

MTA Bridges and Tunnels

Safety Program Presentation

February 2014





Safety Stand-Down Program
December 9, 2013



Safety



Service



Security

Bridges & Tunnels



Safety Goals

- Safety culture “Safety Starts at the Top”
- Provide a safe passage for customers and a safe workplace for employees and contractors
- Communicate safety as a top priority to our employees
- Enhance safety through a review of training, equipment and procedures



Safety Culture

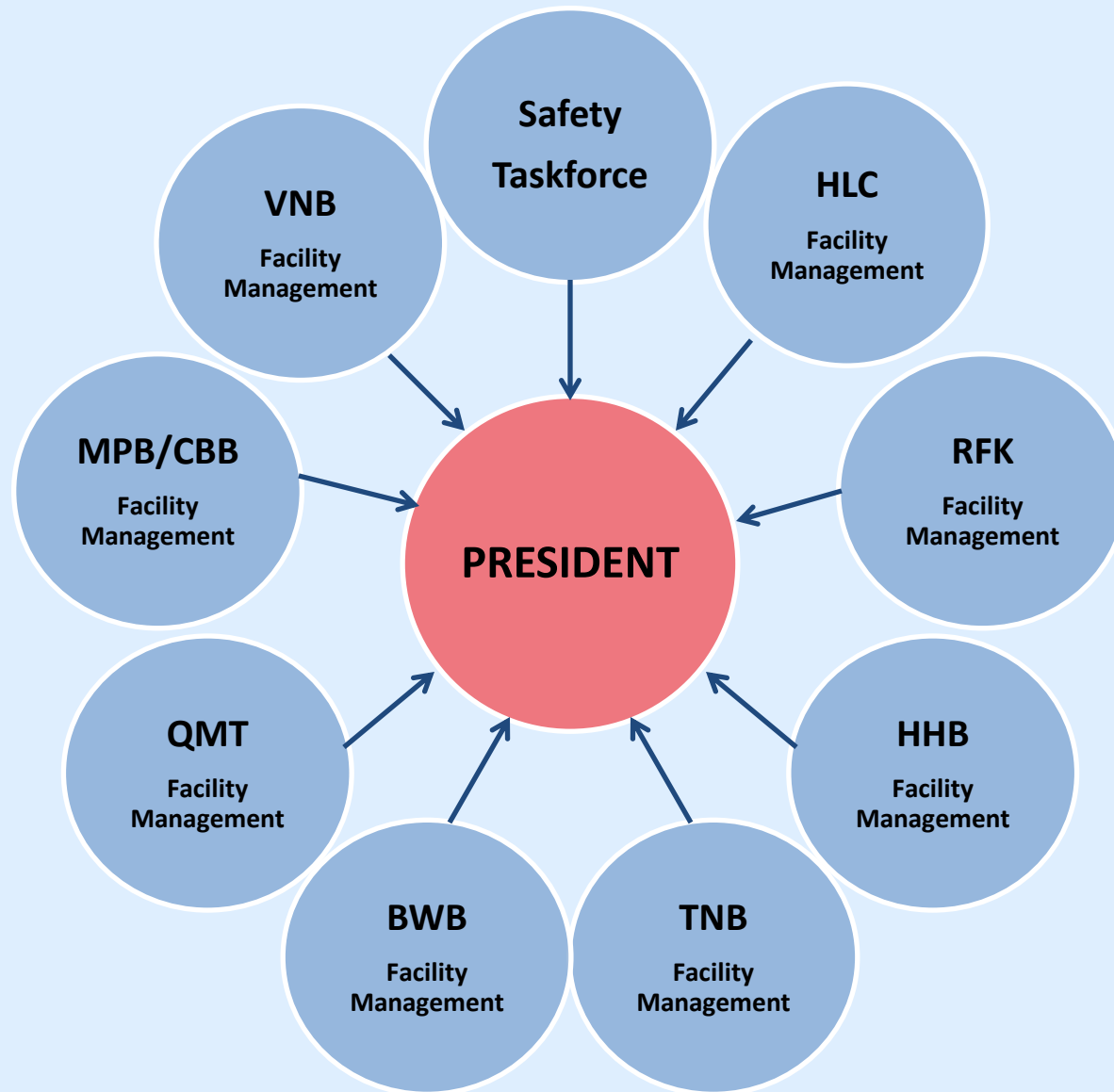
➤ gothamCulture™

B&T has contracted with gothamCulture™ to assist in shaping safety culture at every level of the agency and, more importantly, sustaining that culture change.

