

8.0 COMPARISON OF WINTER ROAD AND ALL-WEATHER ROAD SYSTEM COSTS

All-Weather Road Construction Costs were identified for two scenarios: for an All-Weather Road from the south - via Manigotogan; and an All-Weather Road from the west - via Norway House (plus SERDC from the south).

Based on cost data supplied by Manitoba Highways and Transportation, route segment project costs were calculated as illustrated below.

All-Weather Road Estimated Project Costs*

Reach to	Accumulated Cost (\$) via Manigotogan	Accumulated Cost (\$) via Norway House
Bloodvein and Berens River - Reach I	57 M (155 km)	57 M (155 km)
St. Theresa Point, Wasagamack, Garden Hill, Gods Lake Narrows, and Oxford House - Reaches III and IIIA	292 M (625 km)	240 M (585 km)
Reaches IV and IVA, including connections to: Poplar River, Little Grand Rapids, Pauingassi, Red Sucker Lake, and Gods River	440 M (920 km)	400 M (910 km)

The above estimated costs and All-Weather Road distances are based on conceptual plans only. More reliable cost estimates can only be established after a more detailed route location study and an environmental review has been carried out.

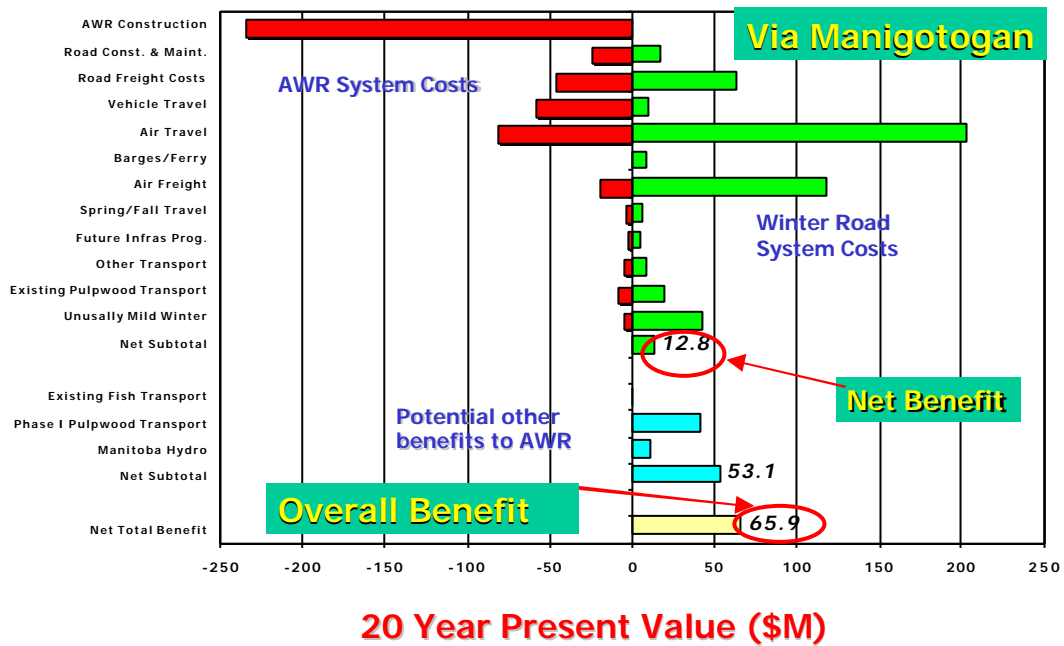
Separate Transport Benefit-Cost Analyses (20-year present value) were carried out for two All-Weather Road scenarios to incrementally serve all twelve communities on the East Side of Lake Winnipeg. These scenarios involved a common component serving the SERDC and a north-south or east-west connection to the existing highway systems for the ILTC and KTC communities.

