



DTR Toll Collection Overview





The Dulles Toll Road

A Traditional Tolling Facility

- * Payment Options
 - * E-ZPass
 - * Exact Change (all coins)
 - * Full Service
(but no Credit Card capability)
- * Some higher *(but not highway)* speed electronic toll collection lanes
- * Violation enforcement process



Dulles Toll Road



Illinois Toll Way, I-90

An Open Road Tolling Facility

- * Payment Options
 - * Primarily E-ZPass (or equivalent)
 - * Automated Cash/Credit
 - * (Full Service may be offered)
- * Most lanes are highway speed
- * Toll collection equipment mounted on overhead gantries
- * Violation enforcement process



Illinois Toll Way, I-90



Inter- County Connector

An All Electronic Tolling Facility

- * Payment Options
 - * E-ZPass Only
 - * No Cash or Credit Option
- * All lanes are highway speed
- * Toll collection equipment mounted on overhead gantries
- * Violation enforcement process

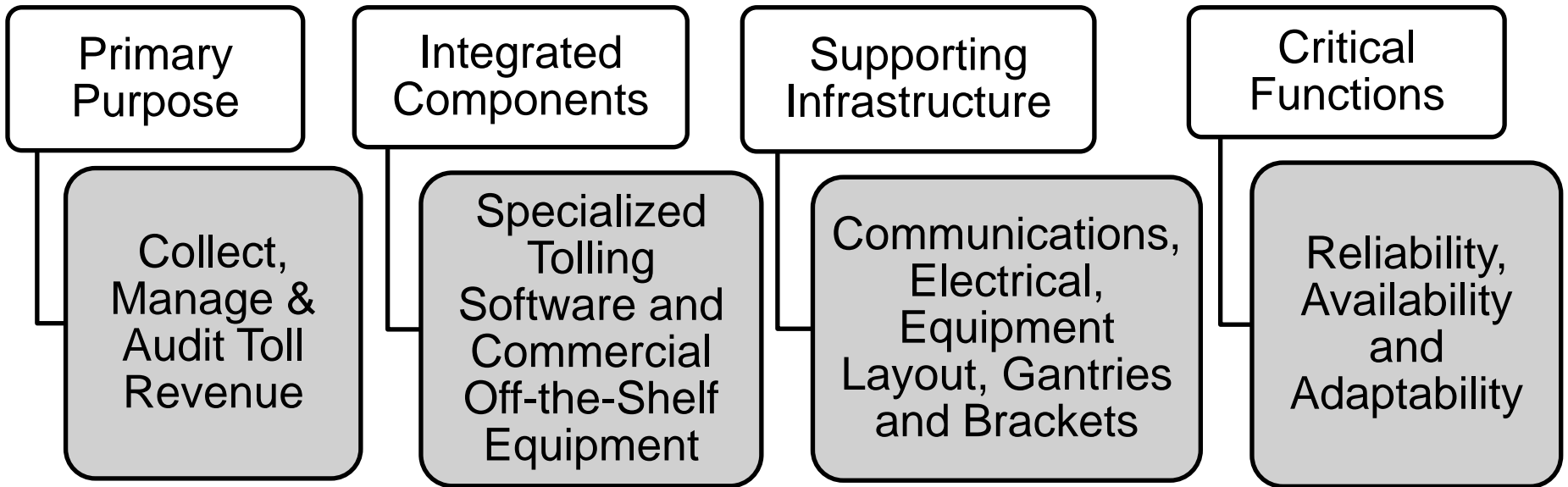


Inter-County Connector



Background

Overview of a Toll Collection System





Background

Components of DTR Toll Collection System

Lane Level

- Lane Controller
- E-ZPass
- Classification
- Violation Enforcement
- Coin Machines
- Toll Attendant Equipment

Plaza/Host

- Servers
- Workstations
- Printers
- UPS
- Video Audit

Communications

- Fiber Optic Backbone
- Routers
- Switches
- Transceivers
- Cables

Interfaces

- E-ZPass Customer Service Center (VDOT)
- Violations Processing Center (VDOT)

