Technical Conference #2

Distribution Custom Rate Application 2015-2019

April 23, 2014

Technical Conference Schedule

Panel 2 April 23

- the distribution system plan, including planned capital investments and asset management planning; discussion of operations, maintenance and administration expenditures, their key drivers, and linkages to RRFE outcomes, such as improvement in productivity and cost performance; the determination of customer preferences, and their incorporation into the distribution system plan.

2015-2019 Custom Distribution Rate Application

Distribution System Plan Overview

Paul Brown

Director, Distribution Asset Management

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Distribution System Plan

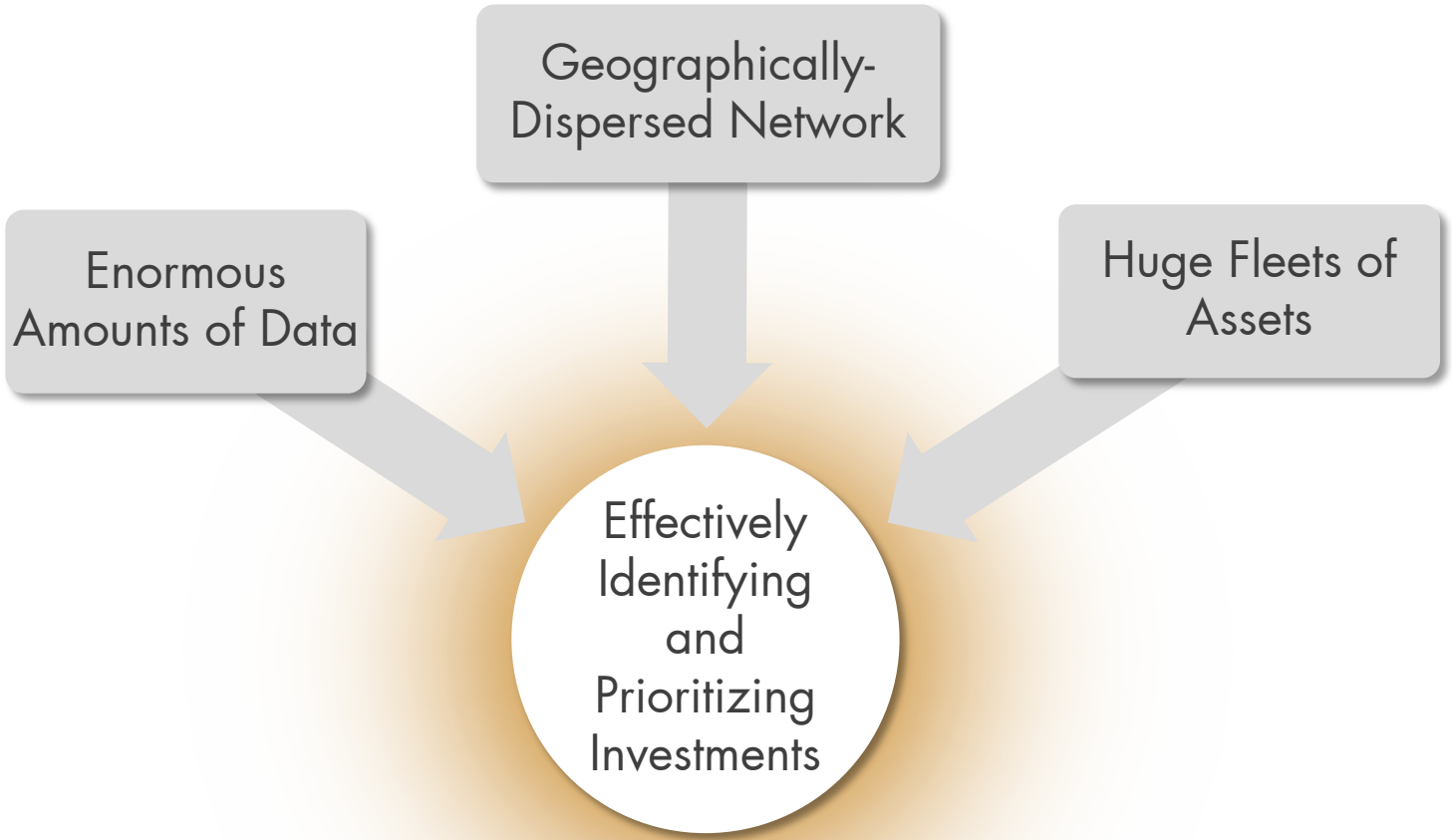
Includes:

- Bottom up review of asset needs, customer needs/feedback, while incorporating corporate objectives
- Prioritization of investments using a risk based approach
- Development of consolidated budgets
- Board of Directors approval of business plan/budget
- Board of Directors approval of rate filing
- Application filed with OEB

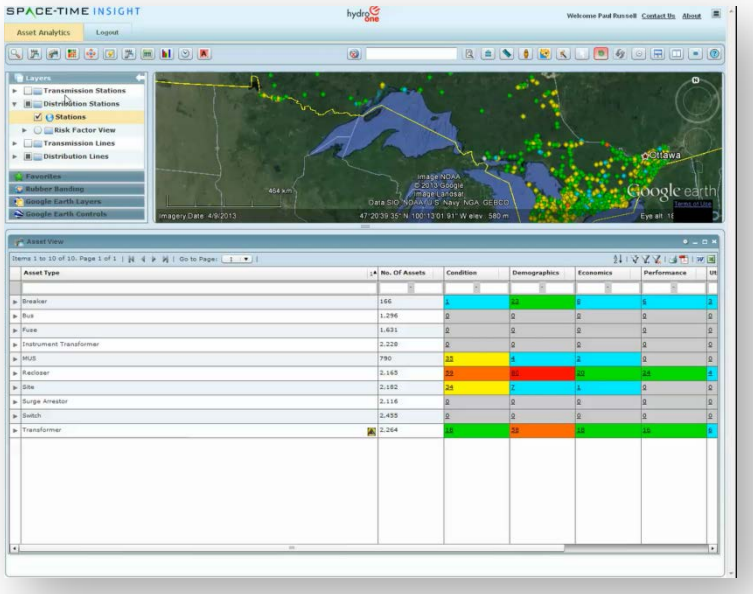
Managing Distribution Assets

- System investment strategies to ensure safe, reliable and efficient power delivery and to create value for customers
- Develop projects and programs to:
  - Address customer and system growth needs
  - Renew assets at their end of life to ensure public/worker safety and service continuity
  - Maintain Q4 reliability/ Improve efficiency
  - Modernize the distribution system to add customer value
  - Effectively respond to unplanned system events

Business Challenges & Drivers



Asset Analytics in Action



- Play video

OM&A Expenditures Summary

$Millions (Forecast)	Forecast	Bridge	Test Years				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Sustaining	318	320	329	374	380	363	358
Development	12	18	15	18	17	17	18
Operations	23	30	30	34	35	42	41
Customer Service	137	134	118	116	115	113	115
Corporate Common Costs & Other	103	74	67	62	62	62	62
Property Taxes & Rights Payments	4	5	5	5	5	5	5
TOTAL	**598**	**581**	**564**	**610**	**614**	**604**	**600**

Sources of Change to OM&A Cost

Main Drivers for Year-over-Year Changes

- Aging assets and systemic problems
  - Large scale testing of transformers for PCB contamination
  - Increasing focus on defect corrections

- Long-term cost optimization and maintaining Q4 reliability
  - Addressing vegetation maintenance backlogs and maintaining an eight year clearing cycle

Vegetation Management

- Trees were the largest contributor (at 44%) to Hydro One Corporate SAIDI in the 2007-12 period.
- Shorter vegetation management cycle durations has been demonstrated to lower SAIDI.

Capital Expenditures Summary

$Millions (Forecast)	Forecast	Bridge	Test Years				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Sustaining	303	286	308	335	360	380	383
Development	193	200	223	206	186	183	199
Operations	9	5	9	19	7	7	4
Customer Service	16	23	23	10	4	0	0
Corporate Common Costs & Other	128	110	85	85	83	84	82
TOTAL	**649**	**624**	**649**	**655**	**639**	**655**	**669**