An All-Weather Road - Main Stem (only) system is illustrated for Reaches III and IIIA on the following pages, along with a benefit-cost comparison of an All-Weather Road versus Winter Road transport. Communities serviced include Bloodvein, Berens River, St. Theresa Point, Wasagamack, Garden Hill, Gods Lake Narrows, and Oxford House for a north-south All-Weather Road system (Reach III) and an east-west (primary access) All-Weather Road system (Reach IIIA). Direct transport **net benefits of \$12.8 M** accrue to the north-south route, while direct transport **net costs of \$24.3 M** relate to the east-west system. When (currently identified) new resource development projects are added, the **net project benefit of \$65.9 M** for the north-south All-Weather Road and **net project benefit of \$7.2 M** for the east-west All-Weather Road are achieved.

Economic Analysis Reach III



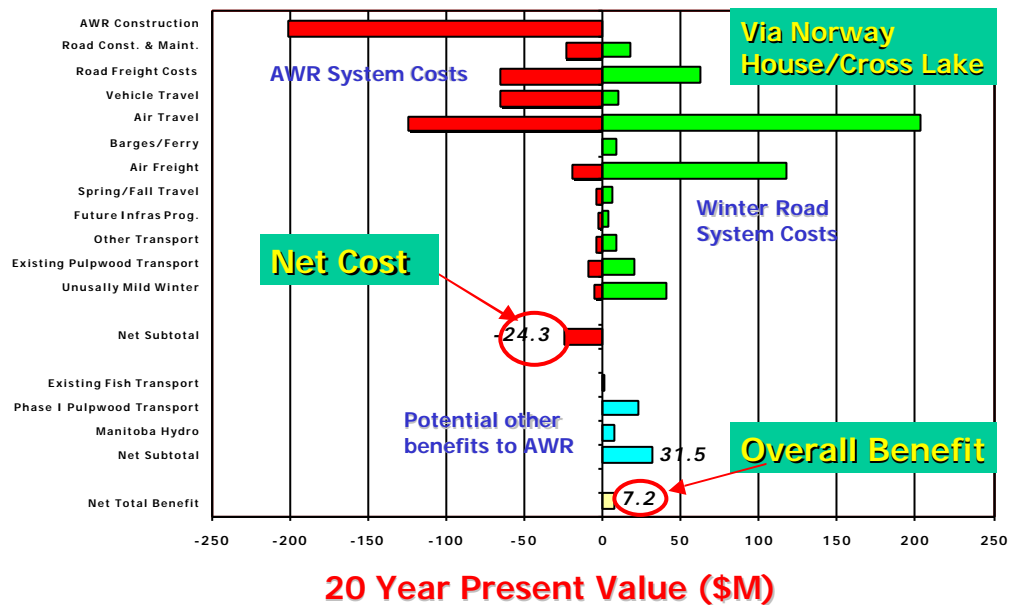
Economic Analysis Reach III – Preliminary Findings AWR to Bloodvein, Berens River St. Theresa/Wasagamack, Garden Hill/Island Lake & Oxford House



Economic Analysis Reach III A



Economic Analysis Reach III A – Preliminary Findings AWR to Bloodvein, Berens River, St. Theresa/Wasagamack, Garden Hill/Island Lake, Gods Lake Narrows & Oxford

