

# Public Agency Performance Management for Improved Service Delivery in the Digital Age

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# Presentation Overview

- Background
- “Perception Gap”
- DDOT Strategies to Deal with Perception Gap
- Results
- Conclusion
- Question & Answers

# Background

# DDOT Structure

- **State + Municipal DOT**
- **900 employees**
- **9 facilities**
- **80%+ Union**



# DDOT's Customers

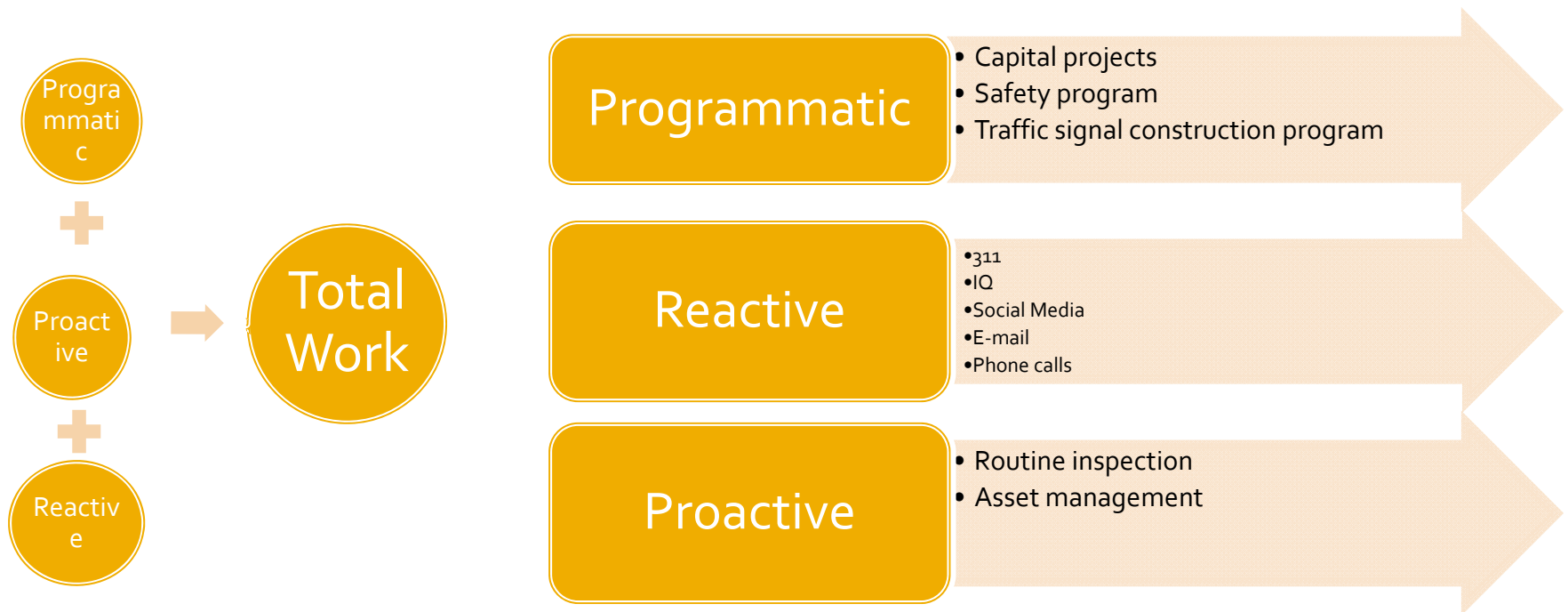
- 650,000 residents, 500,000 daily commuters, 125,000 daily visitors
- Highest median household income
- 2<sup>nd</sup> highest penetration of smart phones
- Multimodal and shared transportation - Capital Bikeshare, car share, Car2go
- Smartphone based interface with transportation system – pay by cell, See-Click-Fix, QR code based service request, uber,

# DC's Transportation Assets

- 1100 miles of roadway
- 241 bridges
- 1600 miles of sidewalk
- 453 miles of alley
- 144,00 trees
- 1600 traffic signals
- 68,000 streetlights
- 16,000 parking meters
- 150 CCTV cameras
- Highway advisory radio
- 271 miles of DDOT owned twisted pair communication backbone

