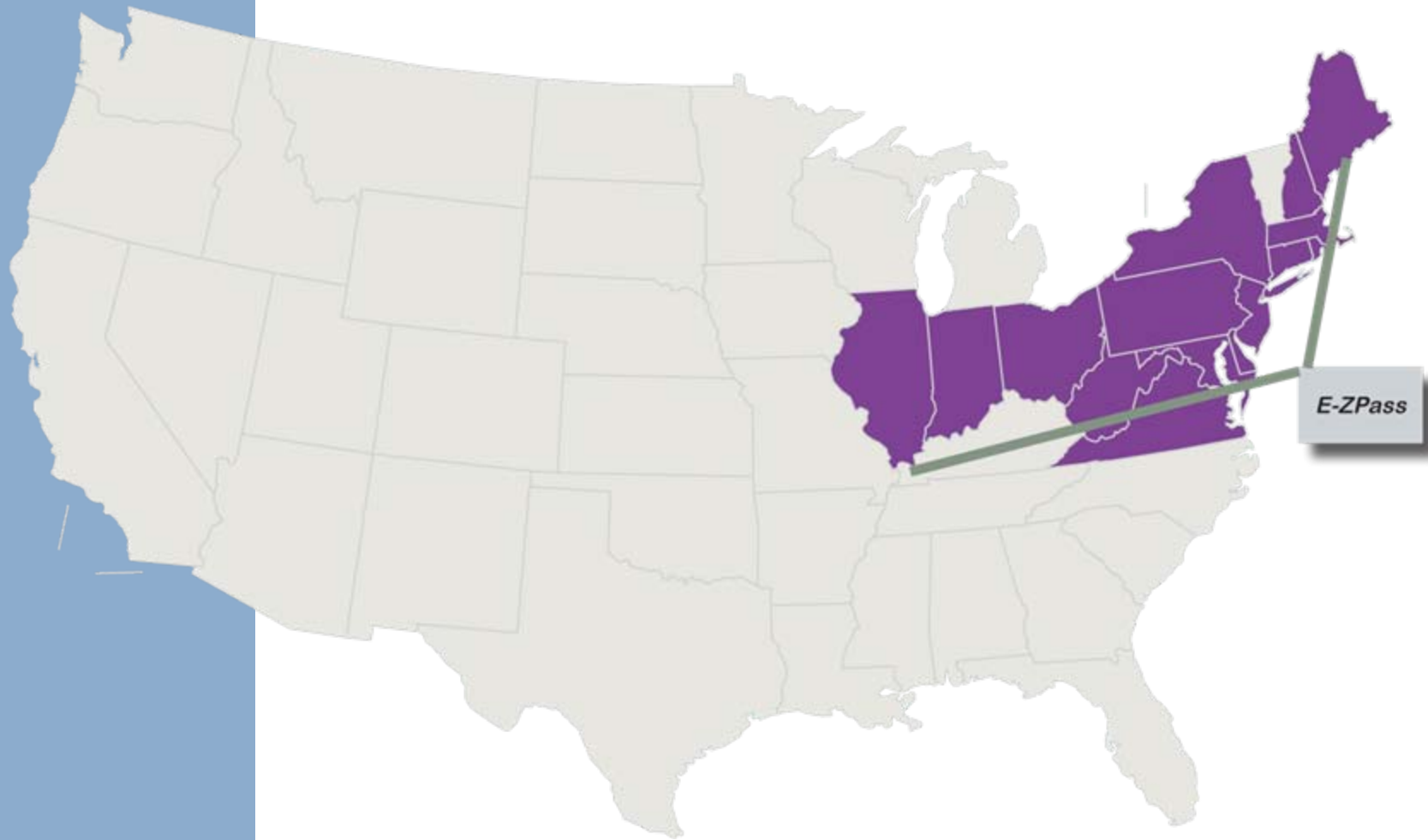
Interoperability



Interoperability



Interoperability



E-ZPass

What does the future hold?

- ✓ **Transponder Technology**
- ✓ **Camera Technology**
- ✓ **More Competition**
- ✓ **More Toll Facilities**
- ✓ **Interoperability**