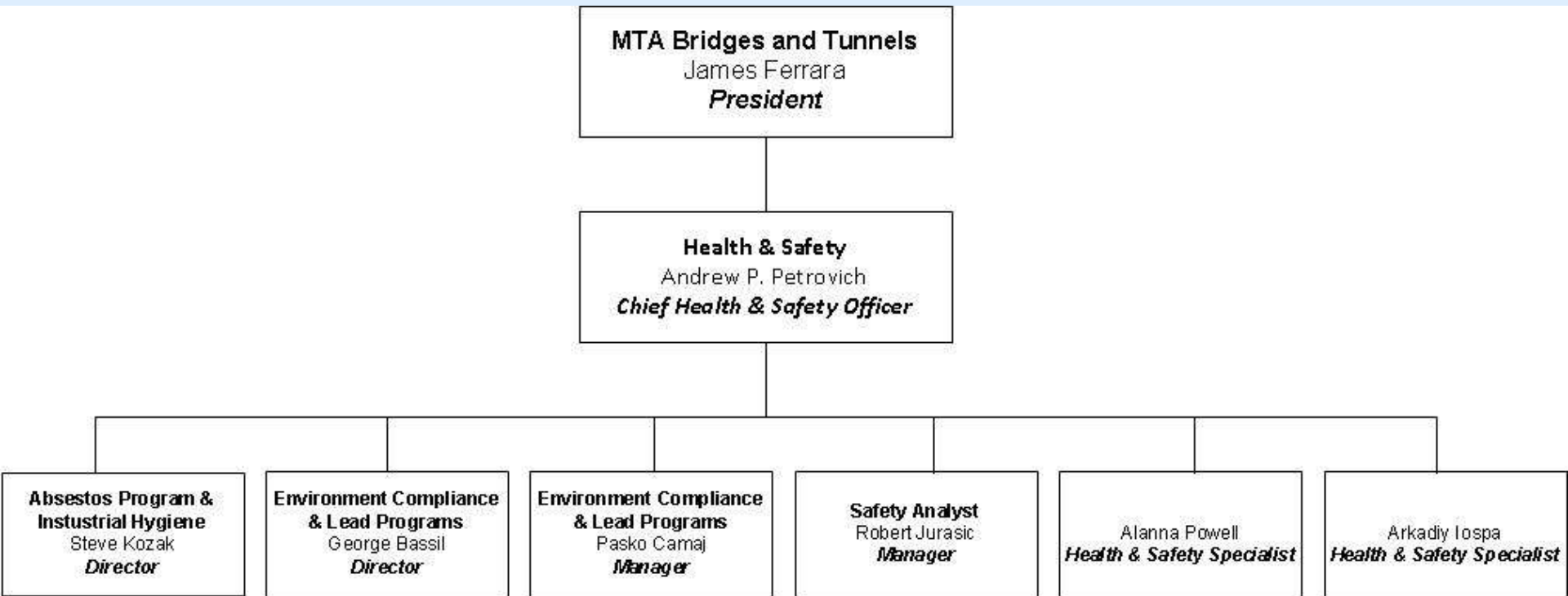
gothamCulture™ has over a decade of experience supporting senior leadership teams in the transportation industry, helping clients understand and transform their cultures to support strategy execution and drive high performance. Leveraging the understanding of how human behavior and leadership impact safety, gothamCulture™ has developed human factors programs emphasizing the design of safe systems and the most effective strategies for avoiding safety risks attributed to human factors.



Safety at B&T



Health & Safety Department



Health & Safety Department

Reporting directly to B&T's President

Certified Safety professionals with Bachelors, Masters and Doctoral degrees in the following disciplines:

- Industrial Hygiene & Asbestos Programs
- Environmental Compliance & Lead Management
- Safety Analysis/Worker Protection
- Safety Reviews for Engineering Designs

These Safety professionals are located at B&T facilities to assist in investigations of employee injuries, hazard analysis and safety planning.



