#### Toronto Hydro: 2020-2024 Distribution Rates Application Overview





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**Today's Agenda** 

**1. Introduction and Overview** 

2. Distribution Capital & Maintenance

**3. General Plant & Field Operations** 

4. Customer Services

**5. Closing Summary** 

### **Toronto Hydro's Customer Engagement**

#### **Residential Customers' Priorities:**



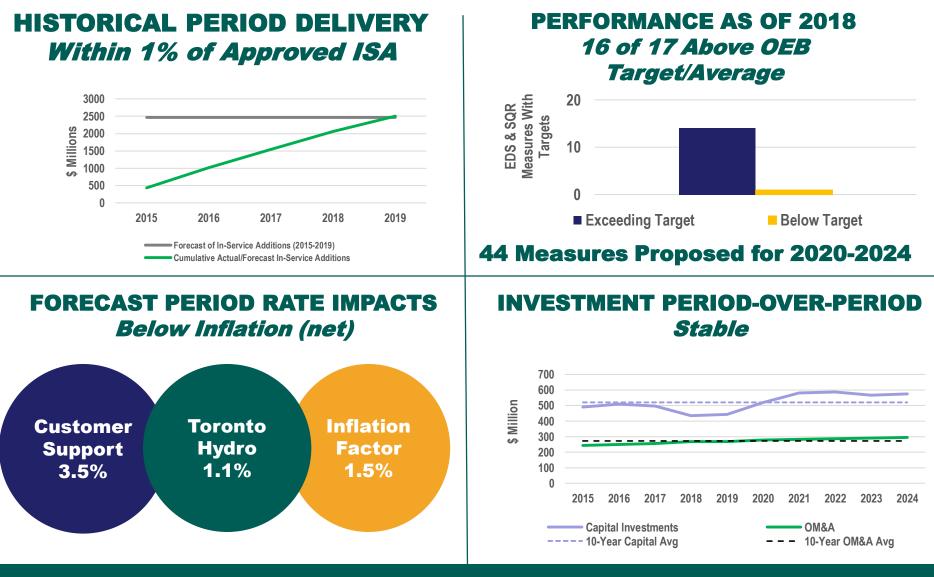
**Our Proposed Plan:** 





We heard from over 11,400 residential and business customers

### Toronto Hydro's Plan

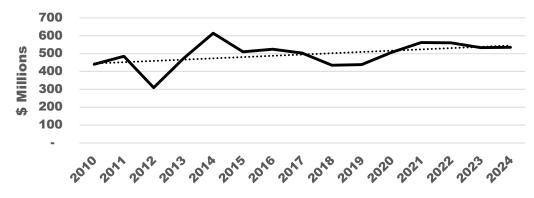


### **Distribution Capital & Maintenance**

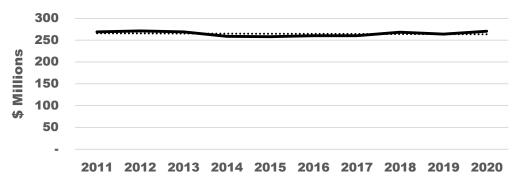


# Capital Investment Plan: The Distribution System Plan

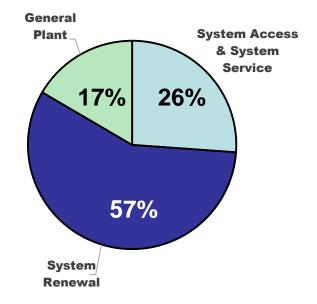
#### **Total Capital Expenditures\***



#### **Total OM&A Expenditures\***



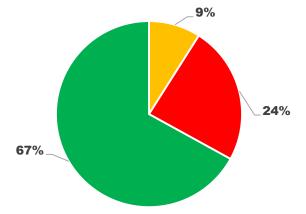




\*All figures are inflation adjusted. Adjusted using annual OEB inflation prescribed value

