

DATA WAREHOUSE

CONTENTS

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IBTTA 
International Bridge, Tunnel and Turnpike Association

The information in IBTTA's Data Warehouse includes information for Agencies as well as information for specific facilities (road, bridge, tunnel).

Currency and distance measures are collected using the local units of measure. The values will be converted to common units of measure for reports and queries.

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I. AGENCY INFORMATION

A. GENERAL INFORMATION

TYPE OF AGENCY

- Type of Agency
 - ▶ Public
 - National
 - State
 - Municipal
 - Authority
 - ▶ Private
- Open Ended Description of Legal Environment

PLANNED CAPITAL IMPROVEMENT

EXPENDITURES:

- Centerline length to be added (2005 - 2007)
- Centerline length that will be under construction (2005 - 2007)
- Centerline length that will be rehabilitated (2005 - 2007)

CONTRACT PROJECTIONS

- Contracts to be put out for bids, 2005 - 2007
 - ▶ Engineering
 - ▶ Construction

TYPES OF STAFF POSITIONS

- CEO
- Finance
- Toll Operations
- Marketing
- Public Information Officer
- Planning
- Maintenance
- Engineering
- Security/Police
- Legal
- Information Technology
- Incident Management

Data Warehouse Contents

INFORMATION SYSTEMS

- Up-time of Information Systems
- Software used

B. CONTRACTORS AND CONSULTANTS

The following information relates to an agency's contractors:

- Company Name
- Primary Contact
- Address
- Phone Number
- Email Address
- End Date of Contract

Agencies report contracts in the following general areas:

- General Engineering
- Traffic Studies and Projections
- Technology
- Lobbyist, Government Relations
- Security
- Marketing
- Human Resources
- Electronic Toll Collection/Automated Vehical ID
- Automatic/Automated Vehicle Classification
- Violation Enforcement
- Violation Processing
- Integration Services
- Customer Service Center
- Call Center
- Financial Underwriter
- Financial Advisers
- Legal

C. BALANCE SHEET, BUDGETS AND EXPENDITURES

BALANCE SHEET

- Total Annual Revenue (2005)
- Total Assets (2004 - 2005)
- Cash and Receivables (2004 - 2005)
- Infrastructure and Fixed Assets (2004 - 2005)
- Other Assets (2004 - 2005)
- Liabilities
- (Encumbered and Unencumbered) (2004 - 2005)
- Short-Term Liabilities (2004 - 2005)
- Long-Term Liabilities (2004 - 2005)
- Remaining Value or Equity (2004 - 2005)

BUDGET

- Month When Fiscal Year Ends
- Annual Operating Budget (2006)
- Total Annual Capital Improvement Budget (2006)
- Total Annual Maintenance Budget (2006)
- Total Annual Marketing Budget (2006)
- Toll Annual Collection Operating Budget (2006)

EXPENDITURES

The following types of expenditures are recorded and broken down by direct agency expenditures and expenditures for contractors.

- Emergency Roadside
- Mechanical Assistance
- Fire Services
- Police Patrol
- Maintenance
- Snow Removal
- Debris Removal
- Money Handling

D. BONDING

- Total Bonding Capacity
- Funding Mix
- Other Sources
- Restrictions
 - ▶ Federal
 - ▶ Local
 - ▶ Other
- Fixed payment schedule?
- Able to refinance?
- Autonomous Toll-setting Authority?
- Are toll increases planned as part of the bond?
- Bond Rating:
 - ▶ S&P
 - ▶ Moodys
 - ▶ Fitch
 - ▶ Other
- Debt outstanding Reserves
- Plans to issue more debt?

E. ELECTRONIC TOLL COLLECTION (ETC)

- Name of ETC program
- Types of tag technology in use
 - ▶ RFID
 - 915 MHz
 - 2.8 GHz
 - 5.8 GHz
 - 5.9 GHz
 - Other DSRC
 - GPS
 - GSM
 - ID
 - Other
- Number of tags in use
- Number of accounts
- Number of annual transactions
- Percent of overall collections that are cash
- Percent of overall collections that are credit
- Percent of overall collections that are ETC
- Average Annual Peak Penetration using ETC
- Cost per unit for transponder