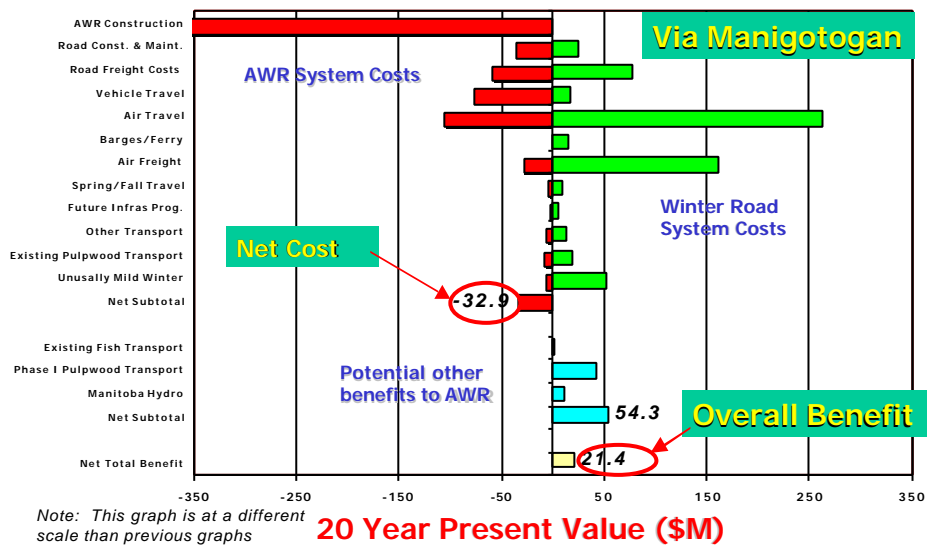


An All-Weather Road system, including all twelve East Side communities, is illustrated on the following pages by Reaches IV and IVA. The comparable **net transport costs are \$32.9 M** for the north-south All-Weather Road and **\$94.6 M** for the east-west All-Weather Road. When new resource development as above is added, the **net project benefits** for the north-south All-Weather Road move to **\$21.4 M**, while the **net project costs** for the east-west system are reduced to **\$61.9 M**.

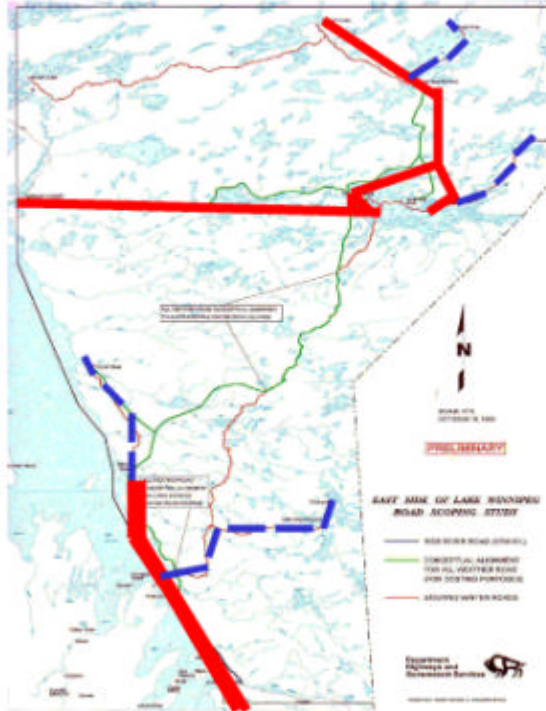
Economic Analysis - Reach IV Includes Connectors



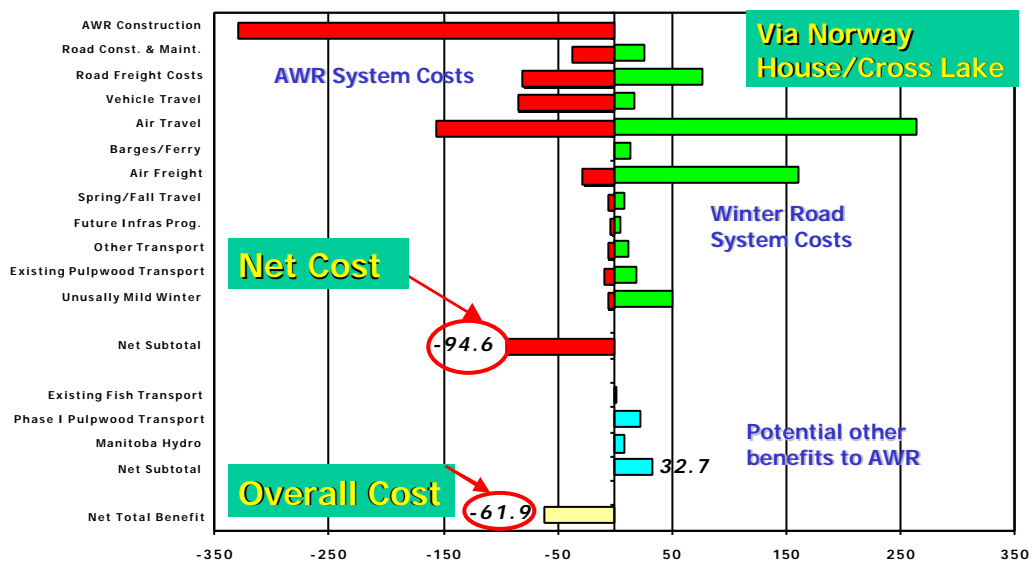
Economic Analysis Reach IV – Preliminary Findings AWR to Bloodvein, Berens River, St. Theresa/Wasagamack, Garden Hill/Island Lake, Oxford House and Connectors to Poplar River, Pauingassi, Red Sucker Lake, & Gods River