Operational Safety

- Facilities conduct Roll-Call at the beginning of each tour of duty- supervisors observe the condition of each employee, check for proper safety gear/equipment and inform employees of any hazards, impending weather, special traffic conditions, etc.
- Special Operations
 - » Provides unified command through Command Center communication including emergency coordination, motor vehicle collision alerts, weather alerts, BOLOs and safety bulletins
 - » Provides speed enforcement (radar) and truck enforcement on facility roadways
 - » Provides alerts and notifications to customers warning of facility/roadway hazards, wind restrictions, etc.



Operations Training

- Aerial Truck Safety
- Forklift
- Welding/Burning
- Confined Space
- Lock-out/Tag-out
- Fall Protection
- Elevated Working Surfaces
- Arc Flash
- CPR/First Aid
- Right-to-Know
- Wrecker Safety
- Traffic Incident Management (TIM) Training (in process)
- Safe Law Enforcement Equipment Handling
- Vehicle Stop
- Firefighting (FDNY Academy)
- Roadway Safety – Maintenance Protection of Traffic (MPT)

Training delivered through classroom, videos, webinar, hands-on, toolbox meetings, manufacturer's meetings, etc.

Operations Safety Equipment

- “PPE”- Personal Protective Equipment (gloves, hearing protection, etc.)
- Steel Toe Work Shoes/Work Boots
- High-Visibility Uniforms/Equipment
- Bullet-Resistant Vests
- Attenuated Vehicles (used on plazas and roadways)
- Remotely Operated Pothole Repair Trucks
- Snow Trucks with Back-up Cameras
- Roadway Delineators
- Facility Roadway Weather Sensors
- Automotive Drive-on Lifts



Operations Safety Equipment





Inspections

➤ Aerial Truck Inspections/Annual Crane Inspections



Operations Procedures

- Manual of Procedures (MOP) Online
- Vehicle Checklists (pre/post tour checks)
- Pre-tour Safety Discussions
- Toll Plaza Safety
- Seat Belt Safety Message



MTA Bridges and Tunnels
OPERATIONS DEPARTMENT
SPECIAL OPERATIONS DIVISION
Operations Central Command & Control
Telephone: 212-360-4177
Fax: 4178

December 24, 2013 11:45AM

OFFICER SAFETY

The SOG **Key-Shaped Knife** features a lockback knife in the opened position and a key in the closed position. The key knife is made of 420J2 steel, it has a 1.5 -inch straight edge.

SOG Key-Shaped Folding Knife:

- 1.25" 420J2 steel blade with a drop point shape
- Measures 4" overall with closed length of 2.5"
- Weighs 0.7 oz.
- Handle made of stainless steel
- Available in assorted colors

Commands are Directed to contact TBTA OCCC should additional information develop related to above matter.

All are reminded to use caution when approaching vehicles.

Distribution		
ALL FACILITIES	X	FYI
GMs	X	Urgent
ISD	X	Agency Sensitive
CNO	X	Law Enforcement Sensitive
	X	Confirm 212-360-4177

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OCCC Bulletin 13-378 WJ

Enhance Safety through Operations Process Re-engineering

- Regrouping of lanes at TNB and BWB
- Patrol of roadway/worksites during capital construction
- Use of LED lighting on bridges- eliminates frequent re-lamping and cable climbing
- Use of delineators in Tunnels and toll plazas to reduce motor vehicle collisions



Operations Working Safely



Operations Safety-Working Together

- Safety Task Force/Safety Action Team
 - » Comprised of Management and Union Safety Officers- audit facilities, check for safety hazards and make safety improvements on the spot and recommend corrections requiring more technical solutions to the Safety Action Team which is comprised of Maintenance/Engineering professionals.
- Safety Stand-Downs/Facility Meetings
 - » Safety Stand-Downs: Every 60 days, facility employees and senior management meet and discuss ways to improve safety culture at the facility. Facility Meetings: held monthly at each facility- Facility management and employees meet to report/follow-up on specific safety concerns at the facilities. Toolbox safety meetings and Roll-Call safety messages are conveyed daily at each facility.



