

# Asset Base of PowerStream Wood Pole Population

PowerStream ACA 2014 Asset Counts	
Asset	Total
Distribution Transformer	44,112
Distribution Switchgear	1,821
Wood Poles	38,070
Underground Primary Cable (km)	8,220
Min-Rupter Switch	433
Automated Switch	360

Table 10: Summary of Distribution System Assets

# Asset Base of Manitoba Hydro Wood Pole Population

Demographics		
Age (Yrs)	Qty	%
0 to 10	143,873	13.3%
10 to 20	157,792	14.6%
20 to 30	170,517	15.7%
30 to 40	173,802	16.1%
40 to 50	174,556	16.1%
50 to 60	144,486	13.3%
60 to 70	113,771	10.5%
70 to 80	3,313	0.3%
> 80	762	0.1%
Grand Total	1,082,873	100.0%
Replacement Value	\$3,500M	

- Manitoba Hydro's pole population is 28 times greater than that of PowerStream.

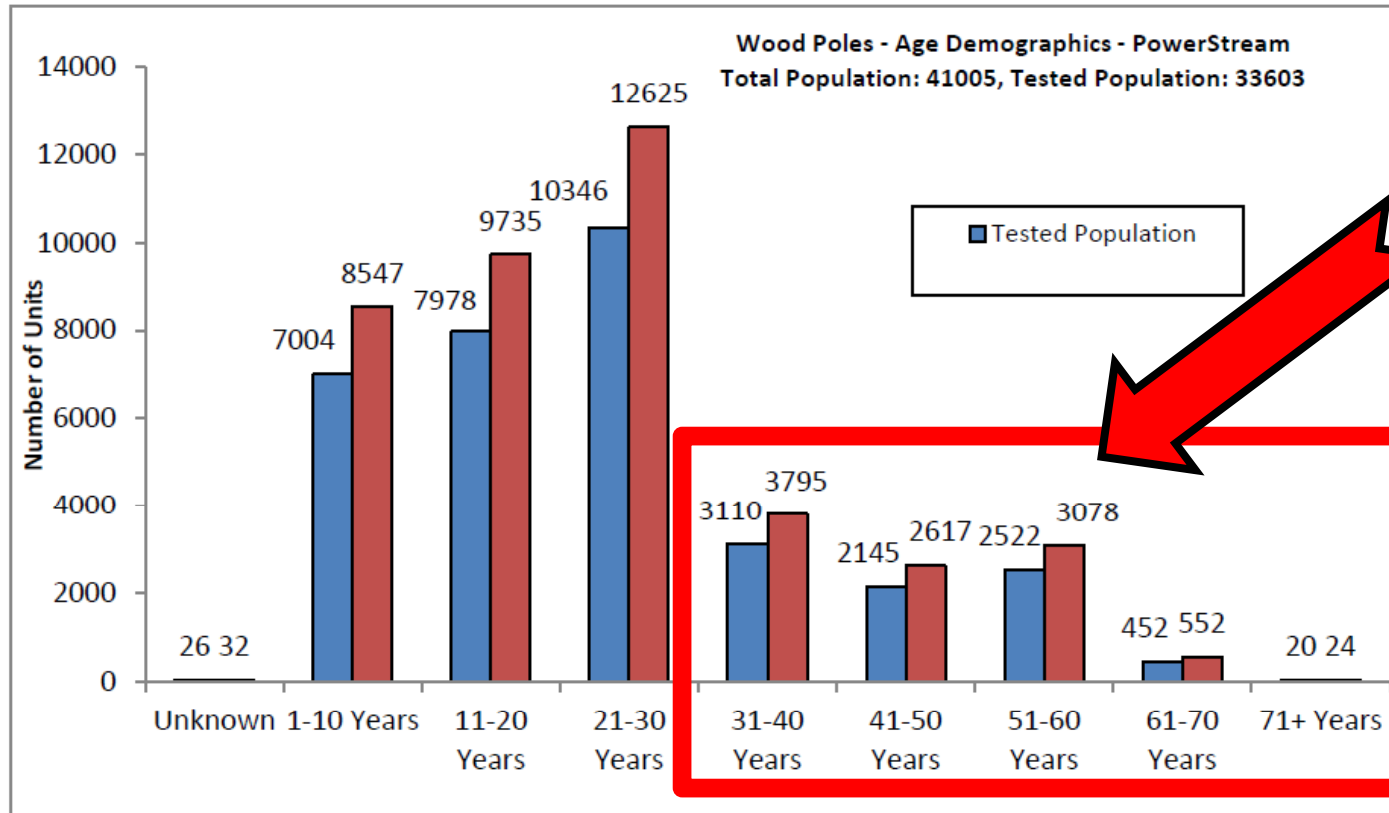
# Annual Material Investment for Wood Pole Replacement by PowerStream

Material Investments	2015	2016	2017	2018	2019	2020
System Renewal	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
<b>UG Lines - Planned Asset Replacement</b>						
Cable Injection Program	4,024,219	4,138,312	4,255,465	4,375,771	4,499,323	4,626,219
Cable Replacement Program	11,718,862	12,538,684	13,607,273	14,288,297	15,085,861	15,340,181
Emerging Cable Replacement Projects	491,687	520,801	1,050,756	1,081,576	1,113,287	1,145,915
Submersible Transformer Replacement	1,040,300	620,000	-	-	-	-
Switchgear Replacement Program	2,003,445	2,327,404	2,462,129	2,533,373	2,606,624	2,681,945
<b>Distribution Lines - Emergency/Reactive Replace</b>						
Storm damage - Replacement of Distribution Equip. due to Storms	999,785	1,000,232	1,005,603	1,005,624	1,010,352	1,010,159
Switchgears - Unscheduled Replacement of Failed Switchgear	1,420,148	1,431,384	1,420,148	1,421,218	1,400,444	1,140,858
Unscheduled Replacement of Other Failed Distribution Equip	4,904,357	5,107,035	5,206,156	5,358,281	5,455,354	5,305,986
<b>Pole Replacement Program</b>	<b>4,645,383</b>	<b>4,933,143</b>	<b>5,570,700</b>	<b>5,870,246</b>	<b>6,241,483</b>	<b>6,244,377</b>
<b>Storm Hardening</b>						
Storm Hardening & Rear Lot Supply	3,499,998	7,900,017	7,999,752	7,499,834	6,900,540	7,200,072
<b>Stations/P&amp;C - Planned &amp; Emergency</b>						
Planned Circuit Breaker Replacement Markham TS1&2, Lazenby TS1	747,766	-	-	1,087,788	1,119,281	-
Station Switchgear Replacement (ACA) 8th Line MS323	-	-	412,339	1,106,666	-	-
Station Switchgear Replacement (ACA) Patterson MS336	-	-	-	421,896	895,805	-

Table 3: Material Investments - System Renewal

- The 2015 Pole Replacement Program Budget of \$4,645,383 represents an investment of \$122 per pole.
- If this rate is applied to Manitoba Hydro's pole population, an annual investment of \$132,110,506 would be required in 2015.

# Age Distribution of Wood Pole Population for PowerStream



- 10,066 poles +30 years of age.
- 24.5% of the known population.

Figure 49: Wood Poles Demographics

# Age Distribution of Wood Pole Population for Manitoba Hydro

- 610,690 poles
- 56.3%
- 60 times greater then that of PowerStream.

Demographics		
Age (Yrs)	Qty	%
0 to 10	143,873	13.3%
10 to 20	157,792	14.6%
20 to 30	170,517	15.7%
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