Economic Analysis - Reach IV A Includes Connectors



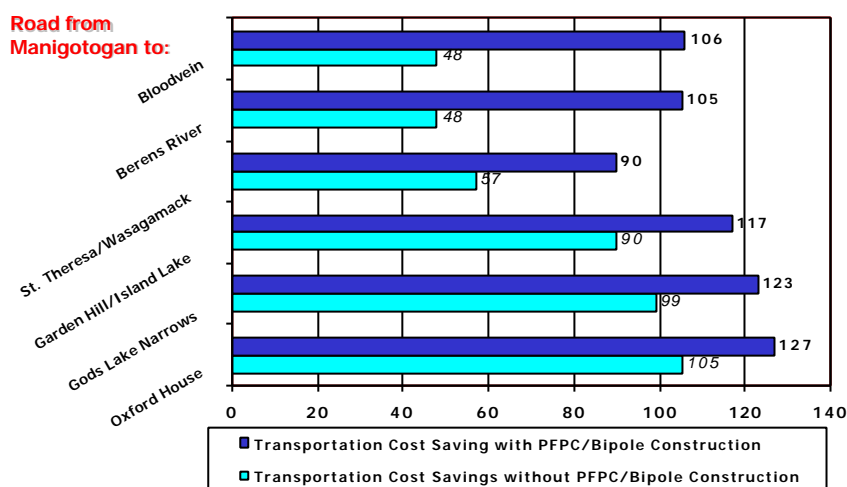
Economic Analysis Reach IV A – Preliminary Findings AWR to Bloodvein, Berens River, St. Theresa/Wasagamack, Garden Hill/Island Lake, Gods Lake Narrows, Oxford and Connectors to Poplar River, Pauingassi, Red Sucker Lake, & Gods River



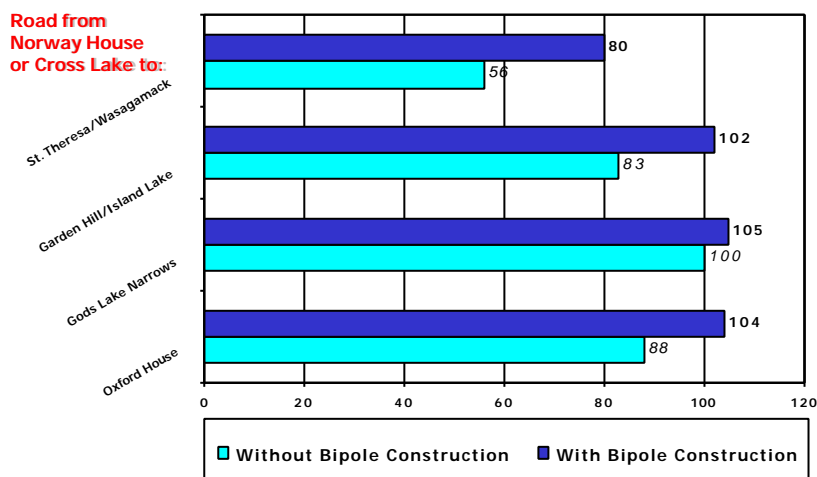
Note: This graph is at a different scale than previous graphs **20 Year Present Value (\$M)**