Sources of Change to Capital Cost

Main Drivers for Year-over-Year Changes

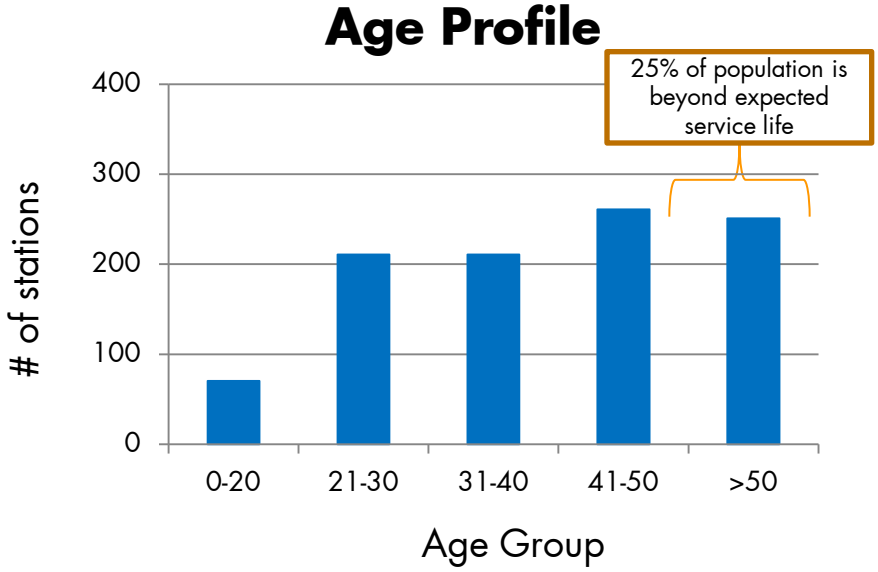
- Aging assets and systemic problems
  - Increasing the replacement rate of wood poles
  - Refurbishing aging distribution stations
  - Replacing PCB contaminated equipment

- Long-term cost optimization and maintaining Q4 reliability with some targeted local area reliability improvements
  - Increasing number of line refurbishment projects

