



Project Update

NORTHERN TRANSPORTATION CONFERENCE
YELLOWKNIFE, NWT OCTOBER 29, 2013

Presentation Overview

- Background
- Southern Section (Wrigley - Dempster)
 - ✓ Work to Date
 - ✓ Proposal
 - ✓ Next Steps
- Northern Section (Inuvik – Tuktoyaktuk)
 - ✓ Work to Date
 - ✓ Proposal
 - ✓ Next Steps



Background



- Long-standing goal for Canada- 1950's Roads to Resources
- 1972 - Public Works Canada completed surveys, geotechnical, environmental studies, design work and initiated construction
- Construction halted in 1977
- Road completed to Wrigley in 1990's
- 1990 GNWT Transportation Strategy & 1999 GNWT Highway Strategy identified MVH as a strategic priority

Background



- Highway Strategy followed by a number of strategic funding proposals



Benefits



- Year round transportation link (will help improve reliability and mitigate climate change impacts)
- Reduce the cost of living for residents
- Reduce the cost of working in the MV
- Improve service delivery
- Improve economic diversification – oil and gas, tourism, etc.
- Increase inter- community travel options
- Jobs (Construction & Maintenance)

Background



- ▶ Past and recent exploration activity points to significant opportunities in resource development in the Mackenzie Valley
- ▶ The MVH is a cornerstone of the GNWTs plan to enable future economic development
- ▶ The MVH will contribute to the future prosperity of Canadians
- ▶ The GNWT needs Canada's commitment to provide resources to build the new highway as the federal government retains the responsibility for new road construction in the NWT.

Background



TRANSFER AGREEMENT
TRANSFER OF INTER-TERRITORIAL ROADS PROGRAM FROM THE
GOVERNMENT OF CANADA TO THE
GOVERNMENT OF THE NORTHWEST TERRITORIES

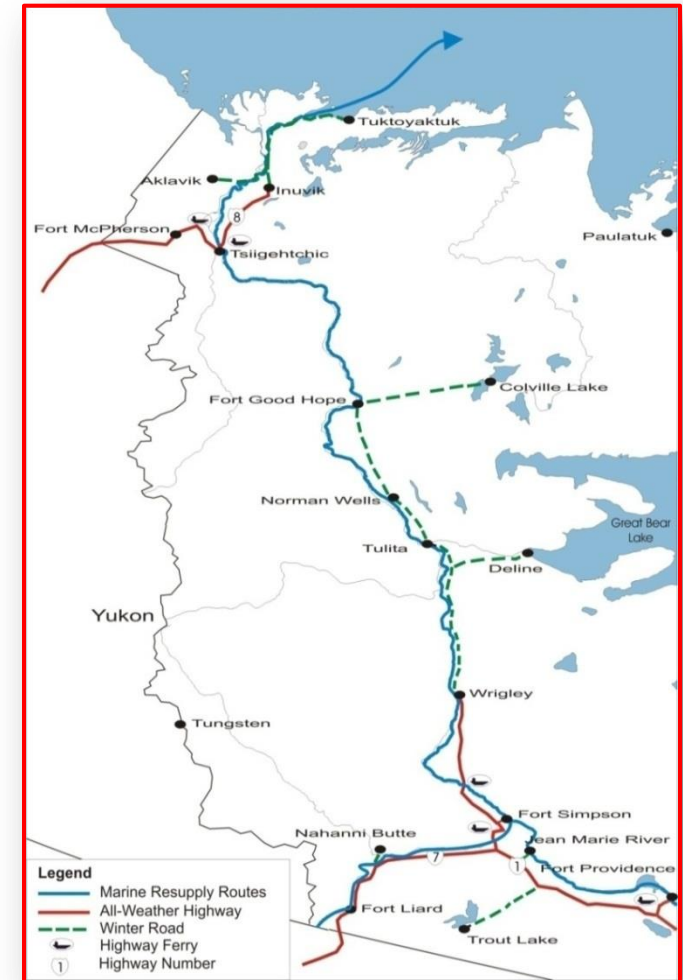
This Transfer Agreement made as of this 8 day of May, 1990 .