Limitations of the DTR's Current Toll Collection System

- Toll Collection System is outdated (17 years old)
- System design was premised on cash collection, not electronic
- Heavy maintenance requirement due to age and cash collection needs
- Most components require proprietary service by others (TransCore)
- Limited redundancy and back-up capabilities
- Current system cannot accommodate new technologies and growth
 - Distance based tolling
 - Differential pricing
 - Open Road tolling
 - Enhanced violation enforcement
 - Maintenance On-line Monitoring System (MOMS)



Current Customer *User Profile*

Daily Customer Trips



■ 4 or more/wk (53%)

■ 2 or 3 times/wk (14%)

■ 1 time/wk (7%)

■ 2-3 times/mo (13%)

■ Less than 1/mo but more than 2/yr (14%)

- Nearly 2/3 (66.5%) of the customers use the facility **more than 2-3 times** per week; indicating regular customers.
- 34% use the DTR **less than 1 time** per week*
- 83% of the vehicles are registered in Virginia; 10% in Maryland; 3% Washington D. C. and 4% other*
- 67% of the customers use the facility to go to and from work*
- E-ZPass usage increased over 11% in the last 3 years, with a penetration rate now at 81.52%

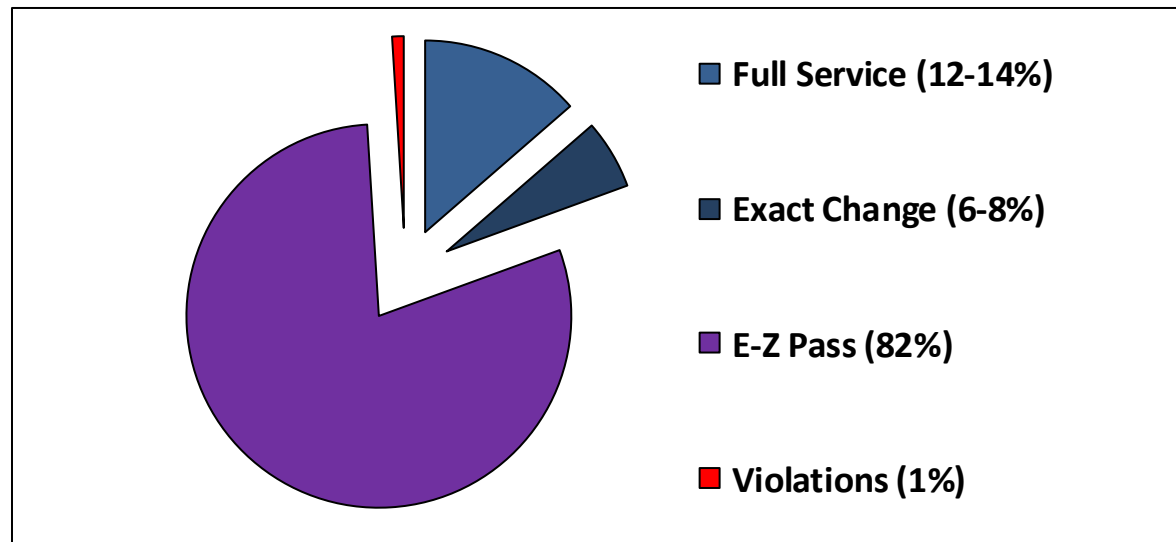
Current Customer *Payment* Profile

E-ZPass Customers

- 81.52% of daily travelers
- \$101.7 Million FY 2013 (est)

Cash Customers

- 18.48% of daily travelers
- \$23.0 Million FY 2013 (est)



Why it is important to serve our cash paying customers (at least in the short-term)

** Avert loss of revenue*

Historically, when a legacy toll facility migrates to an All Electronic Toll (AET) collection process, half of the legacy cash paying customers are lost and do not convert to electronic collection.

** Minimize violations*

Absent a cash paying-option, violations increase, resulting in lost revenue and increased violation enforcement expenses.

Recommended Action Plan

- Achieve higher use of E-ZPass (above 90%) and position the DTR for transitioning to “Open Road Tolling”
- Amend our current contract with TransCore so that we can immediately:
 - Extend our current maintenance agreement to ensure system functionality
 - Replace the *Host Computer* in order to protect current revenues
 - Convert Exact Change Lanes to *E-ZPass Only* and remove the outdated and difficult-to-maintain coin collection machines.
- Design and competitively procure a new *Revenue Control System (RCS)* that capitalizes on proven technology, and provides the features needed for Open Road Tolling.
- Concurrent to the installation of a new *RCS*, analyze and potentially restructure the model used for processing violations (commonly referred to as *Back Office*).