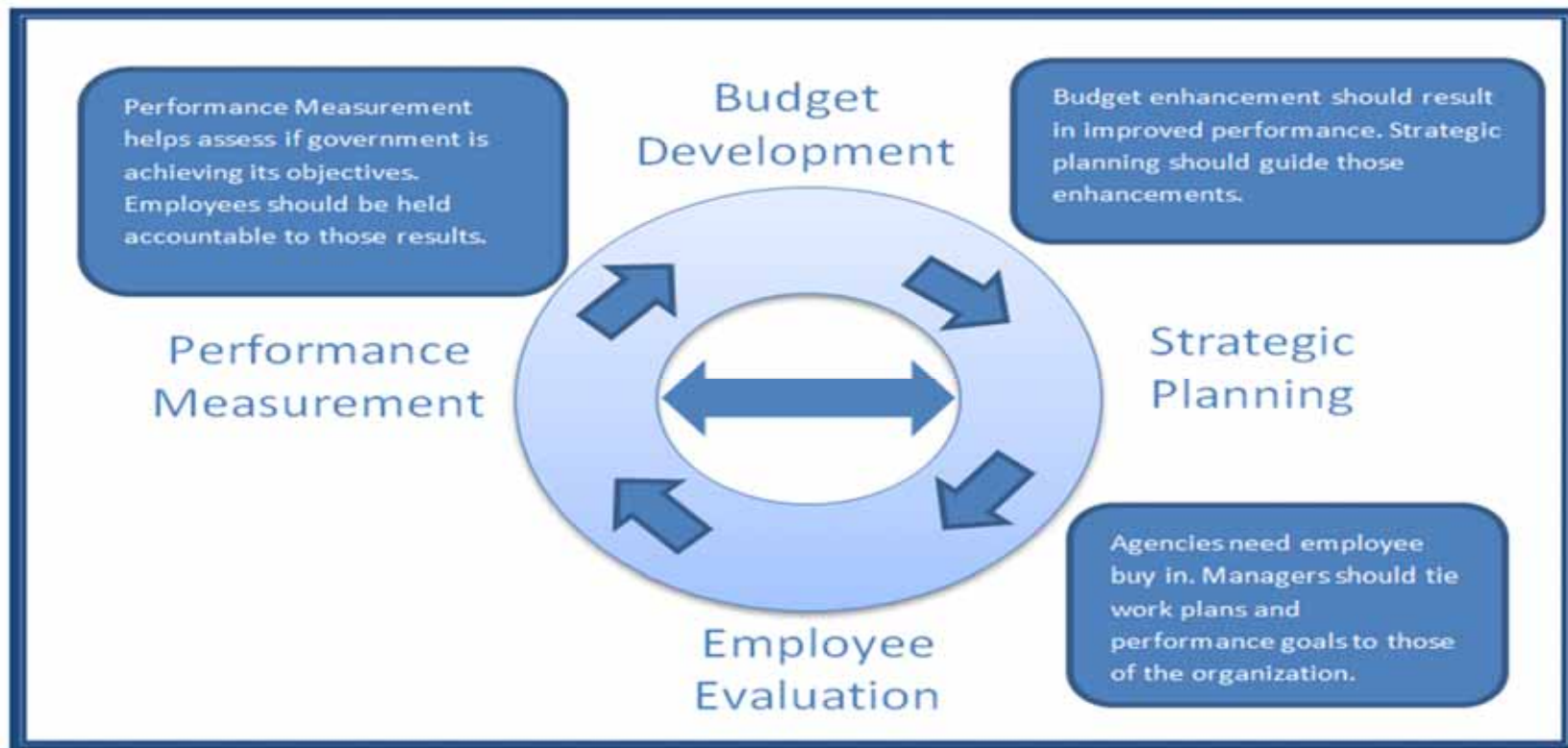
**DDOT's transportation assets is valued at \$45 B**

# Sources of Work at DDOT



Annual Budget of \$480M (excluding \$380M to Metro); \$150M Federal

# Linkages for Effective Performance Management



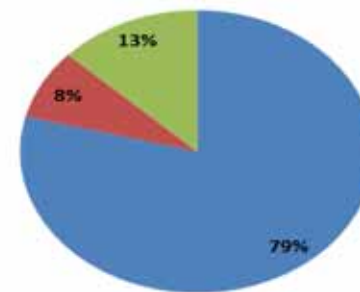
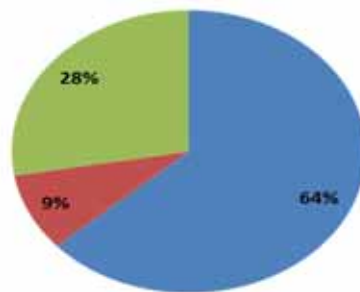
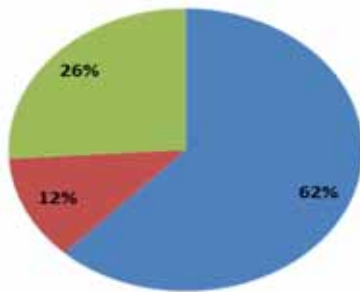