- b) Canada alone will make the decision(s) with respect to Canada's contribution to any or all future funding in the development and support of new highway infrastructure in the Northwest Territories.

Background



- 690 km of all-weather road from the Alberta border north to Wrigley
- 482 km winter road between Wrigley and Fort Good Hope
- No road between FGH and Dempster Highway
- 187 km seasonal ice road between Inuvik and Tuktoyaktuk



Background



Background



Background



Background



Background



Background



Background



Background

- \$120 million in incremental improvements since 2000
- 35 new bridges installed on the winter road alignment
- Work underway at Bobs/Strawberry





Southern Section Wrigley to Dempster Highway

Work to Date – Southern Section Public Engagement



- ▶ Meetings and Open houses held in all regions between 2010 and 2012
- ▶ Led by Aboriginal organizations as part of preparation of Project Description Reports (PDRs)
- ▶ Each community visited 2 or 3 times during that period
- ▶ Engagement will continue throughout EA stage

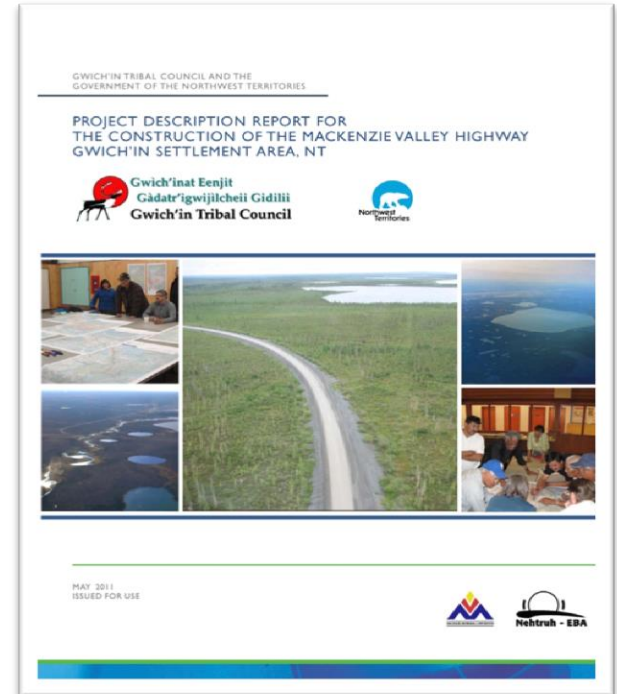
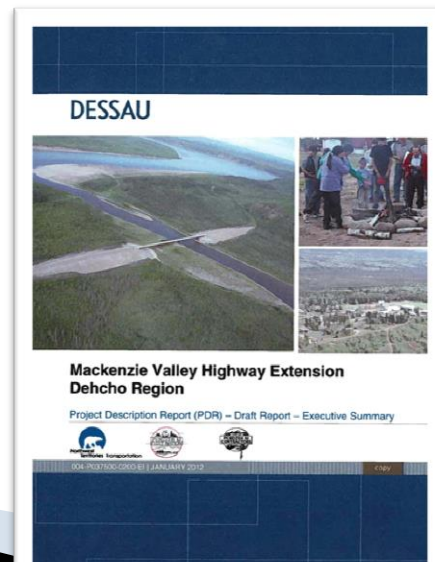
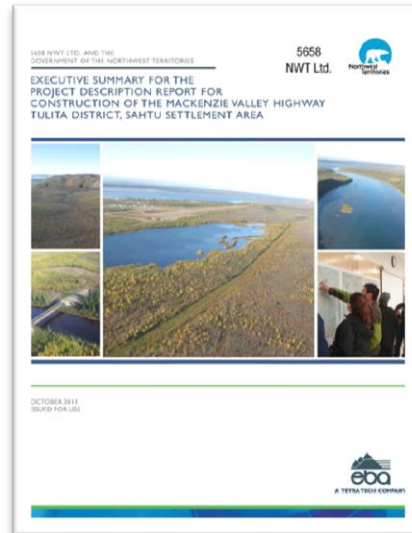
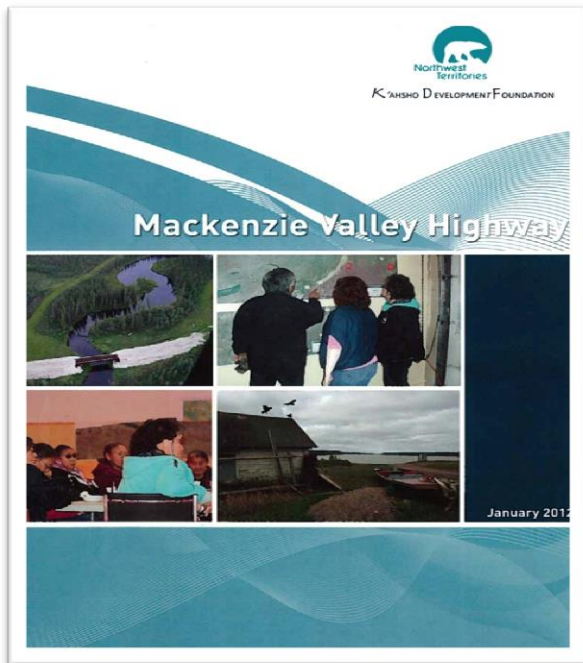