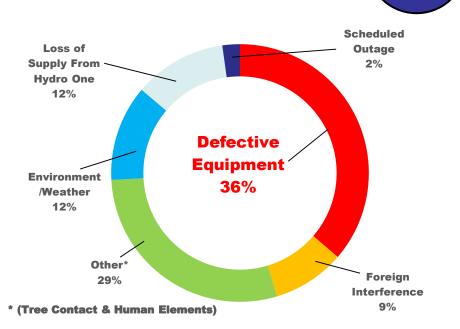
# **Renewing the System**

#### **Our Operating Context**

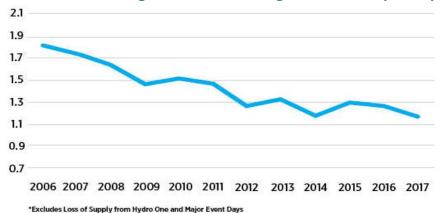


- Assets to Reach Useful Life by End of Forecast Period (2025)
- Assets at End of Useful Life by 2018
- Assets Not at End of Useful Life



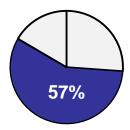


#### Number of Outages for the Average Customer (SAIFI)



57%

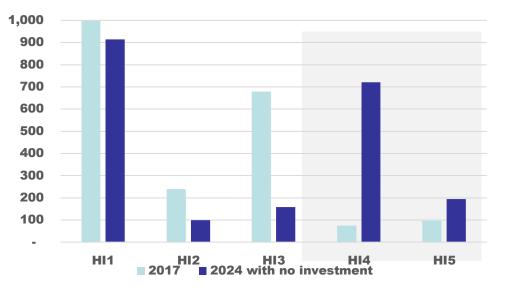
### Renewing the System Stations Renewal







#### Stations Assets Circuit Breakers & Power Transformers



#### Health Index (HI)

Asset Condition Assessment (ACA)

**HI4: Material Deterioration** 

HI5: End of Serviceable Life

### Renewing the System Area Conversions – Box Construction



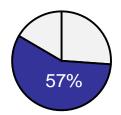
#### 2024: 300 box-framed poles



THE SMOKERS MART

57%





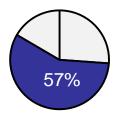
### 2017: 7,100 customers

#### 2024: 3,900 customers



# **Renewing the System**

#### Underground System – Horseshoe & Downtown



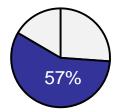


#### 2017: 1,130 km of PILC Cable

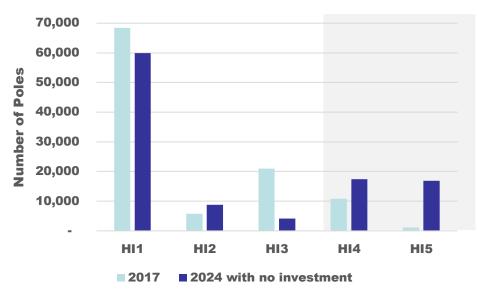
#### 2024: 923 km of PILC Cable



### Renewing the System Overhead System



#### **Wood Poles**



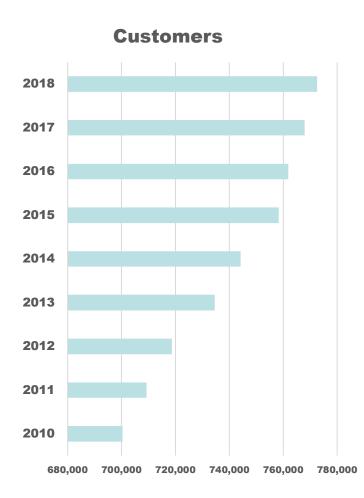
# Health Index (HI) ACA HI4: Material Deterioration HI5: End of Serviceable Life