- Published standards that technology conforms to
 - ▶ CEN
 - ▶ ASTM
 - ▶ IEEE
 - ▶ ISO
 - ▶ Other
- Support parking operations
 - ▶ Public
 - ▶ Private
 - ▶ None
 - ▶ Other
- Annual revenue from parking
- How Transponder is distributed
 - ▶ Mail
 - ▶ Retail
 - ▶ Agency Store
 - ▶ Other
- Deposit required
- Initial prepaid balance
- Price for the customer for each ETC unit
- How statements are delivered
 - ▶ Mail
 - ▶ Fax
 - ▶ E-Mail
 - ▶ Website
 - ▶ Other

- How violations are defined
- Percent of the images that are collected but rejected for either controllable or uncontrollable reasons
- Number of violations agency is able to process per person per hour
- Software used

H. CALL CENTER

- Average number of calls received each month
- Average number of letters received each month
- Average telephone wait time
- Call Breakdown
- Percent of calls resolved by a Voice Response System
- Percent of calls resolved by a Customer Service Representative
- Number of Full Time Equivalent call center representatives
- Number of calls handled per Customer Service Representative (CSR) per hour

F. MARKETING

- Total marketing budget
- Who prepares your marketing materials
 - ▶ Internal
 - ▶ Outsourced
 - ▶ Both
- Marketing methods used
 - ▶ TV
 - ▶ Radio
 - ▶ Print
 - ▶ Direct Mail
 - ▶ Billboards
 - ▶ Other
- Agency does joint promotions

G. VIOLATION ENFORCEMENT

- Allowed to send out citations via mail based on captured images
- Send out citations via mail based on captured images
- Methods used for violation fee collection
 - ▶ Fee notices
 - ▶ Citations via local court systems
 - ▶ Administrative hearings
 - ▶ Collection agency
 - ▶ License plate suspension
 - ▶ Impound, immobilization, and towing
 - ▶ Other

II. FACILITY INFORMATION

A. GENERAL INFORMATION

- Facility Name
- Facility Type
 - ▶ Road
 - ▶ Bridge
 - ▶ Tunnel
- Primary Contact
 - ▶ Name
 - ▶ Title
 - ▶ Mailing Address
 - ▶ Telephone
 - ▶ E-Mail Address

BRIDGE

- Bridge Name
- Location (Longitude/Latitude of Center Point)
- Total Length of Facility
- Number of Lanes
- Year Opened
- Year of last major reconstruction/renovation

TUNNEL

- Tunnel Name
- Location (Longitude/Latitude of Center Point)
- Total Length of Facility
- Number of Tubes
- Total Number of Lanes
- Year Opened
- Year of last major reconstruction/renovation

TURNPIKE/ROAD

- Turnpike/Road Name
- Location (Longitude/Latitude of Center Point)
- Centerline Length
- Total Lane Miles/Kilometers
- Year Opened
- Year of last major reconstruction/renovation

TYPES OF TOLL CONFIGURATION

- Number of Main Line Barriers (Main Entrance-Exit)
 - ▶ Number of Main Line Plazas
 - ▶ Number of Toll Booths
 - ▶ Number of Ramps
 - Attended
 - Unattended
 - ▶ Number of ETC Gantries
- Number of Barriers at Interchanges (Ramps, Interchanges)
 - ▶ Number of Ramp Plazas
 - ▶ Number of Toll Booths
 - ▶ Number of Ramps
 - ▶ Number of Lanes
 - Attended
 - Unattended
 - ▶ Number of Gantries

- Open Road Tolling
 - ▶ Number of Lanes
 - ▶ Number of Ramps
 - ▶ Number of ETC Gantries
- Total Number of Collection Attendants
 - ▶ Average Weekend Full-Time
 - ▶ Average Weekend Part-Time
 - ▶ Average Weekday Full-Time
 - ▶ Average Weekday Part-Time
- Traffic Management Information Services
 - ▶ Message Signs
 - ▶ Highway Advisory Radio
 - ▶ Dedicated Broadcasts
 - ▶ Traffic Operations Centers
 - ▶ Other
- Managed Lane Types
 - ▶ ETC Lanes
 - ▶ ORT Lanes
 - ▶ HOT Lanes
 - ▶ HOV Lanes
 - ▶ Reversible or Zipper Lanes
 - ▶ Slip Ramp
 - ▶ Other
- Tolls only collected in one direction
- Total number of people employed by this facility (2004 - 2005)
 - ▶ Full Time/Permanent
 - ▶ Part Time/Contract/Temporary
 - ▶ Seasonal
- Are toll rates fixed, variable, or a combination of both?
 - ▶ Fixed Rates
 - ▶ Variable Rates
 - ▶ Both
- Fixed toll rates
 - ▶ Passenger Car Minimum
 - ▶ Passenger Car Maximum
 - ▶ Passenger Car Average
 - ▶ 5-Axle Commercial Minimum
 - ▶ 5-Axle Commercial Maximum
 - ▶ 5-Axle Commercial Average
- Variable toll rates
 - ▶ Passenger Car Minimum
 - ▶ Passenger Car Maximum
 - ▶ Passenger Car Average
 - ▶ 5-Axle Commercial Minimum
 - ▶ 5-Axle Commercial Maximum
 - ▶ 5-Axle Commercial Average