Work to Date – Southern Section PDRs



- ▶ All work completed through partnerships with respective Aboriginal land claims organizations
- ▶ Information acquired from research, field work, and consultations
- ▶ Completed PDR includes:
 - Preliminary engineering and design information
 - Construction techniques
 - Impact Management/Mitigation Strategies
 - Consultation Results and Traditional Knowledge
 - Mapping Products

Work to Date – Southern Section PDRs



Work to Date – Southern Section Scoping Document



Mackenzie Valley Highway

Environmental Scoping Document

January 2013

**Department of Transportation,
Government of the NWT**
Yellowknife, Northwest Territories

Project Number: 123510598

MVH Proposal – Southern Section



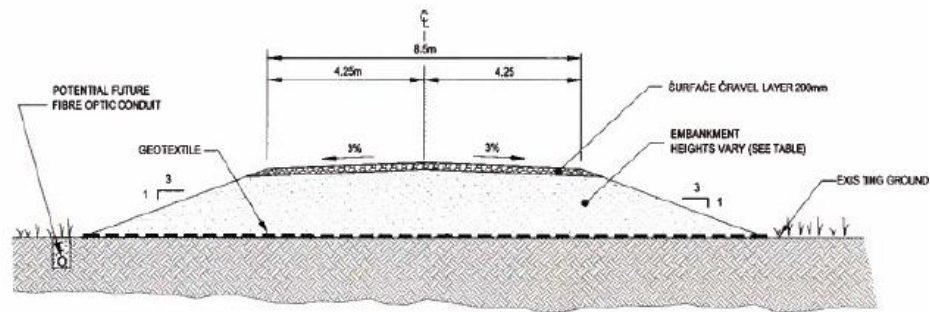
- Approximately 70% of route will follow the winter road alignment between Wrigley and Fort Good Hope
- Route will follow MGP Corridor between Fort Good Hope and Dempster Highway (~ 330 km)
- Designed for average of 100 vehicles per day with speed of 90 km /hr, some exceptions
- Cleared right of way - 60 m wide, Embankment between 1.5 and 2 m high, footprint may be as wide as 21 m
- Design will consider Climate Change and/or preservation of permafrost

MVH Proposal – Southern Section



- 35 bridges on winter road system will be utilized
- Another 25 bridges/large culvert crossings required
- Approximately 30million m³ of granular material required from sources along route
- Support infrastructure includes
 - Camps, staging and maintenance areas
 - Access and haul roads, barge landings
- May also construct winter road between Dempster and Fort Good Hope in advance of all- weather road

MVH Proposal – Southern Section



TYPICAL HIGHWAY CROSS SECTION

TERRAIN TYPE	DESCRIPTION	EMBANKMENT HEIGHTS
1	DRY (ICE POOR) TILL AND OUTWASH DEPOSITS	1.4 m
2	WET (ICE-MEDIUM TO ICE-RICH) TILL AND OUTWASH DEPOSITS	1.4 to 1.6 m
3	WET SILTS AND CLAYS (ICE-RICH)	1.6 to 1.8 m
4	THICK ORGANIC PEATLANDS AND ICE-RICH PERMANENTLY FROZEN	1.8 m