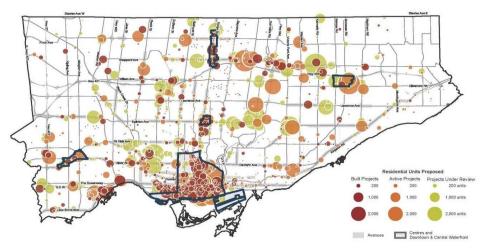




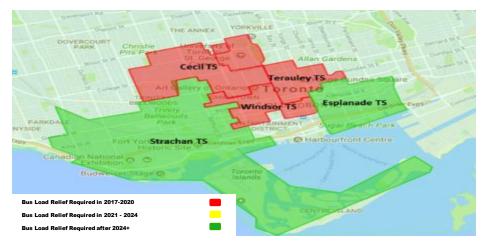
#### PCBs







Source: Toronto City Planning Division, Research and Information, September 2016



26%

# System Access & Service

The Growing City & System — Generation Connections

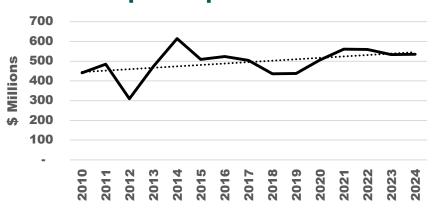
< 100 locations in 2007

26%

1,700 locations in 2017

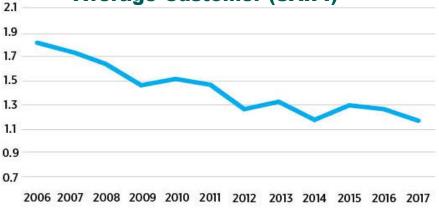
### **Capital Investment Plan: Summary**

**Total Capital Expenditures\*** 



\*All figures are inflation adjusted. Adjusted using annual OEB inflation prescribed value

Number of Outages for the Average Customer (SAIFI)



\*Excludes Loss of Supply from Hydro One and Major Event Days

Balanced Plan Engineering based Asset Condition Assessment

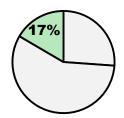
Stay the course: Renewal & Growth

Toronto Hydro

### **General Plant & Field Operations**



# General Plant: Information Technology



 Customer Information System



RUN Upgrades of systems to maintain business capabilities **GROW** System enhancements to capture new business capabilities

#### **TRANSFORM**

Systems to drive new business capabilities

### General Plant: Facilities & Fleet

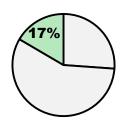




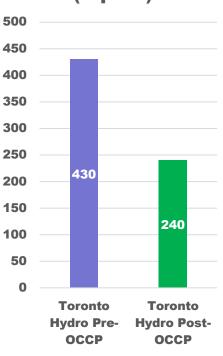






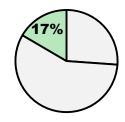


Space Utilization Per Employee (2015-2019) (Sq. Ft.)

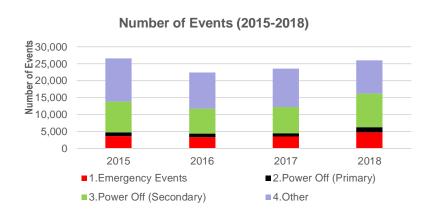


OCCP is Operating Centres Consolidating Program

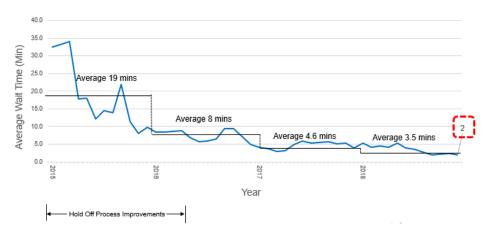
# General Plant: Control Room

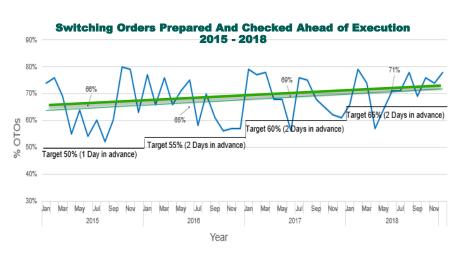


On average, 7% of the approximately 26,000 emergency events across all four categories experienced in 2018 were attributable to 5 Major Event Days in the same year. Average Wait time for Planned Hold-Offs for Toronto Hydro and Contractors 2015 – 2018