Estimated Costs of the Recommended Action Plan

Priority	Feature	Cost
1	Host Computer	\$1.8 Million
2	Mainline Plaza: Convert 3 Exact Change Lanes to dedicated E-ZPass	\$750 K
3	Ramp Plazas: Convert 16 Exact Change Lanes to dedicated E-ZPass	\$3.43 Million
4	Revenue Collection System	\$10-15 Million

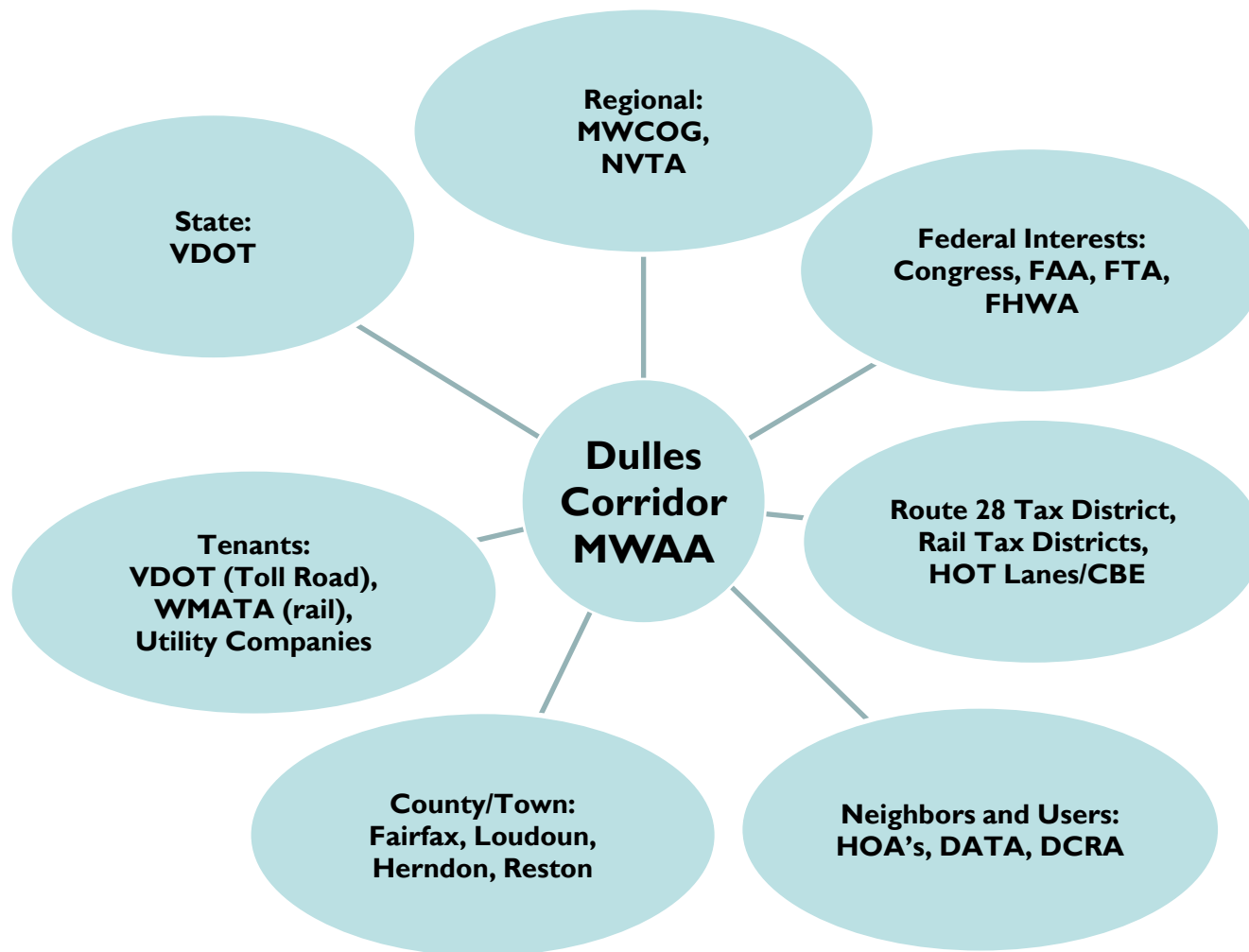
Because the yellow shaded items are inherent parts to the current revenue collection system, all work on them must be performed by our Maintenance Contractor, TransCore