MVH Proposal – Southern Section



- Primarily winter construction
- Summer construction may occur at water crossings, borrow sources and on completed embankment
- Project estimated to cost \$1.7 Billion
- Overall project schedule depends on funding (at this time could range between 4 and 20 years to completion ?)
- Expect several construction spreads active at a time
- Operate as part of NWT Public Highway system when complete

Next Steps – Southern Section



Northwest Territories Transportation

A PLAN FOR STRATEGIC INVESTMENT IN NWT TRANSPORTATION INFRASTRUCTURE

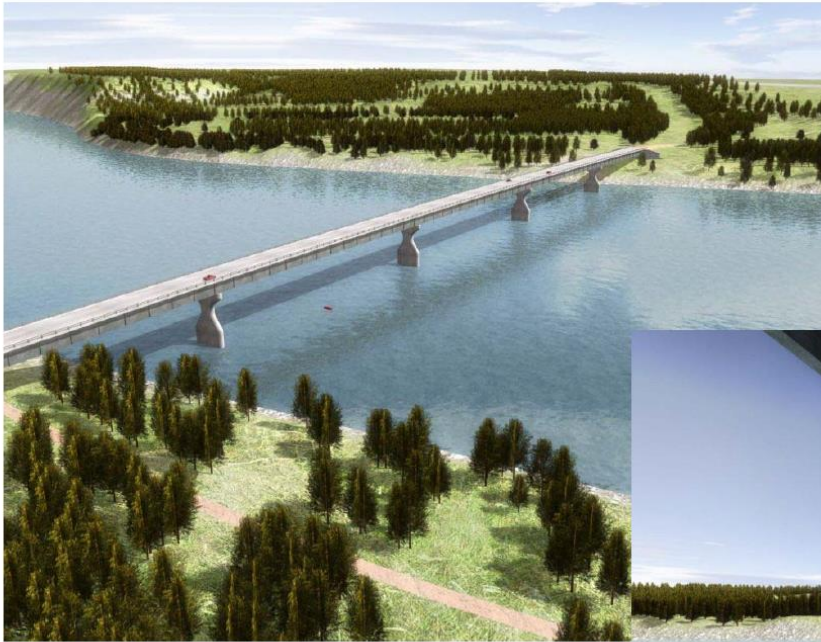
CORRIDORS FOR CANADA III

Building for Prosperity

June 2013

The collage includes: an oil rig on a frozen sea, a truck on a snowy road, a long bridge over water, a construction site with heavy machinery, an airport tarmac with several aircraft, and a large ship at a dock.

MVH Proposal – Southern Section Bear River Bridge



Next Steps – Southern Section EA



- ▶ Based on work done during PDRs, it is expected that the EA and related Developer's Assessment Report (DAR) will focus on potential effects to:
 - Water quality, fish and fish habitat
 - Terrain and permafrost
 - Vegetation
 - Wildlife and wildlife habitat
 - Employment, training and business
 - Human health and well-being
 - Traditional land use and culture
 - Archaeological and historical resources
 - Tourism and other land uses

