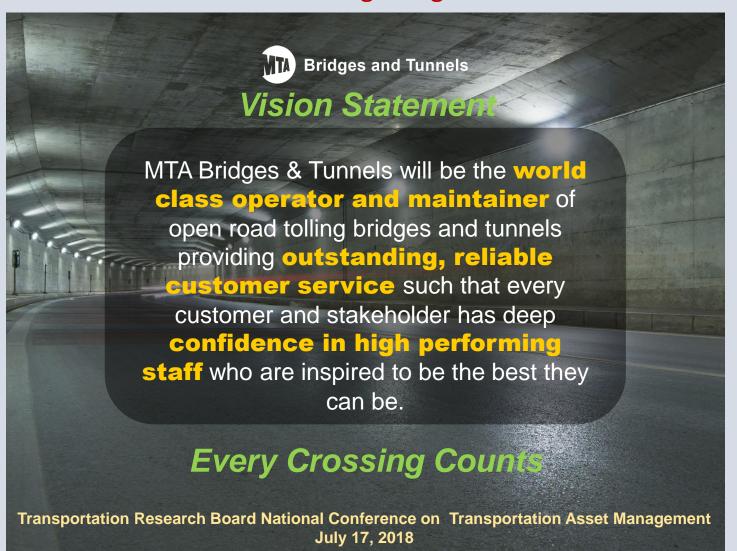


Communicating Asset Management

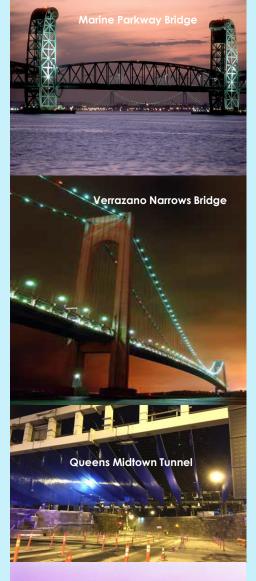


Using Enterprise Asset Management Principles to
Shift an Organization's Operational Focus to a Customer-Centric Service Model for
Better Strategic Alignment

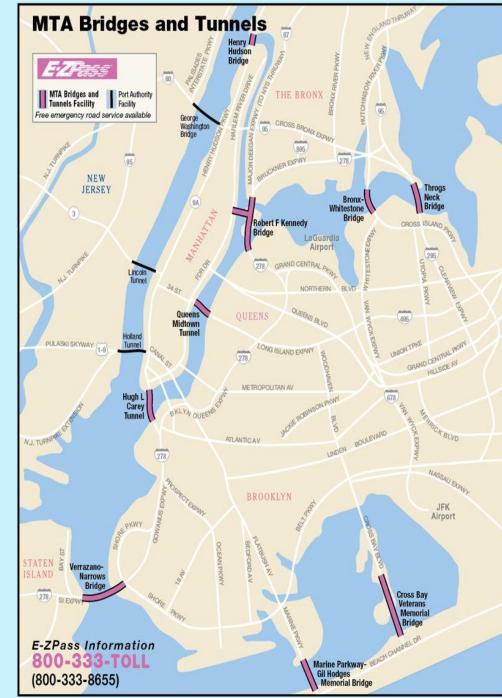


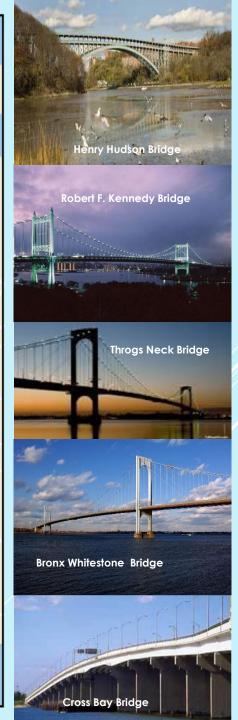
Wayne Francisco
Executive Advisor
GHD Advisory

Mildred Chua
Vice President & Chief Financial Officer
NY MTA Bridges & Tunnels



- Operates seven bridges and two tunnels in New York City
- ► Largest toll collector in the US - \$1.9 Billion in 2017
- ▶ 310 Million paid vehicles in 2017
- ▶ Dual mission:
 - Provide critical regional transportation links
 - Subsidize transit operations
- In 2017, provided over \$1.2 Billion to support MTA mass transit
- ► \$620 Million 2018 Operating Budget
- ▶ \$2.9 Billion Capital Program for 2015-2019
- Enterprise Asset
 Management Program
 since 2013











Open Road Tolling (ORT) Video

ORT Drives Change with Smart Infrastructure

BAT EAN Enterprise Asset Management "Every Crossing Counts"

THEN

Revenue Collection Reliability

Operating Costs

Data/Information Challenges

Aging Toll System Plaza Infrastructure

Centralized Operations



The Journey Continues: Centralized Operations Model

- New Operational Model focused on Customer Service
- Making our infrastructure smart using Enterprise Asset Management (EAM)
 Principles
 - Improve resiliency and sustainability
 - Improved Data Quality
 - Performance-based Reporting
 - Strategic Decision Making
 - Alignment of business functions to corporate goals and vision
- We are LEANING IN!