# “Perception Gap”

# Customer Satisfaction vs. Service Closure Rates

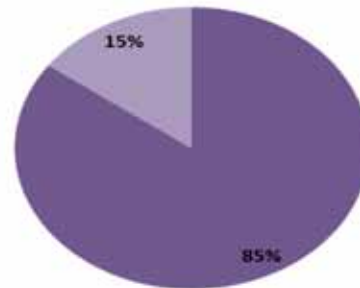
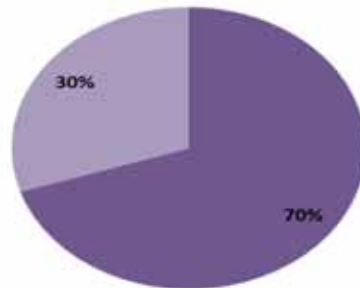
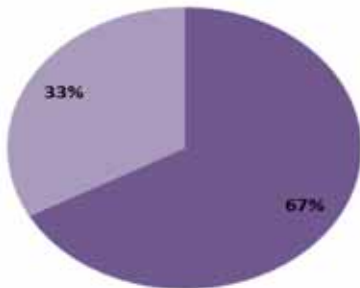
## Customer Satisfaction

- Highly Satisfied
- Satisfied
- Not Satisfied



## Service Request Closure Rate

- Closed
- Open

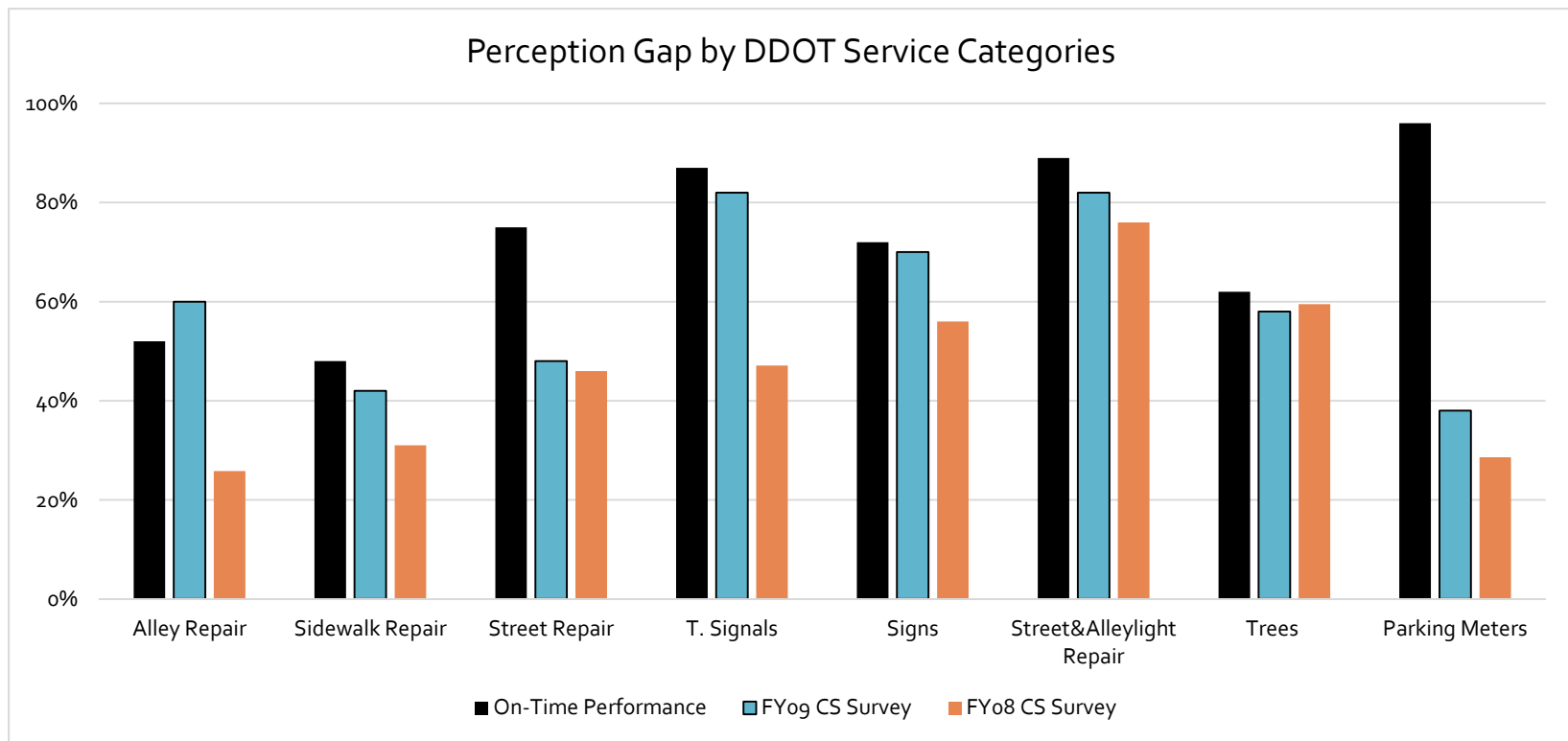


2007

2008

2009

# The Perception Gap



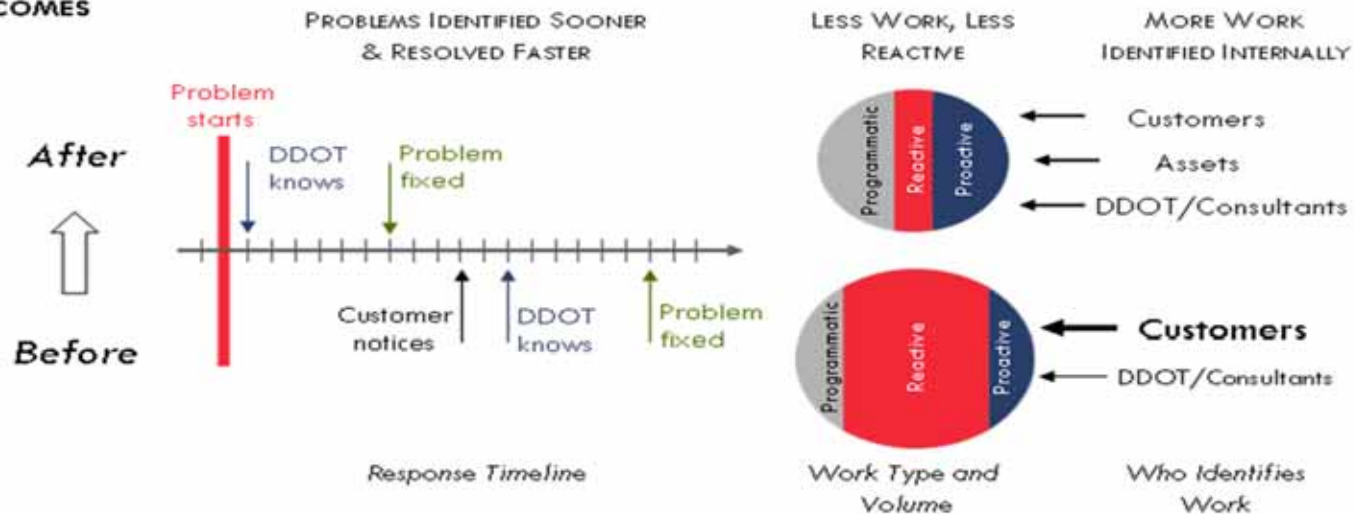
# Strategy

# DDOT's 3R Strategy – Reduce, Rebalance & Re-engineer

## STRATEGIES FOR CHANGE

<p>⇒ Culture Shift</p> <ul style="list-style-type: none"> <li>- Performance management agency-wide</li> <li>- Data-based decision making</li> </ul>	<p>TECHNOLOGY which enables...</p> <p>⇒ Better Communications</p> <ul style="list-style-type: none"> <li>- Social Media</li> <li>- Call Center</li> <li>- Transparency via web content</li> </ul>	<p>⇒ New Contracts</p> <ul style="list-style-type: none"> <li>- Performance-based</li> </ul> <p>⇒ Smarter Assets</p> <ul style="list-style-type: none"> <li>- Networked assets</li> <li>- Real-time asset inventory</li> </ul>
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## OUTCOMES



# Institutionalizing Performance Management

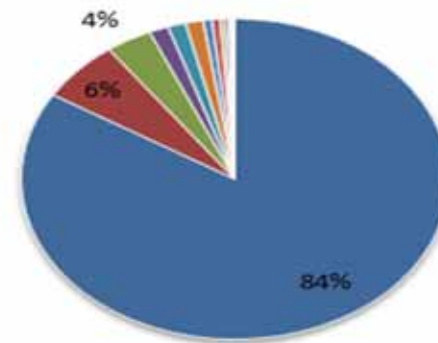


- Cascading goals
- All levels of organization support common goals, objectives, KPI
- Culture shock
  - Storming, norming, conforming, performing