Next Steps – Southern Section EA



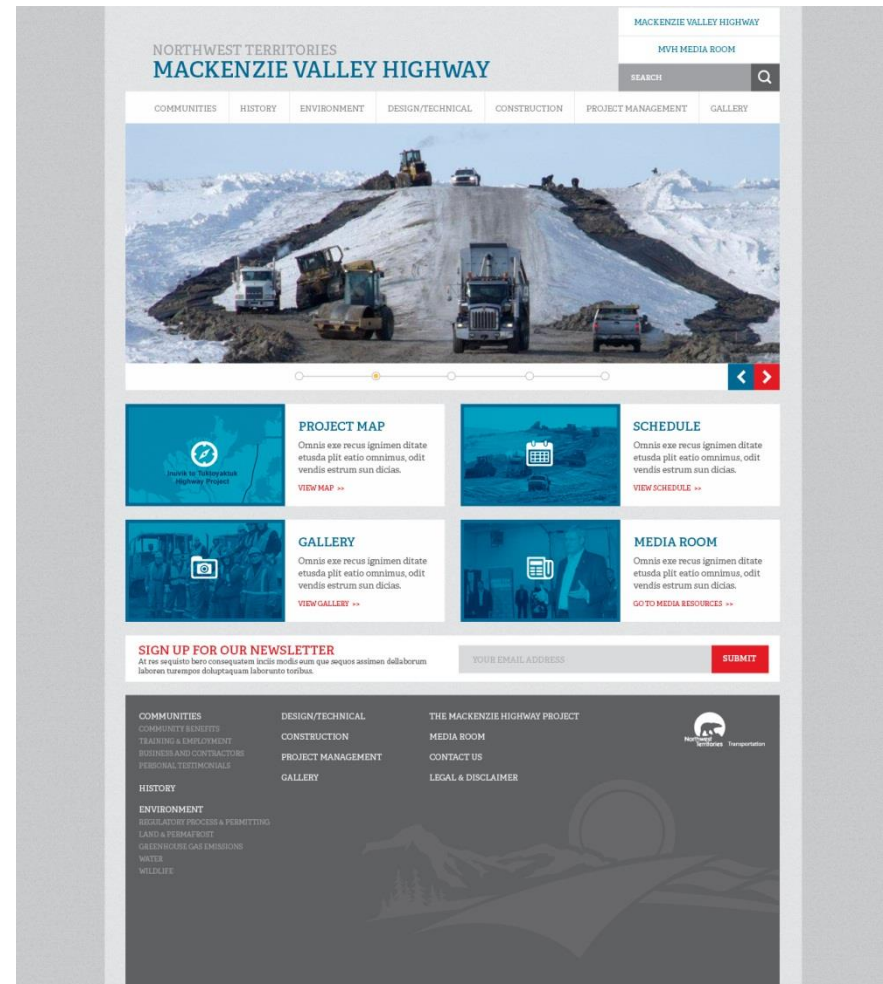
- GNWT will continue to engage Aboriginal organizations in completion of the EA and planning work
- GNWT seeking additional federal and industry funding (June 16 letter from Minister) to assist with EA, design and project implementation
- Future activities during EA stage:
 - Completion of LiDAR Survey
 - Geotechnical & Hydrotechnical investigations
 - Environmental baseline data collection
 - Community Engagement
 - Confirmation of Design and Mitigations

Next Steps – Southern Section EA



➤ Project Communications

- Dedicated Internet website under development
- All information relating to the MVH project will be available and updated regularly





Northern Section Inuvik to Tuktoyaktuk Highway

Work to Date – Northern Section



- January 25, 2013 – project receives EIRB approval
- February 15 – GNWT responds to EIRB Panel report
- April 4 – Canada responds to EIRB Panel report reinforcing GNWT position
- October 7 & 8- NWT Water Board holds public hearings in Inuvik and Tuktoyaktuk on DOT application
- Over 21 meetings held with regulators and co-management groups in the last 2 years
- Ongoing discussions/negotiations with federal Government on funding arrangement and IRC on land swap/royalties

Work to Date – Northern Section Environmental Management

- 12 Management Plans including:
 - Sedimentation and Erosion Control Plan
 - Waste Management Plan
 - Explosives Management Plan
 - Spill Response Procedure
 - Spill Contingency Management Plan
 - Safe Work Practice – Fueling Equipment
 - Safe Work Practice – Handling Petroleum
 - Emergency Response Plan
 - Fish and Fish Habitat Protection Plan
 - Wildlife and Wildlife Habitat Protection Plan
 - Aquatic Effects Monitoring Plan
 - Wildlife effects Monitoring Plan
- 234 EIRB Commitments
- 51 Recommendations

Work to Date – Northern Section Source 177 Construction



Work to Date – Northern Section Source 177 Construction

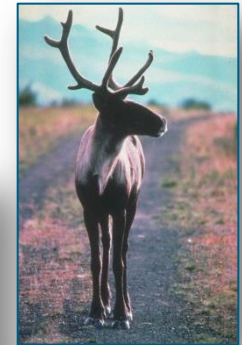


Work to Date – Northern Section Navy Road Construction



Work to Date – Northern Section Construction Plan

- October 15 Final Geometric and Structures design was completed and provided to DOT for review
- All required permit and licence applications for first year of construction have been submitted to regulators