Operations Safety-Working Together

- Achieving Collision Reduction on Bridges and Tunnels (ACROBAT) program: a joint effort with E&C Facility Engineers and Operations staff which is conducted to pinpoint accident hot spots and implement a variety of countermeasures ranging from physical improvements to operational actions to reduce vehicular accidents and injuries to customers
- Quarterly Safety Review- Facility Management meets with the VP of Operations to analyze every employee injury at B&T facilities. This cross-facility collaborative review process allows for sharing of best practices to reduce employee injuries



Occupational Health

B&T provides the following:

- Pre-employment medical exams
- Pre-employment and ongoing medical screening for Commercial Driver's License exams (CDL) under US DOT regulations
- Random Drug and Alcohol testing for Operations employees under FHWA regulations (Approximately 500 test per year.)
- Medical assessment of employees absent for medical reasons and monitoring of employees with medical conditions (Approximately 1,100 exams per year)
- Hearing Conservation Program
- Influenza Inoculations
- Hepatitis B Inoculations
- Defibrillators/ Defibrillator training at all facilities



Engineering & Construction (E&C) Program Areas

- Construction Safety
- Traffic Safety Engineering
- Structural Integrity and Safety Inspections
- Regional Improvements off property



E&C Construction Safety Program

- The focus of the construction safety program is to eliminate accidents and injuries on work sites and enhance the safety of field/construction personnel, B&T employees and the general public.
- The implementation of the program is the responsibility of E&C Facility Engineers and their staff with technical support and programmatic guidance by the Construction Safety Officer (CSO) who reports directly to the VP and Chief Engineer.
- Construction Safety will report to B&T President quarterly



E&C Construction Safety Program

- Safety organization and implementation at the work site is based on the safety triangle of Contractor, Resident Engineer and Facility Engineer/Staff. For larger projects the Contractor has a full time site safety professional on site. The Contractor has part-time presence on smaller projects. CM and FE staff independently oversee the project and are responsible to integrate safety oversight and necessary interventions into their project management
- E&C Construction Safety Division, performs capital and maintenance construction specification and plan review
- Technical safety support is provided by the Manager, Construction Safety Programs or designee and may be supplemented by an independent safety consultant who reports to the Safety Manager.
- An E&C safety committee is in place and meets regularly to discuss safety and develop recommendations to improve safety performance and enhance program success.
- Targeted safety audits are performed to ensure program compliance.



Traffic Safety Engineering

- Traffic safety engineering is an integral part of E&C functions. The group consists of professionals with Bachelors and Masters degrees in Civil Engineering and Transportation Planning and Engineering.
- Key aspects include review of MPT for all E&C projects to ensure compliance with MUTCD , AASHTO and other standards; implementation of traffic safety studies, designs and traffic safety improvements to ensure roadside traffic safety devices such as guiderails, impact attenuators, lane markings and signs meet standards.
- Assists Operations in the re-engineering toll plazas- most recently Southbound approaches to the Bronx-Whitestone and Throgs Neck Bridges.

E&C Structural Integrity and Safety Inspections

- E&C has a vigorous bridge and tunnel inspection program that exceeds Federal and New York State requirements for bridge and tunnel inspection programs.
- The program ensures a systematic in-depth inspection of structures and critical facility systems is carried out and any deficiencies or conditions requiring corrective actions are identified and tracked through correction.
- Additional special or supplemental inspections are carried out in the wake of major events such as Superstorm Sandy or seismic events to ensure the continued structural integrity and safety of our structures and facilities.
- Structural or safety conditions are addressed as promptly as possible based on urgency to maintain facility integrity and assure public safety.