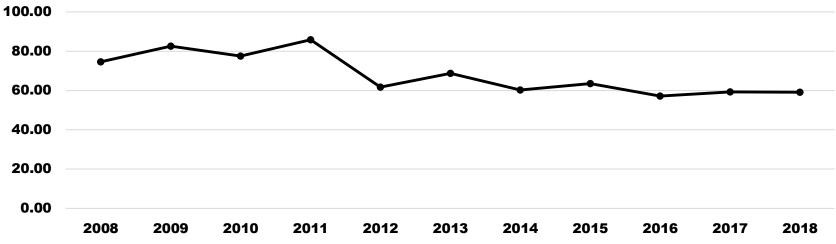






### **Field Operations: Challenges**

#### **Average Duration of Outages (SAIDI)**



Average duration of interruptions caused by defective equipment per customer in a given year.





**CAPITAL INVESTMENTS 10 OF 11 UNIT COST TORONTO HYDRO DELIVERED AT CATEGORIES UMS ESTIMATED SAVINGS MARKET RATES BENCHMARKING STUDY** 1999-2015 2<sup>ND</sup> 82% + **\$2B QUARTILE** ~\$150M

# Field Operations: Successes 2015-2019

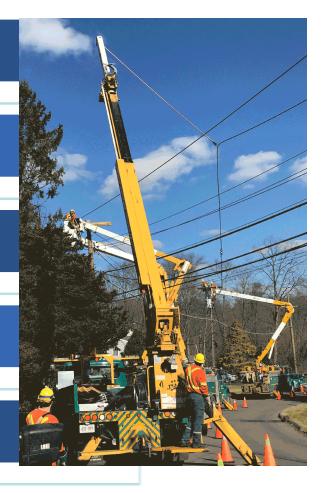
Advance work methods and scheduling

Safety and attendance performance

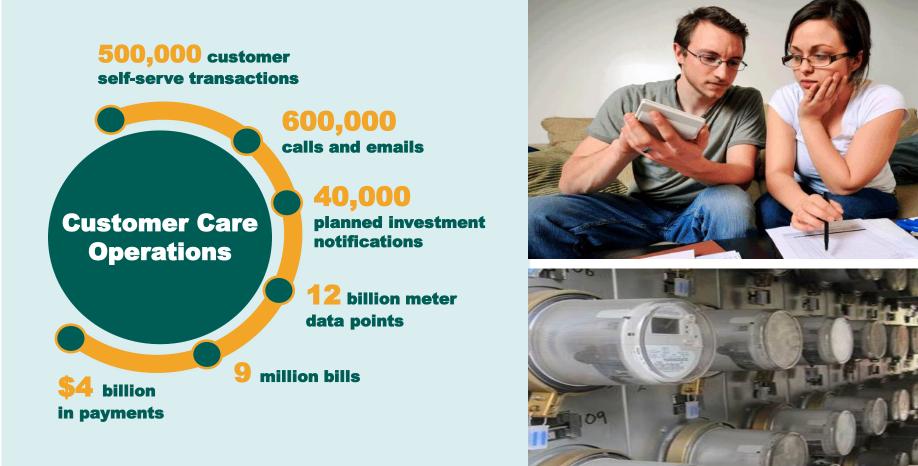
Strategic mix of internal and external resources