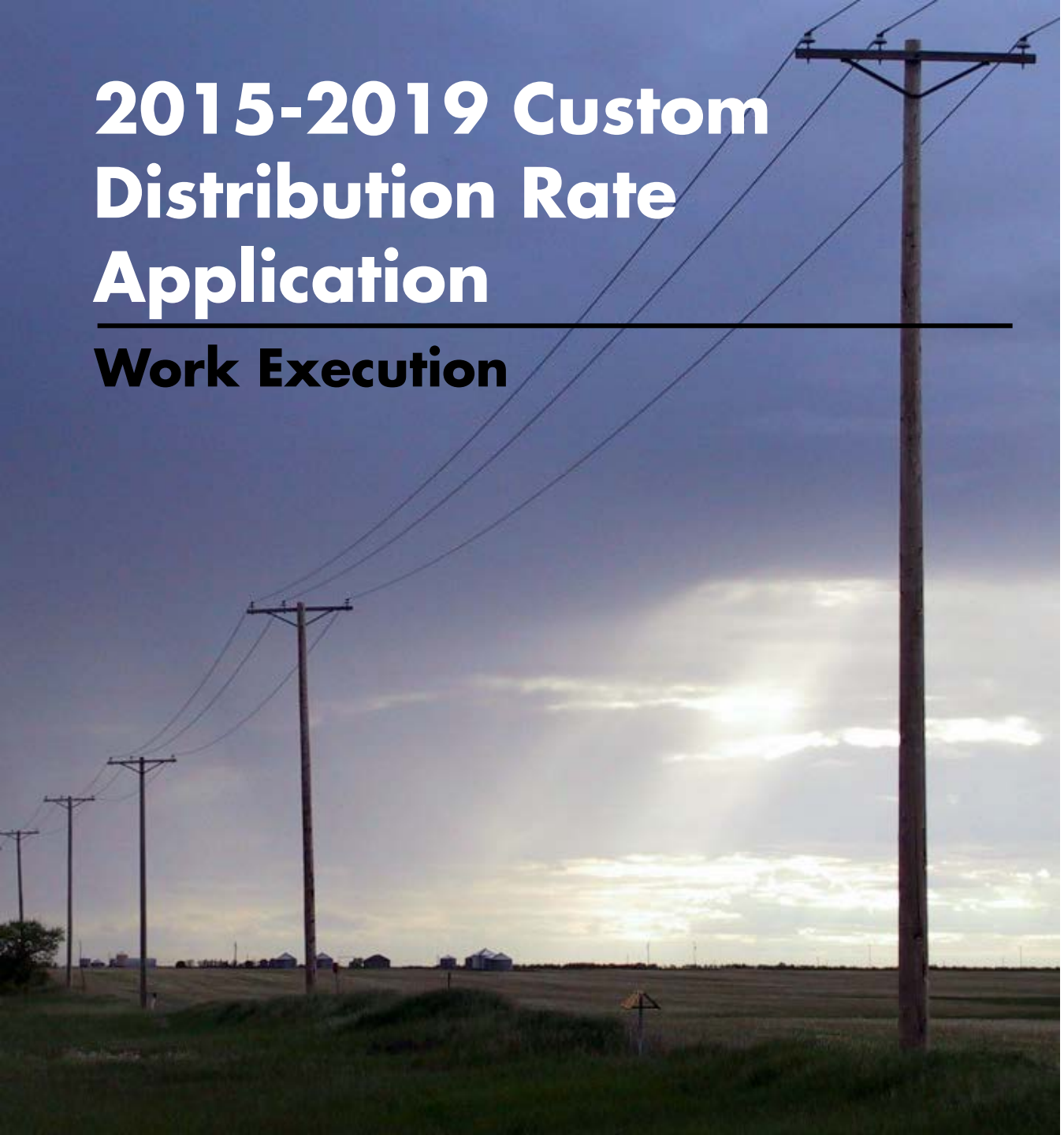
Distribution Wood Poles

- Total Fleet of Distribution Wood Poles is approximately 1.6 million
- Expected Service Life of Distribution Wood Pole is 62 years
- Approximately 20,000 poles are installed each year (new installations & end of life replacement)
- Hydro One is proposing increased funding to address premature decay issues and mitigate risk of the approaching bow wave of poles reaching expected service life over the period.

Distribution Stations



- 1,004 Distribution and Regulating Station Facilities
- Expected Service Life of Distribution and Regulating Stations is 50 years
- Historical Replacement Rate has been approx. 4 stations/year
- Hydro One proposing increased funding to manage demographic pressures and mitigate risk of the approaching bow wave of stations reaching expected service life over the period.



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Work Execution

Marc Clement

Distribution Superintendent
Provincial Lines

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Work Execution Improvements Include:

- Increased Work Bundling and Outage Optimization
- Work Program Releases
- Work Prioritization
- Strategic Sourcing
- Logistics Support

Work Execution - Examples

- **Vegetation Management (Ex C1, Tab 2, Sch 2, pg 31)**
- Efficiency gained through increased use of herbicides and mechanical brush control; Flexible workforce through use of hiring hall and apprentices
- **Trouble Calls (Ex C1, Tab 2, Sch 2, pg 14)**
- Reduce the number of unnecessary crew dispatches by integrating smart meter data with the Outage Management System to confirm outage locations
- **Storm Response**
- GIS mapping of entire Distribution System, allowing for efficient staff dispatch, reducing maintenance costs
- Smart Meter deployment for power restoration and nested outages

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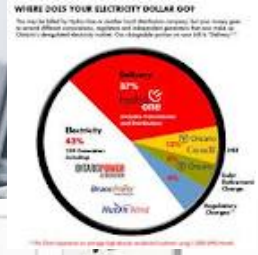
Voice of the Customer (A-5-1)
&
Customer Service OM&A (C1-2-5)



David Adams

Director, Customer Care

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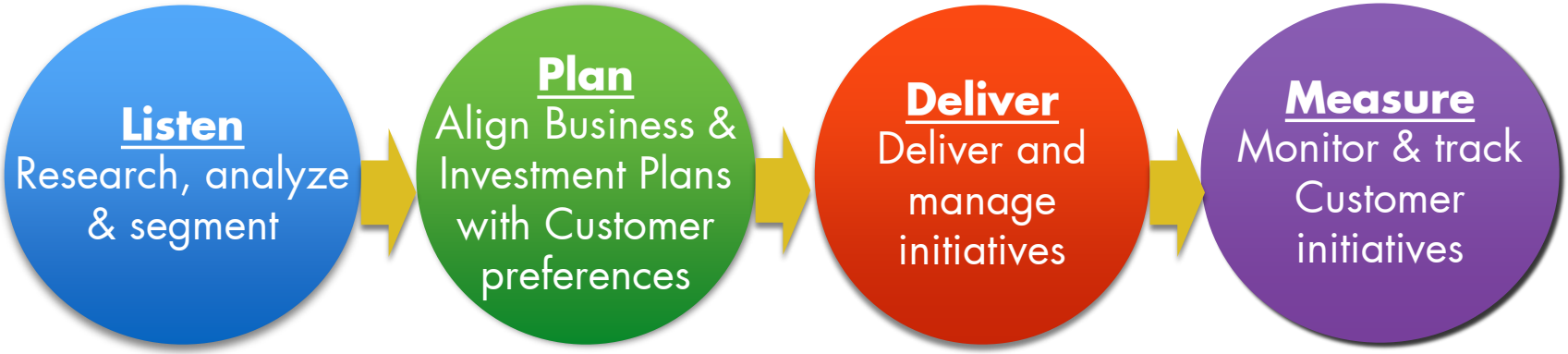
Voice of the Customer



Cost, Reliability, Communication

- Residential and Small Business Impressions
- Business to Business Impressions
- Transactional Satisfaction Surveys
- Brand Research
- Event Surveys

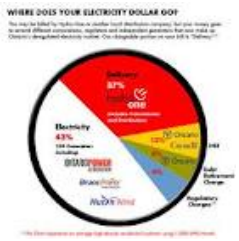
Customers whose RATING were 3 OR LESS:

What issues or concerns were you thinking of when you rated Hydro One?

