

IBTTA  
74<sup>th</sup> ANNUAL MEETING & EXHIBITION  
September 16-20, 2006 • Hyatt Regency Dallas • Dallas Texas USA

**IBTTA**  
International Bridge, Tunnel and Turnpike Association

**E-ZPass**  
Interagency Group

**IAG**  
Interagency Group

## Achieving Interoperability in a Multi-State Environment

James A. Crawford  
Executive Director  
E-ZPass Interagency Group

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## INTEROPERABILITY

- ❖ Is the concept of One Tag/One Account feasible?
- ❖ What happens when you cross State Lines?
- ❖ What is the impact of a large size?
- ❖ Can Interoperability work without an effective Violations Processing System?

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## INTEROPERABILITY

- ❖ What is it?
- ❖ How does it work?
- ❖ What is required to make it work?
- ❖ What issues impact its use?
- ❖ What are the dangers in using it?
- ❖ Is it successful?

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**E-ZPass**  
Interagency Group  
22 Agencies located in 11 States

States with E-ZPass  
Non-Toll States

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## INTEROPERABILITY – TWO VIEWS

- ❖ A) *The system of toll agencies collecting and exchanging information so as to create a seamless single network for the patrons and a practical method for collecting tolls from those who have the proper hardware and collecting fines from violators.*

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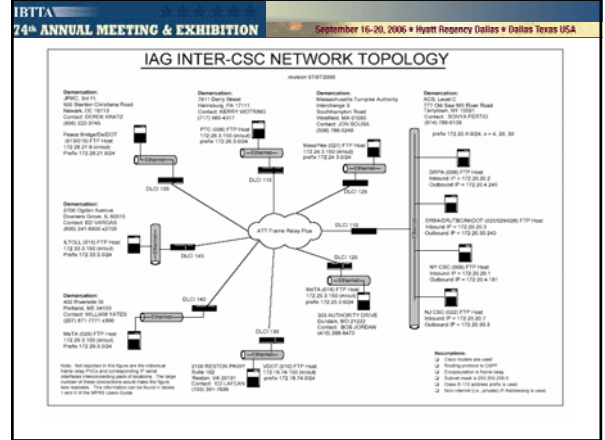
## And

- ❖ B) *A System on a Network, providing the Exchange of Data and Transfer of Payments supported by a common interest in putting regional mobility above single agency efficiency.*

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## INTEROPERABILITY – How does it work?

- ❖ Common purpose and trust
- ❖ Unified protocols
- ❖ Common hardware
- ❖ Virtual Network
- ❖ Scheduled Interchanges for data and funds
- ❖ Independence in administration
- ❖ Common Brand and signing



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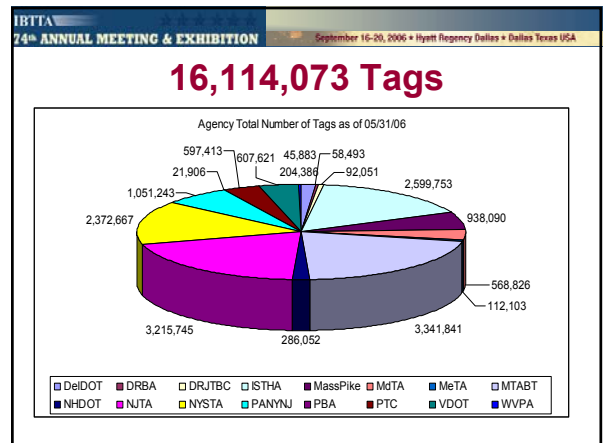
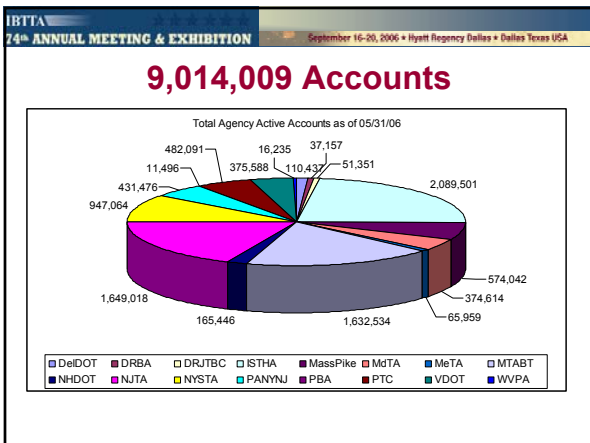
## What is Required to Make it Work?

