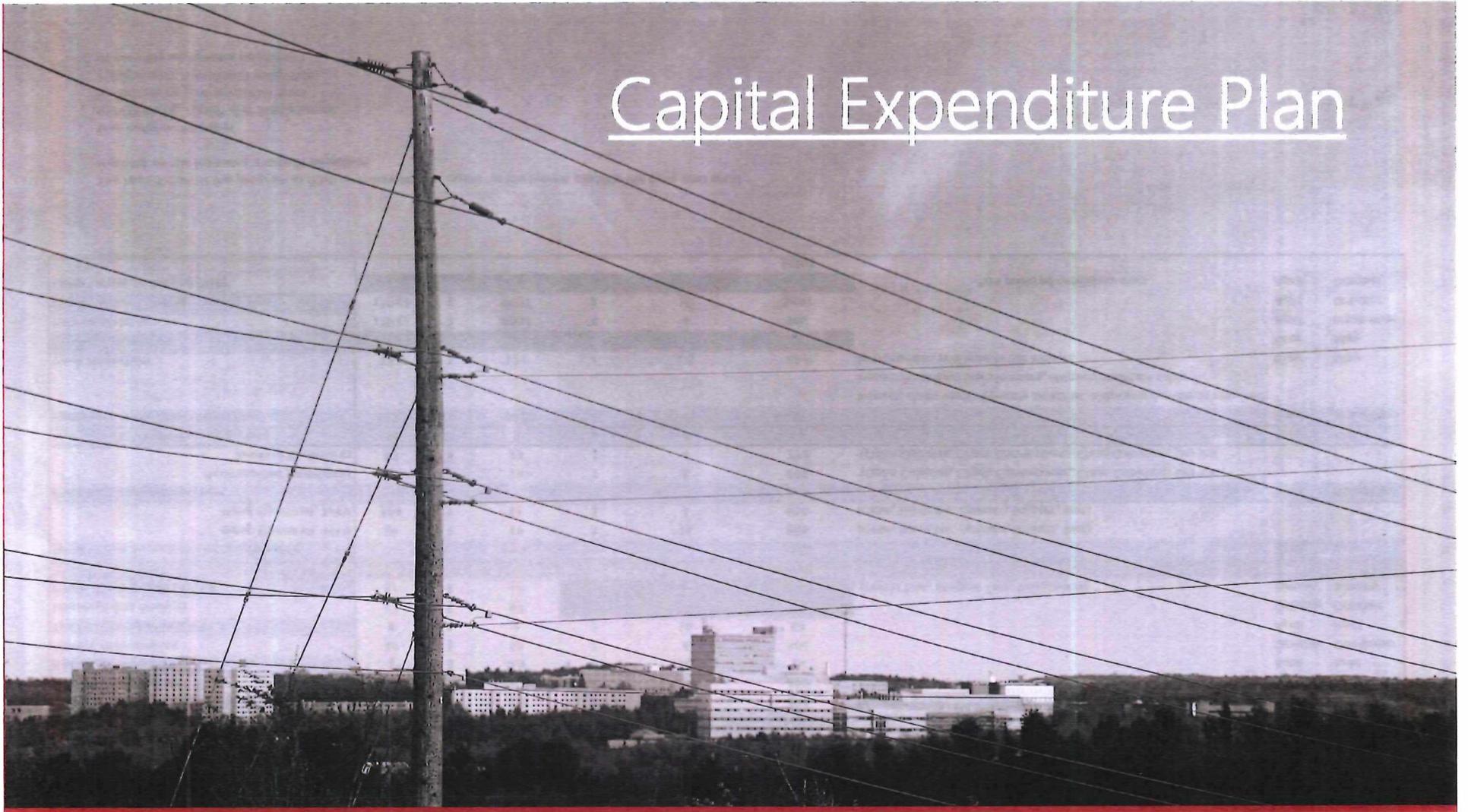


# Capital Expenditure Plan



# Capital Expenditure Planning Process - Objectives

- GSHI's CEP Objectives:
  - Invest and maintain assets to achieve the lowest long-term cost of ownership while meeting prescribed codes, statutory requirements, standards and performance targets.
  - Meet customer expectations by improving existing infrastructure to manage growth in support of new and existing customers as well as renewable energy generation connection requests.
  - To support the outcomes of the Asset Management process balancing **cost, reliability** and **risk**.
  - To meet or exceed all requirements with respect to distribution system **safety** such that no undue hazards exist for workers or the public.

# Investment Prioritization – Tools and Methods

- System Access - first come, first served; non-discretionary; based on resource availability
- System Renewal – derived from the results of:
  - ▣ Asset Condition Assessment (ACA);
  - ▣ Feeder Reliability Assessment;
  - ▣ Customer Satisfaction Surveys/Consultations;
  - ▣ Fleet Management Strategy; and
  - ▣ Service Territory Load Forecast
- System Service – same as System Renewal
- General Plant – derived from results of:
  - ▣ Fleet Management Strategy
  - ▣ Building Condition Assessment (recommended); otherwise “Historical” funding
  - ▣ Subject Matter Experts/“Historical” funding for Tools and Equipment

## Pacing Investments

- The vast majority of capital investments related to optimizing asset lifecycle cost belong to the “System Renewal” category and represent annual programs required to sustain the asset base.
- Asset Condition Assessments incorporate a 10 year “Flagged-for-Action” strategy for each assessed asset category (Optimal).
- As it would not be feasible or practical to address all assets immediately, a *levelized* “Flagged-for-Action” Plan is a tool that spreads out (levelizes) the number of assets to be addressed over a greater period of time.

Asset Category		10 Year Flagged for Action Total				10 Year LEVELIZED Flagged for Action Total				Replacement Strategy
		First Year		10 Year		First Year		10 Year		
		Quantity	Percentage	Quantity	Percentage	Quantity	Percentage	Quantity	Percentage	
Substation Transformers		14	30%	17	36%	14	30%	3	6%	proactive
Pad Mounted Transformers		4	0%	54	4%	5	0%	50	4%	reactive
Pole Mounted Transformers		174	5%	793	24%	74	2%	795	24%	reactive
Submersible Transformers		1	6%	15	94%	2	13%	12	75%	reactive
Vault Transformers		0	0%	0	0%	0	0%	0	0%	reactive
Overhead Line Switches		40	2%	211	11%	19	1%	227	12%	reactive
Pad Mounted Switchgear		0	0%	0	0%	0	0%	1	1%	reactive
Pad Mounted Junction Enclosures		0	0%	2	3%	0	0%	2	3%	reactive
GSU Wood Poles	44 kV	0	0%	15	1%	1	0%	39	3%	proactive
	Non-44 kV	240	2%	2600	24%	237	2%	2474	23%	proactive
GSU Concrete Poles	All (Non-44 kV)	0	0%	0	0%	0	0%	0	0%	proactive
	44 kV	0	0%	0	0%	0	0%	0	0%	proactive
Bell Wood Poles	Non-44 kV	51	2%	640	25%	58	2%	638	25%	proactive
Hydro One Wood Poles	44 kV	0	0%	0	0%	0	0%	6	2%	proactive
	Non-44 kV	0	0%	6	4%	1	1%	11	8%	proactive

# 10 Year "Flagged for Action" Plan