Leaning in to Better Performance







How Do WE make Customers Central to Everything we do?





Customer Service	Management and Reporting	Management and Assurance	Program Management	Life Cycle Asset Management	Technology and Innovation	Business Support Functions
Service production Operations Department – Analysis	Reporting Requirements • State of Good Repair (SGR) Ratings	Service-Revenue business risk	Safety management program Top-Line Safety Performance Indicators Safety and Health Policy Safety and Health Management System Collision Risk Management Program	Asset production • Asset Handover	Operational systems Open Road Tolling (ORT)	People management program
Revenue Production • BTO Staffing Analysis	Performance framework • Performance Management Framework	Risk-Assurance Framework Risk Register Quality Assurance Function	Integrated program management framework • Enterprise Asset Management System (EAMS) • Quality Management System (QMS) • Environmental Management System (EMS)	Asset management program framework • Enterprise Asset Management Policy	Enterprise systems architecture	Integrated business support functions framework
Revenue-Cost Tracking	Customer service parameters Customer Service Performance Framework	Risk management program Risk Management Framework	Security management program Security Risk Management System (SRMS) Security Department - Analysis	Asset management financial planning	Asset systems architecture Infor EAM Asset Register	Integrated business objectives
Agency key performance indicators Top-Line Customer Service Top-Line Revenue Production Agency key performance indicators Customer Service Revenue Production Safety		Audit and assurance program	Extend program approach to emerging business functions • Management System Template • Management System Roles and Responsibilities	Asset class management strategies • Asset Class Management Strategy (ACMS) Template • Ten plus (10+) ACMS	Data management strategies • Asset Breakdown Structure (ABS)	Internal service level agreements



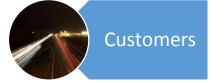
Business Model Report (June, 2018)



Performance Management Framework

"Every Crossing Counts"

Objectives







Facilities









Departments







Performance Management Framework

"Every Crossing Counts" - Making every crossing count for our customers!









Facilities





Our infrastructure enables the provision of each unit of service

Departments



Our people provide stewardship of our infrastructure and strive to provide service excellence

GHD Advisory



Understanding the Customer Experience

 Measuring performance from the perspective of the customer – separated into 4 distinct phases.

Customer Service Phase	Description
Long Before a Crossing	Non-travel periods Trip planning information is readily available Customer awareness of significant changes in roadway conditions – e.g. roadworks
Soon Before a Crossing	Getting ready to travel Traveling and approaching our facilities Information that enables customers to re-route based upon current conditions
During the Crossing	Using our facilities Navigating through our facilities Measuring time to cross, average speed, roadway capacity availability, etc.
After the Crossing	Transaction processed No tag transactions and payment options Surveying customers on their service experience



Customer Service	Customer Service Performance	Customer expectations for a safe crossing B&T commitment to safe crossings	Col	lision R	Risk N	/lanage	ment	Program
Performance Management and Reporting	Performance Management and Reporting Framework	 Safety as a top line business driver Collision statistics a key performance measure for external stakeholders 	Top Line Safety Performance Measures	Tracking the quantum of collisions across the agency Tracking collision risk reduction across the agency				
Risk Management and Assurance	Risk Assessment and Evaluation Process	Risk guide, process and tools Risk register	Business Risk Management Program	 Collisions are an identified B&T business risk Management of Significant and High risks 	Assurance Program	Ultimately, business risk reporting provides assurance of B&T efforts to reduce the risk of collisions	 	
Integrated Program Management	Safety Management Program	Collision risk reduction is an aspect of 'safe infrastructure systems' approach	Collision Risk Management Program	Risk-based analytical approach Activities to support the program – e.g. Technical Working Groups for ACROBAT meetings				
Life Cycle Asset Management	Asset Management Plans	Collision risk profile Risk reduction plan Funding requirements Risk reduction performance	Capital Program Management	Delivering capital projects for collision risk reduction	Asset Class Management Strategies	Inspection and maintenance requirements Rehabilitation and renewal requirements		
Operational Technology and Innovation	Integrated Technology Solutions	GIS mapping of 'hotspots' ITS – information for customers TRANSCOM – sharing data on congestion issues, ongoing projects, etc.	Operational Innovation	CARS as a visualization interface for GIS data, collision data, congestion notices, VMS feeds, TRANSCOM feeds, etc.				
Business Support Functions	Liability Management	Insurance as a risk treatment	Budget Development Process	Capital approvals Maintenance approvals	Public Relations	Website information on collision 'hotspots' at each facility	 	GHD Advisory



We Are Transforming our Culture

- A Back to Basics Assessment
- Strong Leadership at the top
 - Demonstrable Commitment by senior team to communicate, participate and support transformation efforts
- Engagement across all departments
 - Develop Desired Operating State
 - Establish Performance Management Framework
- Benchmarking with Peer Agencies
 - Use EAM principles to embed best practices



Thank You!





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