Timely resource recruitment from trades and technical groups

**Training and development** 

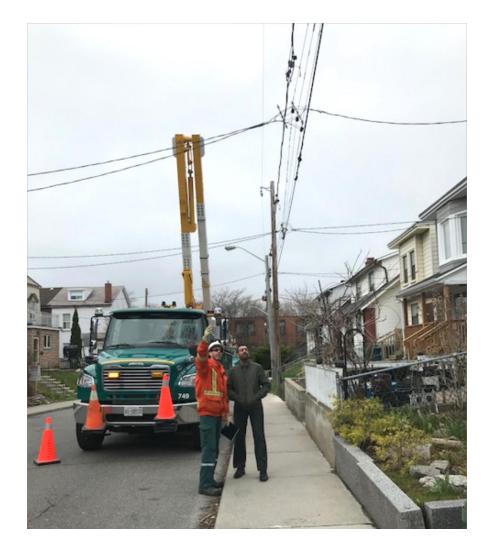


### **Customer Services**



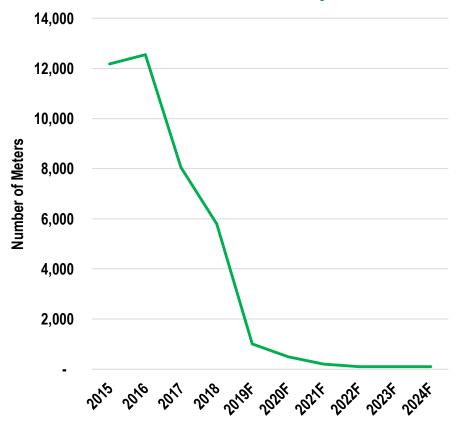
### **Customer Services**: Customer Operations Communications

	IDER: IMPORTA	NINCHEL
ROJECT: ammersmith Phase 5	PROJECT INFORMATION #: )	(18249/X18390
ARD: 2 - Beaches-East York	ACTIVITY: Overhead Electrical Upgrade	EXPECTED PROJECT TIMELINE June 2018 - December 2018
ORK AREA: be boundaries include Col	te rebuild includes upgrading over ity-owned property near your lot. umbine Avenue (north), Ashbrid st), and Coxwell Avenue (west).	
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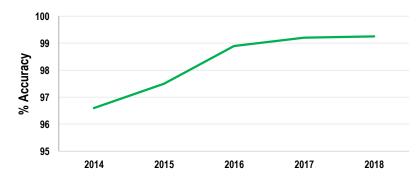


# Customer Services: Impact of Investments

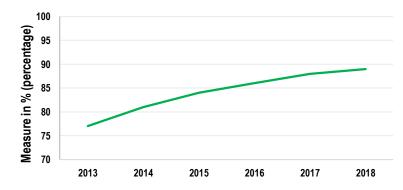
**Meters Read Manually** 



#### **Billing Accuracy**

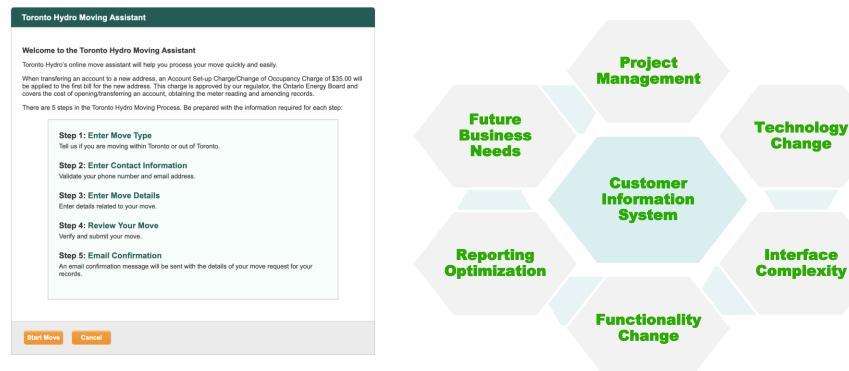


**First Contact Resolution** 



### **Customer Services: Key Projects**

My TorontoHydro > Toronto Hydro Moving Assistant



### Renewal of customer self-service website

#### Upgrading our Customer Information System

### **Customer Services: Key Projects**

Number of Customers on **Electronic Billing** 400.000 350,000 300,000 Number of Customers 250,000 200,000 150,000 100,000 50,000 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024



#### **Paper savings equal to 90% of CN Tower Height**

### **Customer Services: Summary**







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Toronto Hydro

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