This Action Plan accomplishes the following:

- * Optimizes and increases the use of E-ZPass
- * Removes antiquated cash collection technologies while preserving the cash-paying option at the full service booths
- * Reduces the DTR operating budget by approximately \$1.5m
- * Replaces the Revenue Collection System, thereby permitting:
 - * the implementation of Back Office collection and processing capability
 - * provides for differential toll setting
 - * the implementation of Open Road Tolling technologies
- * Permits the future use of “Automatic Toll Payment Machines” if so desired (in lieu of full service operators)
- * Prepares for the eventual construction of an “All Electronic” Toll Gantry, and full Open Road Tolling
- * Minimizes violations and assists in the monitoring of reciprocity agreements

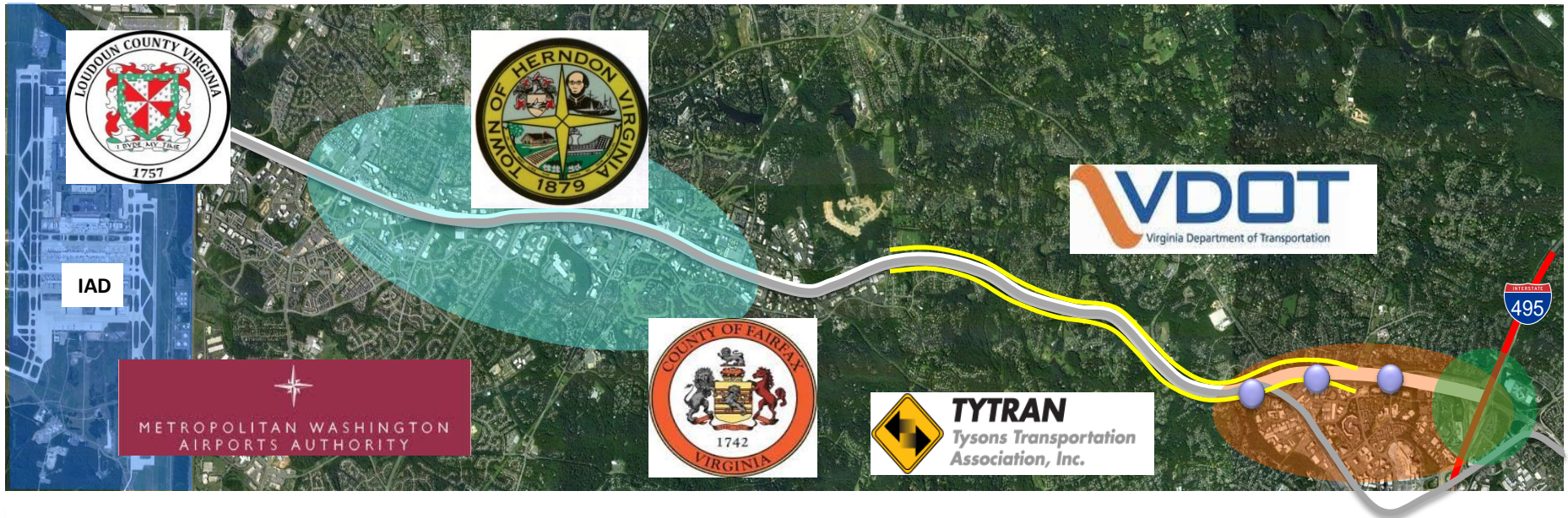


Longer Term Vision for the DTR Requires a Master Plan that is integrated with our Regional Partners





DTR is part of a Regional Transportation Network



The Dulles Toll Road goals need to align with regional transportation plans



Ronald Reagan Washington National Airport



Dulles Corridor Metrorail Project



Dulles Toll Road



Washington Dulles International Airport



METROPOLITAN WASHINGTON
AIRPORTS AUTHORITY