B. BUDGET, CAPITAL IMPROVEMENT PROJECTIONS AND CONTRACT PROJECTIONS

BUDGET

- Month When Fiscal Year Ends
- Annual Operating Budget 2005
- Total Annual Capital Improvement Budget 2005
- Total Annual Maintenance Budget 2005
- Total Annual Marketing Budget 2005
- Toll Annual Collection Operating Budget 2005

PLANNED CAPITAL IMPROVEMENT EXPENDITURES

- Centerline length to be added (2005 - 2006)
- Centerline length that will be under construction (2005 - 2006)
- Centerline length that will be rehabilitated (2005 - 2006)

CONTRACT PROJECTIONS

- Contracts to be put out for bids in the next 12 months
 - ▶ Engineering
 - ▶ Construction

C. TRAFFIC AND REVENUE

- Total vehicle count (2004)
- Total vehicle miles/kilometers traveled for this facility
- Facility's average daily vehicle count
 - ▶ Overall
 - ▶ Weekday
 - ▶ Weekend
- Percent of all vehicles that used your facility that were:
 - ▶ Passenger Cars
 - ▶ Commercial Vehicles
- Level of Service (Using the A-F level of service measure scale)
 - ▶ Overall
 - ▶ Peak
- Annual Toll Revenue (2004 - 2005)
 - ▶ Total
 - ▶ Cash
 - ▶ Credit
 - ▶ ETC
- Annual Non-Toll Revenue (2004 - 2005)
 - ▶ Ad Revenue
 - ▶ Concessions
 - ▶ Other

D. EXPENDITURES

The following types of expenditures are recorded and broken down by direct agency expenditures and expenditures for contractors.

- Emergency Roadside Mechanical Assistance
- Emergency Roadside Medical Assistance
- Fire for facility
- Police patrol for facility
- Maintenance for facility
- Snow removal at facility
- Debris Removal at Facility
- Money Handling

E. ELECTRONIC TOLL COLLECTION (ETC)

- Numer of Electronic Toll Collection (ETC-only) lanes
- Does the facility use barrier systems for Electronic Toll Collection (ETC)?
 - ▶ Speed allowed
- Does the facility use non-barrier systems for Electronic Toll Collection (ETC)?
 - ▶ Speed allowed
- Does the facility use Open Road Tolling?

TYPES OF TAG TECHNOLOGY USED

- For each type of technology the warehouse includes the following:
 - ▶ Active or Backscatter
 - ▶ Manufacturer(s)
- Radio Frequency Identification (RFI)
 - ▶ 915 MHz
 - ▶ 2.8 GHz
 - ▶ 5.8 GHz
 - ▶ 5.9 GHz
- Other DSRC
- GPS
- GSM
- IR
- Other
- Overall percent of vehicles that use Electronic Toll Collection (ETC) at this facility
- Percent of all vehicles during the peak traffic times that use Electronic Toll Collection (ETC)

F. SAFETY

- Number of Accidents (2003 - 2004)
 - ▶ Total
 - ▶ Passenger
 - ▶ Commercial
- Number of Fatalities
 - ▶ Total
 - ▶ Passenger
 - ▶ Commercial
 - ▶ Toll Facility Personnel

Data Warehouse Contents

- Lane/Facility Restrictions used:
 - ▶ HAZMAT
 - ▶ Height
 - ▶ Length
 - ▶ Width
 - ▶ Weight
 - ▶ Combustible
 - ▶ Other
- Average incident response time
- Average incident clearance time

G. INFORMATION TECHNOLOGY

- Does the facility have a Traffic Management Center
- Roadside Detection Devices used
 - ▶ Cameras
 - ▶ Loops
 - ▶ Transponders
 - ▶ Weigh In Motion
 - ▶ Photo Radar
 - ▶ Human sight/observation
 - ▶ Other
- Does the facility have a Smart Highway Program?
- Does the facility use Fiber Optic Cables to connect its Information Services, Toll Operations, and/or Operational Facilities?



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