# Data –based Decision Making

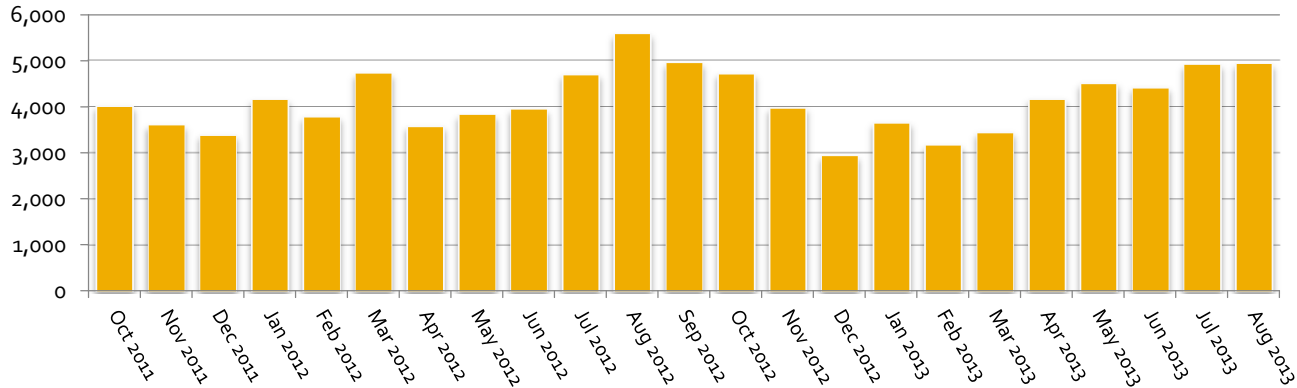
- Data-based decision making
  - Lean six sigma
  - Pareto analysis (80/20 rule)

% SRs By Category



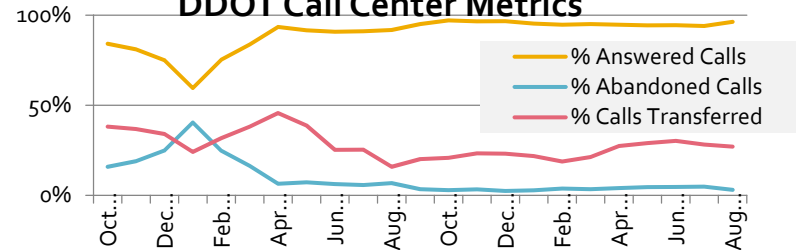
# Better Communication - DDOT Call Center

DDOT Call Center Monthly Call Volume



30% of the calls are transferred from 311  
Abandonment rate is 4%

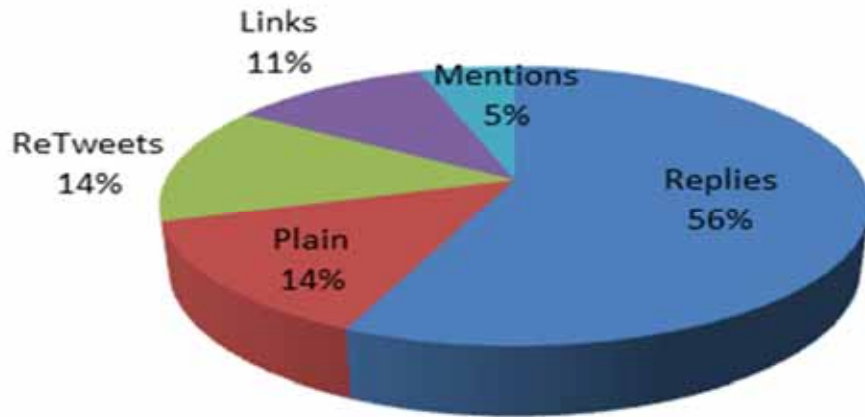
DDOT Call Center Metrics





# Better Communication - Social Media Presence

@DDOTDC Tweet Distribution



Potential Reach: ~ 3.3 million  
Outreach: 206 replies per 100 tweets  
Amplification: 124 re-tweets per 100 tweets

