

Northern Natural Gas
2021 Maintenance Capital Update
Posted April 12, 2021
(\$ in thousands)

RP19-1353

	Posted April '21 for 2021	Posted December '20 for 2021	Increase/ (Decrease)
Operations			
Pipeline Assessments	\$ 64,522	\$ 59,796	\$ 4,726
<i>30" Oakland-Ogden C - MCA Phase 2</i>	7,126	7,022	104
<i>24" Macksville-Bushton B</i>	9,899	-	9,899
<i>24" Clifton-Beatrice B</i>	7,646	9,936	(2,290)
<i>26" Mullinville -Macksville C</i>	6,054	-	6,054
Compression Replacement	62,441	50,021	12,420
<i>Farmington Horsepower Replacement</i>	20,377	22,180	(1,803)
<i>Ogden Horizontal Compression Replacement</i>	26,627	25,439	1,188
<i>Spraberry Unit 15 Installation</i>	9,235	-	9,235
LNG Replacement	5,069	3,011	2,058
Vintage Pipeline Replacement	142,055	88,321	53,734
<i>South Sioux City to Sioux Falls A-line Replacement</i>	41,154	1,155	39,999
<i>Beatrice New Compression U29</i>	22,678	22,188	490
<i>Copeland, Kansas Branch Line Replacement</i>	11,210	1,565	9,645
<i>Plains, Kansas Branch Line Replacement</i>	6,974	900	6,074
Total Asset Modernization	274,087	201,149	72,938
Building/Facility - Field	14,724	7,301	7,423
Pipeline-Integrity	21,189	23,344	(2,155)
<i>NEB46001 Auburn BL Abandonment</i>	4,088	6,634	(2,546)
Pipeline-Shallow/Exposed Pipe	21,699	16,408	5,291
Measurement	15,971	7,012	8,959
Automation/Controls	17,757	17,165	592
<i>Carlton Controls Upgrade Phase 1</i>	5,868	4,566	1,302
Pipeline - Relocation	2,258	2,192	66
Compressor Mods	17,983	9,941	8,042
Underground/LNG Storage	13,497	8,809	4,688
Measurement-Heaters	11,676	7,764	3,912
Valve Installation/Replacement	9,397	3,045	6,352
Corrosion Control	10,011	8,111	1,900
Odorization	1,984	2,196	(212)
Pipeline Safety Act HCA	16,057	11,451	4,606
Unit Exchange	1,984	1,661	323
Systems Development	6,088	5,708	380
Special Projects	7,494	6,050	1,444
Retirements	15,503	6,661	8,842
Risk-ESD	2,955	2,707	248
Trans/Mob Wrk Eqp	4,320	3,383	937
Information Technology	14,611	14,204	407
Other	18,280	8,428	9,852
Other Maintenance Capital	245,438	173,541	71,897
Total Maintenance Capital	\$ 519,525	\$ 374,690	\$ 144,835
Maintenance Capital Target	369,000	369,000	
Variance - Increase/(Decrease)	\$ 150,525	\$ 5,690	

Notes:

Items in italics are individual projects that were initially or are greater than \$5 million in 2021