Inter-Departmental Initiatives

- E&C, Health and Safety and Operations Joint Initiatives include:
 - » Training in safety such as electrical safety, OSHA 10 and 30 hour classes
 - » Field operations with FDNY
 - » Support in construction/maintenance activities and safety coordination activities
 - » Health and Safety is a member of the E&C safety committee responsible for E&C safety policy



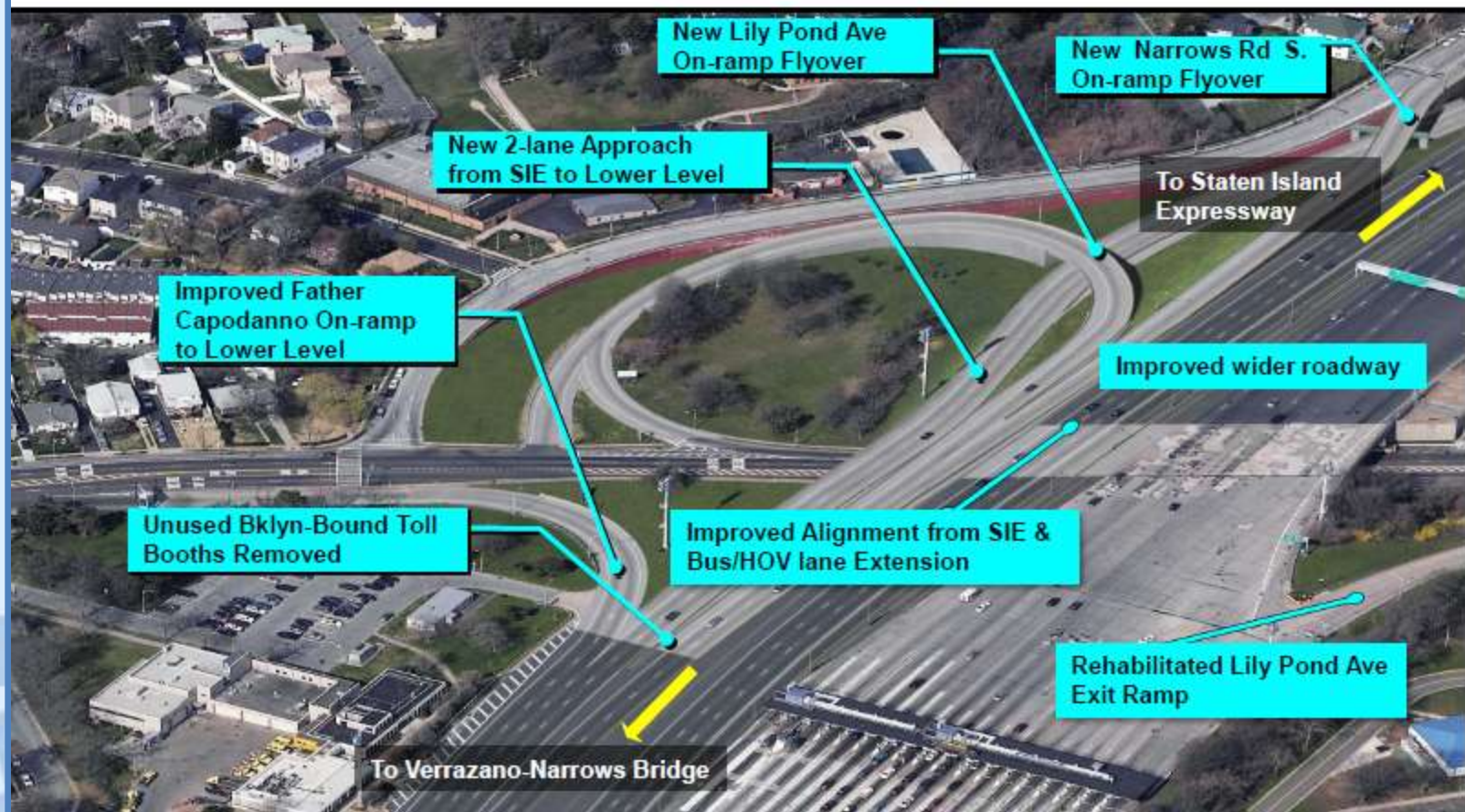
Regional Improvements

- E&C has a comprehensive approach to interagency coordination to coordinate facility work with nearby regional work to ensure traffic safety
- E&C identifies off property improvements needed to facilitate/mitigate traffic safety impact
 - » Improve regional traffic flow
 - » Eliminate accident prone locations that affect the traffic at facilities