# Asset Based Strategies

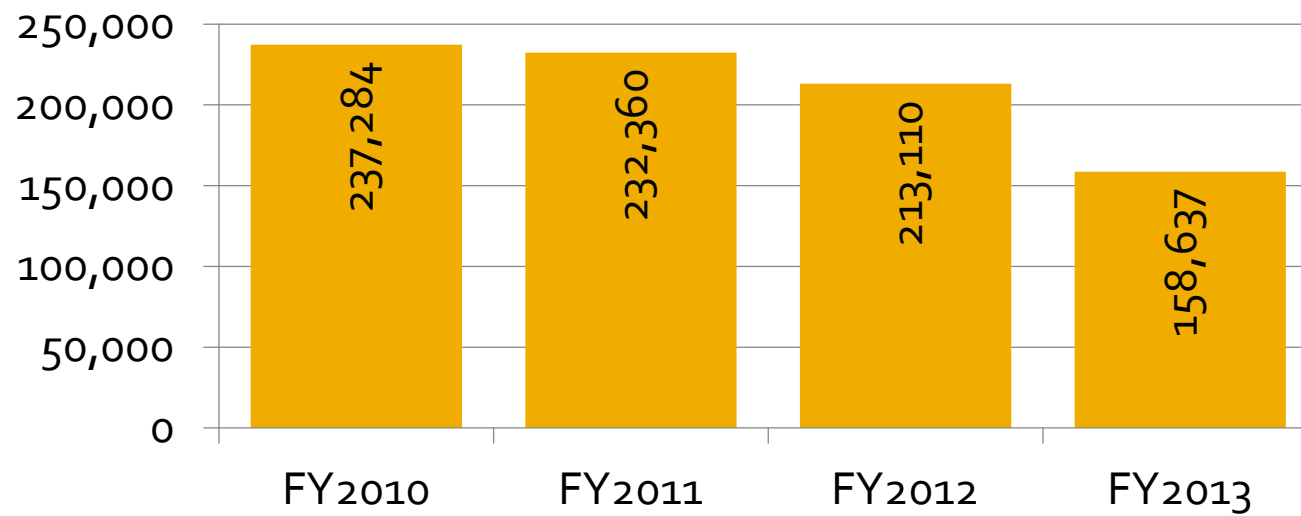
- Migration to smarter/networked assets
  - Better visibility into operational status
  - Proactive maintenance
  - Better uptime
- Real time asset inventory
  - Incorporate asset inventory into standard business process

# Performance Based Contracting

Streetlight	Parking Meter
<ul style="list-style-type: none"><li>• Percentage of streetlights functioning properly</li><li>• Percentage of non-functioning streetlights fixed within required timeframe. Repair timeframe is based on parameters such as type of fault, location, etc.</li><li>• Percentage of light poles that are vertical</li><li>• Percentage leaning light poles repaired within timeframe</li></ul>	<ul style="list-style-type: none"><li>• Mechanical Meter Operability Rate</li><li>• Connected Meter Operability Rate</li><li>• Mean Time to Repair Mechanical</li><li>• Mean Time to Repair Connected</li><li>• Mean Time to Repair Multi-space Meter</li><li>• Meters Operable at Start of Business</li></ul>

