

## NWT HIGHWAY CAPACITY UPGRADE PROJECT BACKGROUND

The **NWT Highway Capacity Upgrade Project** is comprised of eight components that each involve rehabilitating sections of existing roadways to rehabilitate and enhance the NWT Highway System. The estimated cost of the initiative is \$96 million delivered over four years through contributions from the Provincial Territorial Component of the New Building Canada Plan and the Government of the Northwest Territories.

The individual components of the **NWT Highway Capacity Upgrade Project** were strategically selected to improve the safety and to extend the service life on territorial highways to support economic growth, job creation, and stronger communities.

### Estimated Project Cash Flow (*\$ millions*)

Funding Source	2015/ 16	2016/17	2017/18	2018/19	Total
Government of Canada	23.63	16.13	16.13	16.13	72.00
Government of the NWT	<u>7.88</u>	<u>5.38</u>	<u>5.38</u>	<u>5.38</u>	<u>24.00</u>
<b>Total Project Costs</b>	<b>31.50</b>	<b>21.50</b>	<b>21.50</b>	<b>21.50</b>	<b>96.00</b>

Totals are rounded

- **Highway 1: km 187 to 690 (\$14 million)**

Various sections between km 207 and km 690 require geometric and surface improvements in order to provide a safe operating surface in support of industrial development, tourism and the quality of life in northern communities. Reconstruction priorities under this phase of the project phase will focus on deteriorating sections of the roadway from km 375 to 395 and km 207 to 230.

- **Highway 2: km 8 and 11 (\$3 million)**

Highway 2 is subject to flooding and slope failure due to its proximity to the Hay River at two locations: km 8 and km 11. The project will realign the highway away from the river to limit the likelihood and severity of flooding and reduce highway maintenance costs.

- **Highway 3: km 239 to 339 (\$18 million)**

Highway 3, the main corridor into Yellowknife, requires strengthening and drainage improvements at various locations on the roadway between km 224 and 332 to provide a safe operating surface.

- **Highway 4: km 40 to 55 (\$8 million)**

Reconstruction work on Highway 4, the Ingraham Trail, includes resurfacing, drainage improvement, and chip seal on sections between km 32 to 46.3 to improve safety and ride quality.

- **Highway 6: km 28 to 62 (\$17 million)**

Sections of Highway 6 to Fort Resolution are structurally weak and vulnerable to load-induced damage during spring thaw. The reconstruction project will focus on drainage and ditching improvement as well as roadway widening, strengthening, and chip sealing from km 28 to 62.

- **Highway 7: km 0 to 254 (\$12 million)**

The 4-year reconstruction project for Highway 7 includes chipsealing the reconstructed section from km 0 to 20 in 2015. The project also includes reconstruction of a narrow section at km 170, resurfacing from km 111 to 130, and reconstruction of sections between km 20 and 38. The work will include highway widening, strengthening, drainage improvement, guardrail placement, and chip seal surfacing. The focus will be on repairing various distressed areas, highway resurfacing, and drainage improvements between km 38 and 254.

- **Highway 8: km 0 to 272 (\$18 million)**

Reconstruction work on Highway 8, the Dempster Highway, is planned for segments between km 0 and 272 to improve surface conditions and roadway geometrics.

- **Dettah Access Road: km 0 to 6.5 (\$6 million)**

Reconstruction on the Dettah Access Road, the only road access into the community, will take place from km 0 to km 4.1. The access road will then be chip sealed from km 0 through to km 6.6.

## NWT HIGHWAY CAPACITY UPGRADE PROJECT

High way	Location	Estimate (Million)	Activities	Tasks
1	Mackenzie Highway: km 375 to 395 and km 207 to 230	\$14	Paving	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, drainage improvements, culvert replacement, and asphaltic surface treatment
2	Hay River Highway: km 8 and km 11	\$3	Realign road away from the river at two locations	Survey, geotechnical investigation, crushing granular material, realignment, reconstruction of embankment, sub-base, base course, and asphaltic surface treatment
3	Behchoko to Yellowknife: various locations between km 224 and 332	\$18	Road strengthening and drainage improvements	Survey, design, crushing granular material, roadway strengthening, drainage improvements, culvert replacement, and asphaltic surface treatment
4	Ingraham Trail: various locations between km 32 and 46.3	\$8	Resurfacing, drainage improvement and chip seal	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, drainage improvements, culvert replacement, traffic signs and delineators, and chip seal
6	Fort Resolution Highway: km 28 to 62	\$17	Reconstruction and chip sealing	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, drainage improvements, culvert replacement and, asphaltic surface treatment
7	Liard Highway: km 170, km 20 to 38, and km 38 to 254	\$12	Widen, strengthen, improve drainage, install guardrails and chip seal	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, drainage improvements, ditch excavation, culvert replacement, and asphaltic surface treatment
8	Dempster Highway: various locations between km 0 and 272	\$18	Reconstruction	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, embankment shaping, drainage improvements, ditch excavation, and culvert replacement
	Dettah Access Road: km 0 to km 6.6	\$6	Reconstruct and chip seal	Survey, geotechnical investigation, geometric improvements, crushing granular material, roadway widening, strengthening, embankment shaping, drainage improvements, ditch excavation, and culvert replacement

# NWT HIGHWAY CAPACITY UPGRADE PROJECT LOCATIONS