Regional Improvements

VNB Toll Plaza Improvement Project: Brooklyn-bound Plaza; Ramps and SIE Approach



E&C Safety Program Current Status and Next Steps

- Actions underway to enhance the safety program:
 - » Increased emphasis on Safety Training for facility engineering staffs
 - » Enhancements to safety and fire protection specifications to reinforce safety requirements and to increase accountability for safety and fire protection.
 - » Development of leading and lagging metrics to measure safety performance (See Appendices “B” & “C”)



Appendices

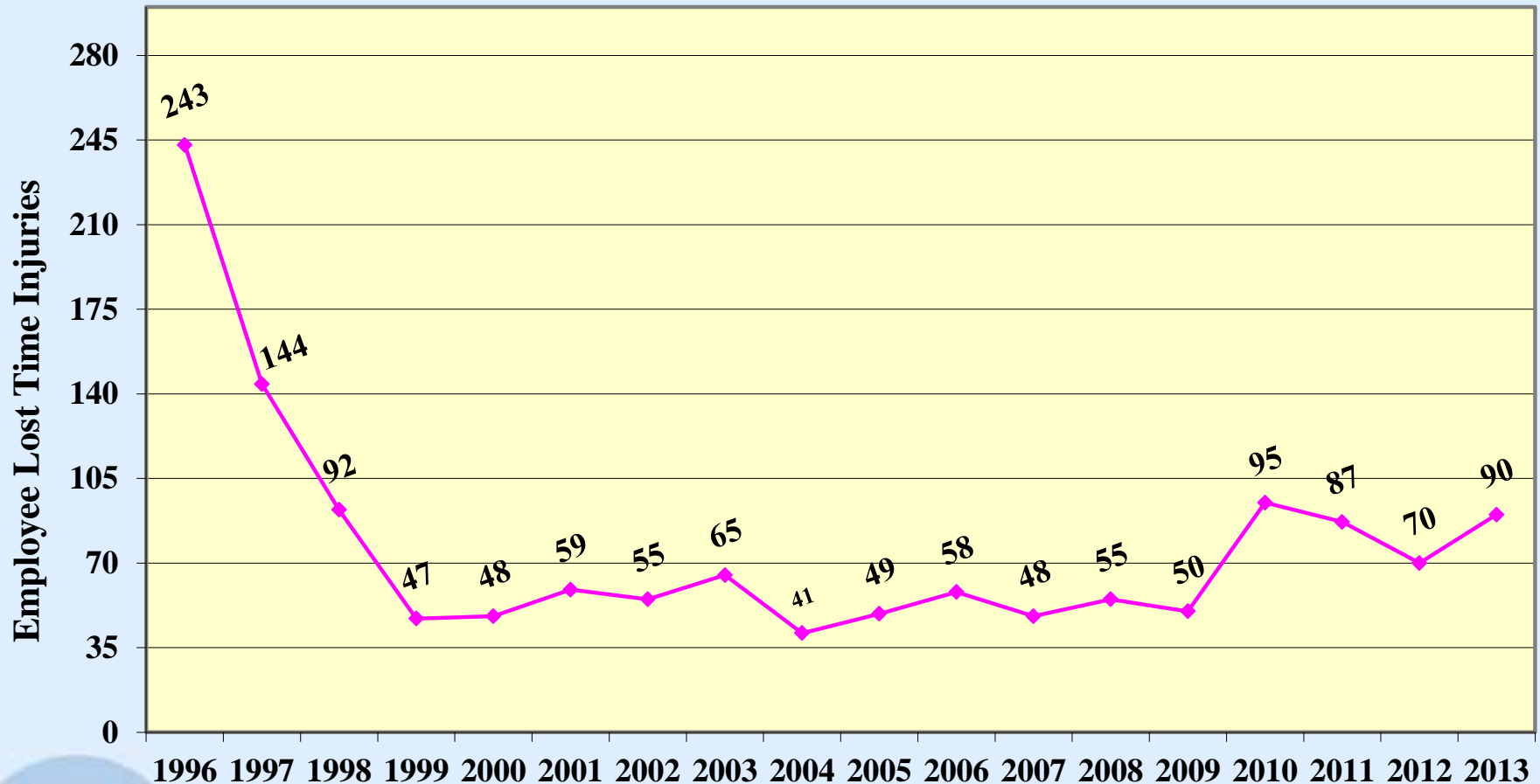
Appendix “A” - Employee Lost Time Injuries