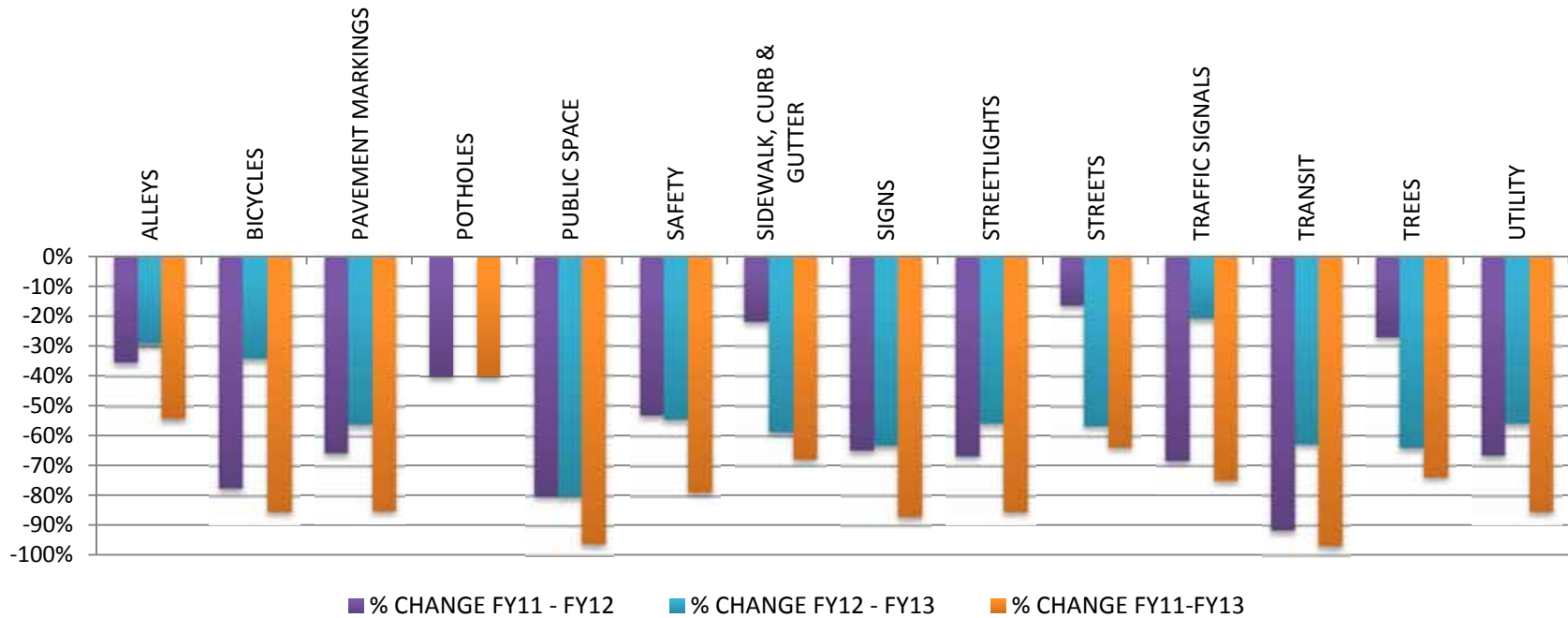
# Results

# Annual Service Request Trends



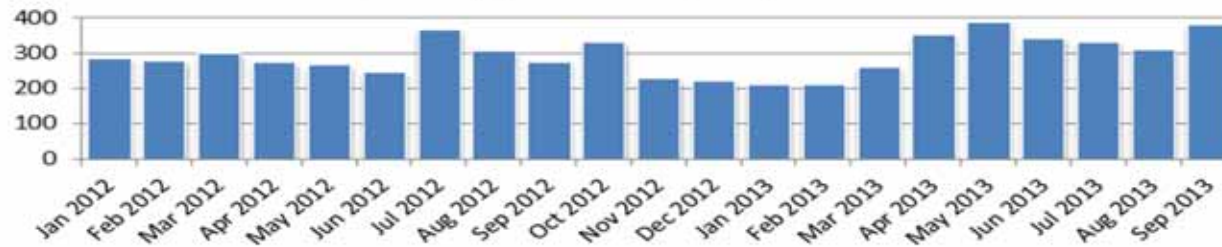
# Reduction in Service Delivery Times

## Reduction in Service Delivery Times

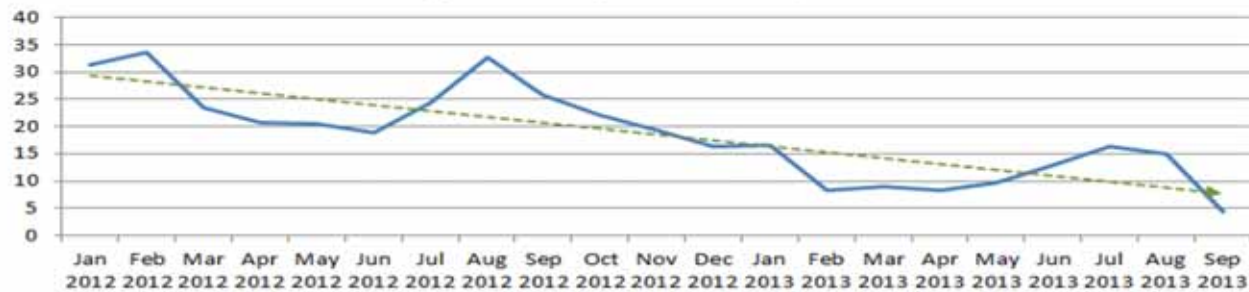


# Timeliness of Written Correspondence

DDOT IQs / Written Correspondence

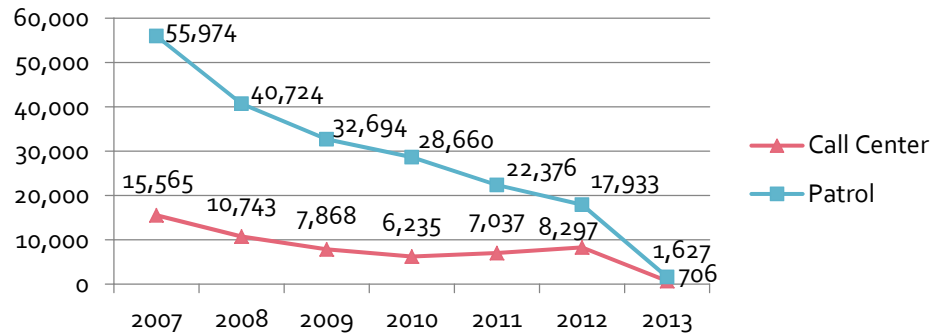


Avg Num Days For IQ Response

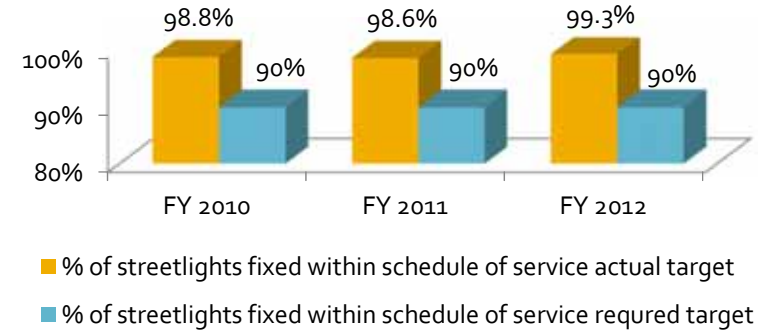


# Increase in Proactive Work

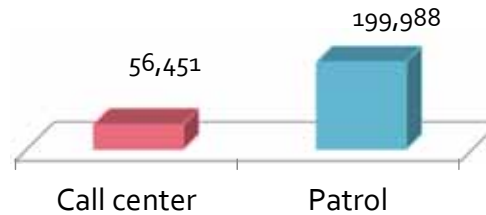
Total work orders by year by request source



Streetlight repair target attainment

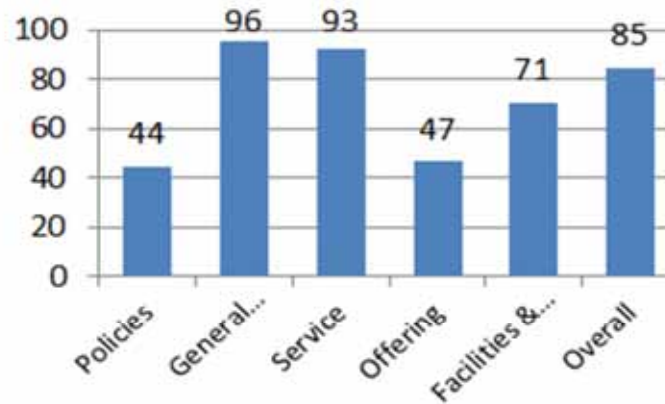
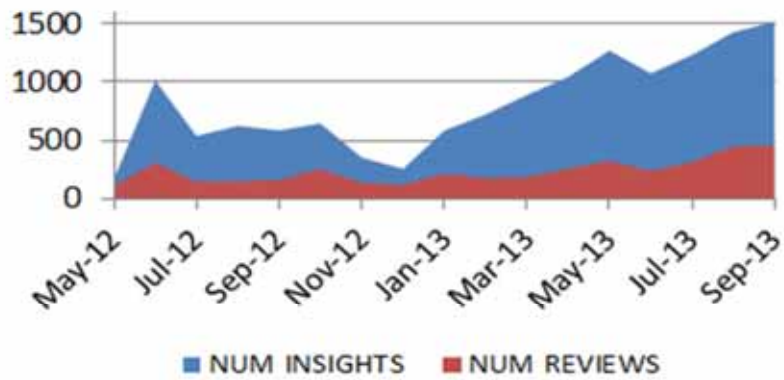


Total Work Order Calls, 2007-2013





# Grade DC



	SEP 2013	AUG 2013	JUL 2013	JUN 2013	MAY 2013	APR 2013	MAR 2013	FEB 2013	JAN 2013	DEC 2012	NOV 2012	OCT 2012	SEP 2012
DDOT	A	A	A	A	A	A	A+	A	A	B+	B+	B+	B+

# Conclusion

- Customer expectation not in line with traditional schedule of service
- Agencies forced to “do more” with “same” level of resources
- 3R Strategy – Reduce, Rebalance & Re-engineer has worked well for DDOT
- Executive buy-in is the most critical success factor; uniform application & consistency 2<sup>nd</sup>

# Questions?

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Dey, S.S., Thommana, J and S. Dock. "***Agency Performance Management for Improved Service Delivery in the Digital Age***", ASCE Journal of Management in Engineering, July 2014.