- ❖ Commitment
- ❖ Flexibility
- ❖ Tight Standards
- ❖ Testing
- ❖ Cooperation
- ❖ Follow-up
- ❖ Respect

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## What Issues Impact its Use?

- ❖ Customer Acceptance
- ❖ Number of Agencies
- ❖ Number of Accounts and Tags
- ❖ Penetration Rates
- ❖ Extent of Non-Home activity
- ❖ Violation Rates
- ❖ Business Rules



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## Interoperability

### Does it create dangers?

- ❖ Delays in payment
- ❖ Uneven flow of funds
- ❖ Issues related to bad reads and violations
- ❖ Timing
- ❖ Equity
- ❖ Additional steps in changing policies

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## Settlement Differences

TOTAL PAID SETTLEMENT		Total Received Payments
-	BCRC	*
1,921,300	DMDOT	1,914,523
333,102	DRBA	663,787
309,625	DRUTBC	1,302,657
-	DRPA	*
-		*
189,464	IBTTA	1,276,701
1,416,620	ManPA	2,063,036
1,165,132	MTA	1,826,044
408,482	MTA	723,824
11,957,179	MTABT	4,173,775
448,836	NHDDOT	1,121,400
8,188,312	NJCSC	16,335,945
-	NJTA	*
0	NYSA	1,352,038
8,116,821	NYSTA	4,322,300
9,883,104	PANYNJ	5,695,301
82,552	PBA	82,966
2,020,777	PTC	2,812,588
-	SJTA	*
496,702	VDOT	856,890
0	WVPA	302,561
48,627,708	TOTAL	46,627,708

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## Interoperability – Is it successful?

YES

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## Does Interoperability Foster Violations?

- ❖ NO but
- ❖ More tags mean more bad reads
  - Even at 99.95% success you have 500 bad reads for every million attempts
- ❖ Dedicated lanes increase opportunities for those intending to cheat
- ❖ Express lanes make cheating seem easy
- ❖ Video Enforcement is costly but necessary

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## Does Interoperability Reduce Violations

- ❖ Higher levels of V-Tolls (from Video enforcement) which is good and bad
  - Higher cost to collect
  - Less out of state transactions to process
- ❖ More valid reads which ensure proper collection
- ❖ A clearer enforcement policy
- ❖ Legal standing for enforcement out of state

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## Violation Issues and Solutions

- ❖ No violations can be accepted
  - Use Gates that are operated by payment
  - No Express Lanes
  - Retain Collectors as Lane Walkers
- ❖ A Minimum number of violations is acceptable
  - No Express Lanes
  - Collectors or Lane Walkers

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## Violation Issues and Solutions

- ❖ Minimum Violations offset by Collections
  - Aggressive Video Enforcement with Collection Agency
  - Aggressive Registration Revocation
  - Limited use of Express Lanes
  - Time Controlled Gates
  - Use of Police from time to time
- ❖ Violations viewed as Business Issue
  - Video Enforcement
  - No Collectors at Ramps
  - Police use when violations rise

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## Issues Affecting Violations

- ❖ V-Tolls
  - Battery Life or Transponder success
  - Patron Cooperation
  - Vehicle Configuration
- ❖ Bad Tag Reads
  - Legislated restrictions
  - Multiple Plates with Same Numbers
  - Specialty Plates
  - Difficulty in Identifying State

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## Issues Affecting Violations

- ❖ Cheating Customers
  - Rental Car Users
  - Covered or Marked License Plates
  - Trucks with No Front Tag pulling "terminal" trailers
  - Failures to Pay upon Notice
  - Those who look for lanes where they are less likely to be identified as a violator

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## What should we do about Violations?

- ❖ Interoperability reduces the impact of violations by providing plate numbers (and ideally uniform application of plate recording) for all customers
- ❖ Violations can be reduced by business practices
- ❖ Violations will increase with Express Lanes
- ❖ Effective Video Enforcement remains critical
- ❖ Nothing replaces effective management of agency and of plaza

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## What is Next

- ❖ RFP for Technology
- ❖ Further research on Technology and Vehicle configurations
- ❖ Pursue 9.5GHz systems
- ❖ Determine how to make Interoperability work under different paradigms
- ❖ Watch for new requirements from Federal Government

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