Residential & Small Business	**2009**	**2010**	**2011**	**2012**	**2013**
Rates/price	43%	59%	61%	61%	56%
Reliability/outage handling	24%	16%	15%	16%	25%
Operations/meters/reads/forestry	19%	18%	16%	12%	17%
Market structure/Debt charge/GST	19%	21%	22%	20%	15%
Billing/payment	19%	17%	17%	15%	13%
Customer service/concern/empathy	18%	11%	12%	18%	11%

Note: may add to more than 100% due to multiple mentions

Voice of the Customer

Driver	Plan
Maintain or Reduce Bill 	• CIS & Outsourcing Benefits • Common Corporate Cost reductions • Regular Headcount Reduction • Persona based services marketing & CDM education
Reliability, Power Quality & Outage Handling 	• Smart Grid investments • Vegetation Management & Pole replacement • ORMS replacement • Targeted investments
Communication & Staying in Touch 	• My Account proactive notifications & Alerts • Mobile My Account • Forestry consultation • Electricity Discovery Centre

Customer Service OM&A

$Millions (Forecast)	Forecast	Bridge	Test Years				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Customer Service	137	134	118	116	115	113	115

- Cost per Customer declines from $93 in 2012 to $86 in 2019 (- 7%)
- 60% of costs are set by competitive external RFP

Hydro One Customer Service OM&A Costs include: Customer Services (Billing, Call Centre, Collections & Settlements); Distributed Generation, Smart Grid Pilot; and Conservation & Demand Management

- Reduced Customer Service Operations spend
  - CIS Benefits and Outsource Contract retendering
  - Smart Meter maturity & fewer manual reads
- Increased Customer Experience spend
  - Address the requirements of the Renewed Regulatory Framework
  - Shape our vision for ideal customer experience

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Common Corporate Costs

Ryan Lee

Director, Management Accounting

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What are Corporate Common Costs?

- Hydro One Corporate Common Costs:

OM&A

- Corporate Common Functions & Services
  (HR, Finance, Law, Real Estate & Facilities, etc.)
- Asset Management
- Information Technology
- Cost of Sales

Capital

- Transport, Work & Service Equipment
- Real Estate
- Information Technology

Corporate Common Costs

$Millions (Forecast)	Forecast 2013	Bridge 2014	Test Years 2015	2016	2017	2018	2019
Total Tx & Dx OM&A Corporate Common Costs	**139**	**144**	**137**	**134**	**136**	**126**	**130**
Distribution Allocation	103	74	67	62	62	62	62
% of total Dx OM&A	17.2%	12.7%	11.8%	10.2%	10.2%	10.3%	10.4%
Total Tx & Dx Capital Corporate Common Costs	**193**	**196**	**155**	**153**	**149**	**152**	**147**
Distribution Allocation	128	110	85	85	83	84	82
% of total Dx Capital	19.7%	17.6%	13.2%	12.9%	13.0%	12.9%	12.3%

Cost Analysis

$Millions (Forecast)	Forecast	Bridge	Test Years				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Regular Staff	5,482	5,400	5,308	5,240	5,170	5,089	5,000
Total Staff	8,205	8,223	8,218	8,202	8,184	8,169	8,162
Customers	1,267,308	1,277,895	1,289,499	1,301,910	1,314,209	1,326,167	1,337,709

(Ref: Staff # Exhibit C1-3-2, Customer #Exhibit A-16-2)

Dx Work Program $ per							
Customer	984	944	941	972	954	949	949

(Ref: Work Program $ Exhibit C1-2-1, D1-2-1)

Dx Common Corporate Costs $ per							
Regular Staff	18,752	13,667	12,566	11,927	12,070	12,262	12,460
Total Staff	12,529	8,975	8,116	7,620	7,625	7,639	7,633
Customer	81	58	52	48	47	47	47

(Ref: Common Corporate Costs $ Exhibit C1-2-6)