Next Steps – Northern Section Construction Plan



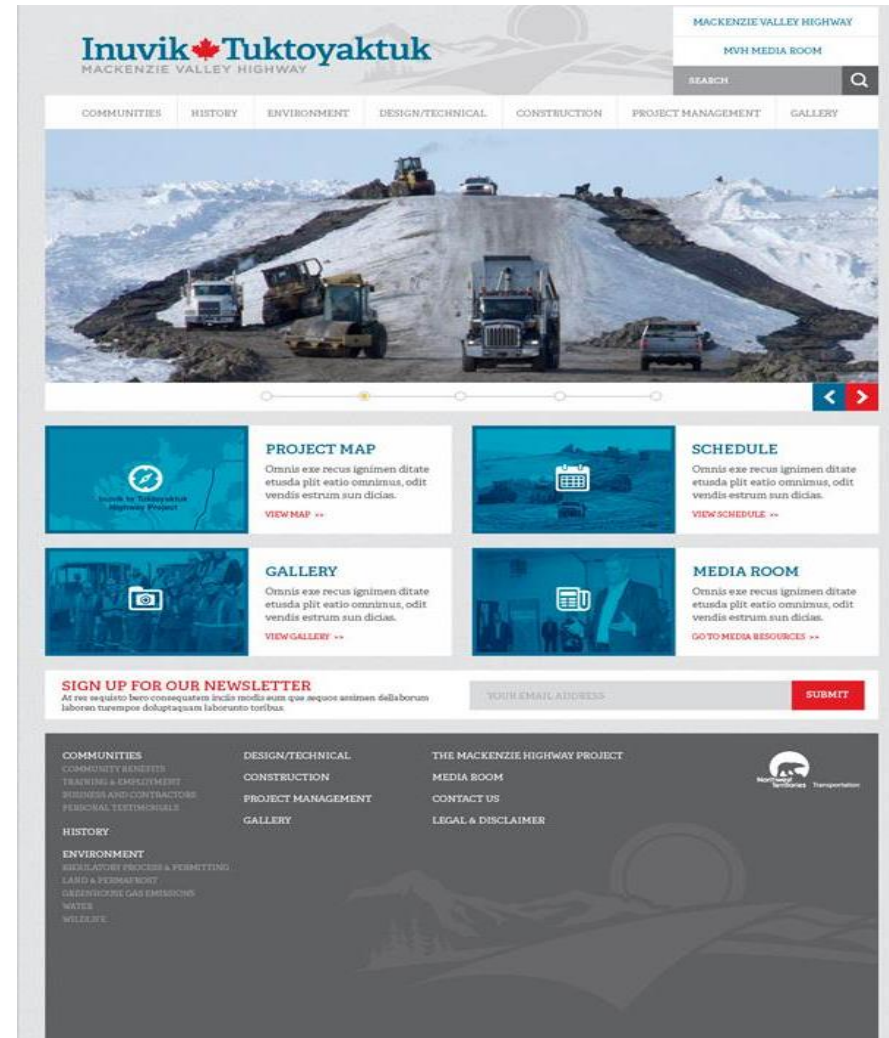
- 3 year embankment construction; 4th year surfacing
- 40 km constructed each year: 20 km/spread
- Most construction activities in winter
- Details to be finalized based on current contract negotiations and actual construction progress

	Winter 2013-14	Summer 2014	Winter 2014-15	Summer 2015	Winter 2015-16	Summer 2016
Embankment and Crossing Construction	Year 1-N Year 1-S		Year 2-N Year 2-S		Year 3-N Year 3-S	
Borrow Pit Development	4	Limited	6	Limited	6	Limited
Access Road Construction	Year 1-N Year 1-S		Year 2-N Year 2-S		Year 3-N Year 3-S	
Camps and Supporting Infrastructure	4 ²	2	4	2	4	2
Surfacing/Grading/Railings		Year 1-N Year 1-S		Year 2-N Year 2-S		Year 3-N Year 3-S

Next Steps –Northern Section Project Communications



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- All information relating to the ITH project will be available and updated regularly





Thank You