Appendix “B” - Contractor Lost Time Injuries

Appendix “C” - Customer Collisions



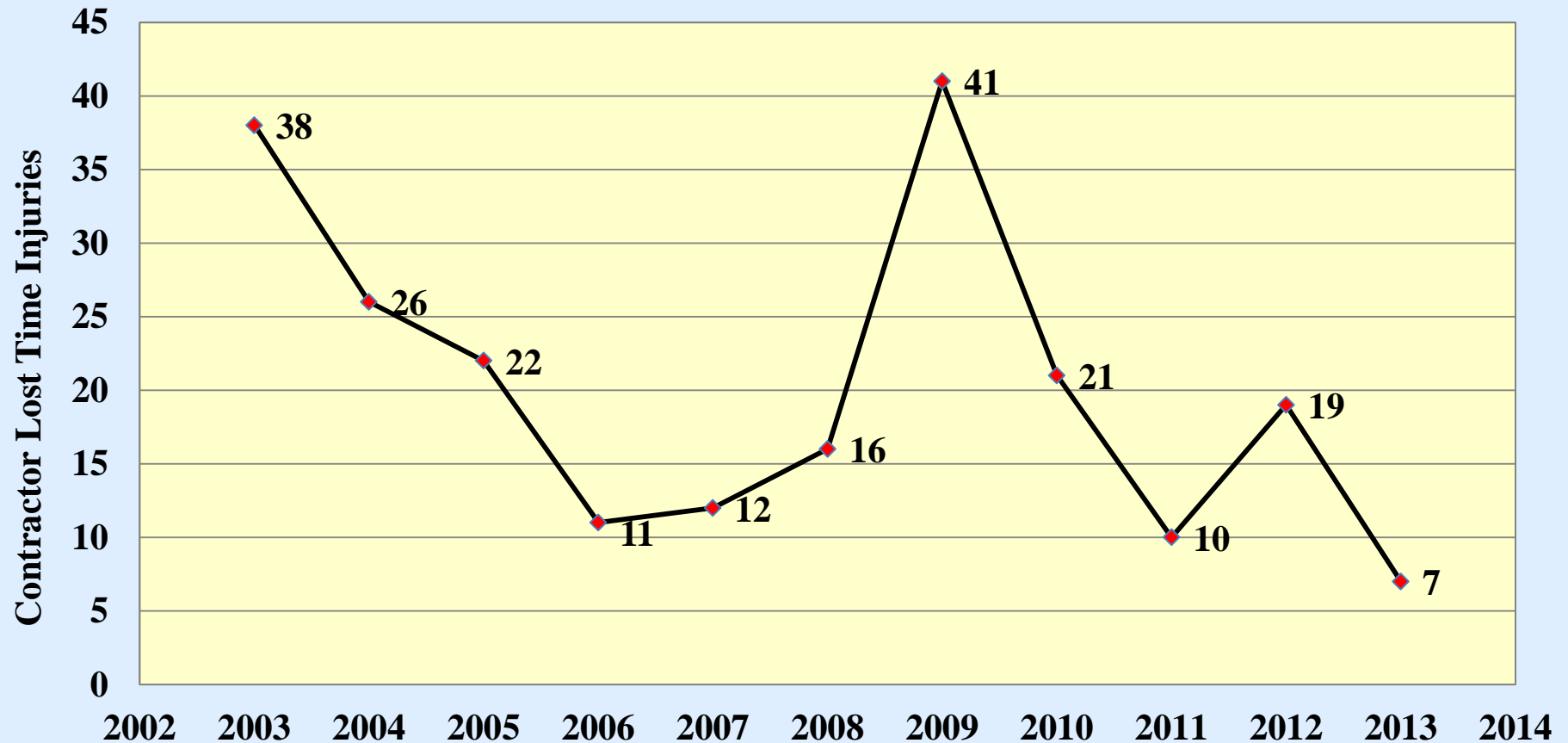
Employee Lost Time Injuries



Appendix "A"

