

Expansion of GPS Tolling

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Traditional Tolling



Traditional Tolling

- Significant Infrastructure Costs
 - Requires Civil Construction
 - Plazas, Booths, Gantries, etc.
 - Requires Equipment
 - Lane Equipment, Cameras, Readers, Transponders
 - Requires Ongoing Labor
 - Operations
 - Back Office
 - Maintenance







Traditional Tolling (continued)

- Ongoing Challenges
 - Maintaining Equipment
 - Labor Costs
 - Aging Equipment
 - Keeping Up with Technology
 - Advancements in ETC
 - Manual to ETC to ORT
 - Need for Interoperability







Traditional Tolling (continued)

- Ongoing Challenges
 - Expanding Tolling Locations
 - Expensive
 - Time Consuming
 - Traffic Disruptions



- Continuous Customer Service
 - Transponder replacements
 - Interoperability





We've Come A Long Way

From Old Technology...



To Current Technology...



No road infrastructure required. No long lead times.

No kidding.

Congestion Management Toll Systems using GPS, GSM, and Unique ID.





GPS Based Tolling



GPS Based Tolling

- Advantages
 - Rapid Deployment
 - Easily Implemented on New or Existing Roadways
 - Infrastructure-free Tolling Capability
 - Eliminates Need for Costly Toll Structures
 - Thousands of Toll Location
 Coordinates and Toll Fees







How It Works

- Combines GPS Navigation with GSM Communications
 - Device Plugs into OBD Port Under Dashboard
 - GPS Inside Device Logs Vehicle Location as It Transverses Roadways
 - Device's Built-in GSM
 Transmits Vehicle Position and ID Information to Cloud-based System for Processing







GPS Based Tolling for High Occupancy Tolling (HOT) Lanes

- Tracks Road Usage
- Eliminates Expensive and Ineffective Manual Lane Enforcement
 - No Need for Police Observation/Enforcement
 - Ability to Distinguish between Vehicles at Highway Speeds



Additional Benefits of GPS Tolling

- Vehicle Owner ReceivesWeekly Scorecard Via E-mail
 - Focuses on Improving Driver Behavior and Fuel Efficiency
 - Provides Suggestions
 - Improving Overall Driver Safety
 - Reducing Fuel Consumption
 - Lowering Greenhouse Gas Emissions







Thank You.

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