Bridges & Tunnels

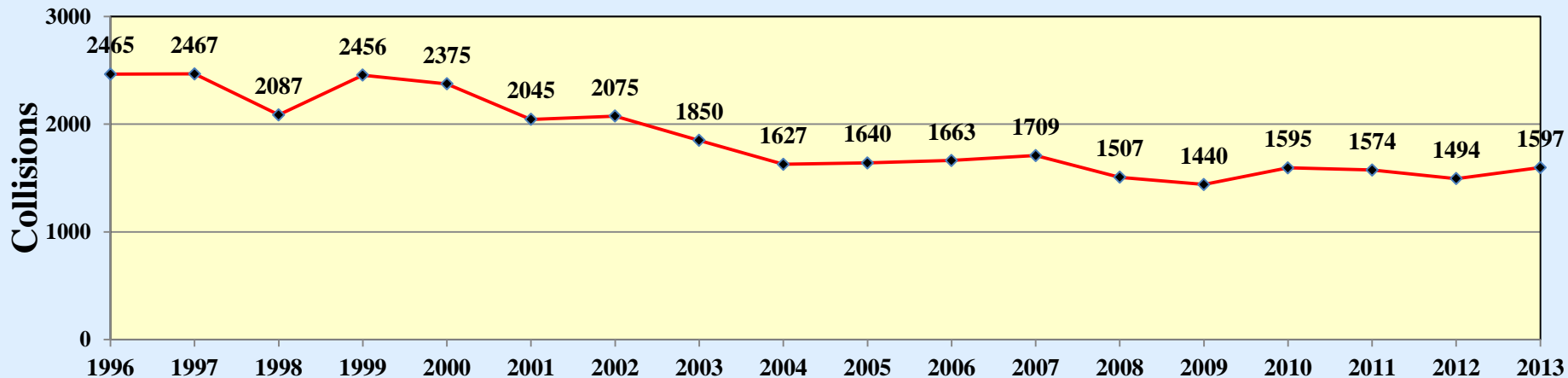
Contractor Lost Time Injuries



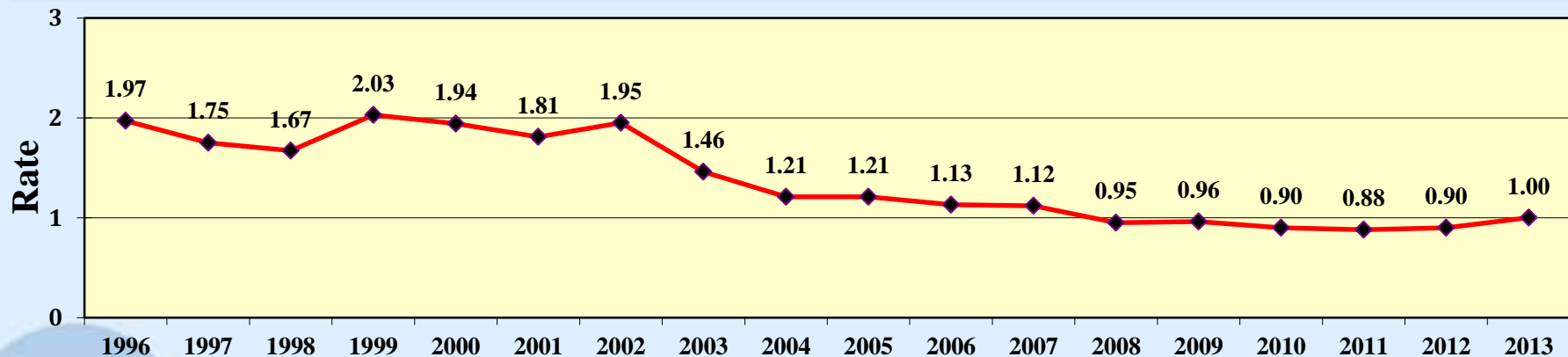
Appendix "B"

Bridges & Tunnels

Total Customer Collisions



Collision Frequency Rate



Frequency Rate of Customer Incidents With Injuries Per 1,000,000 Vehicles

Appendix "C"