Relative Cost Coverage of Different Route Segments are identified for the north-south route and the east-west route in the following figures. These indicate the proportion of All-Weather Road main stem costs that are covered by direct transportation savings (without new forestry or Bipole III). The **coverage** ranges from as low as **48 percent** to **105 percent** for an All-Weather Road from Manigotogan. For an All-Weather Road from Norway House, comparable coverage is **56 percent** to **88 percent**.

Transportation Cost Savings as a percent of AWR Costs (%)



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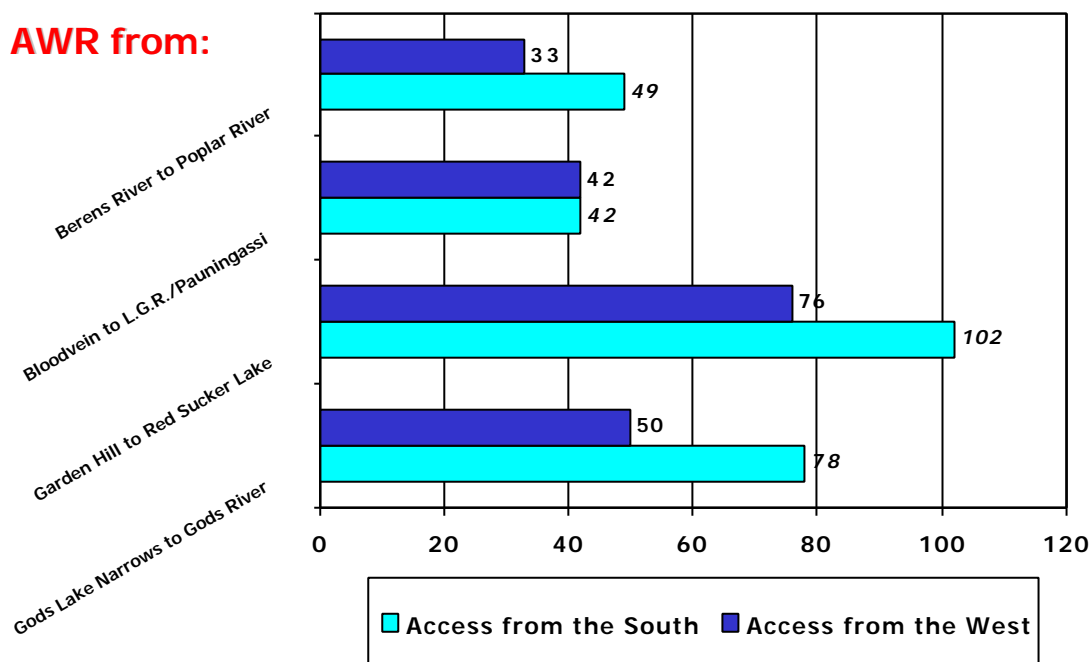


If new forestry developments and Bipole III are included in these analyses, the **cost coverage** for a route from the south increases from a low of **90 percent** to a high of **127 percent**. For an All-Weather Road from Norway House, the **comparable cost coverage** ranges from **80 to 104 percent**.

For an All-Weather Road from Norway House, the non-main stem communities are more difficult to justify. The following figure illustrates the transportation cost savings relative to costs for an All-Weather Road connection to various communities. Communities such as Poplar River/Little Grand Rapids/Pauningassi have cost savings of 33 to 42 percent of All-Weather Road construction. (Poplar River goes to 49 percent if the main stem All-Weather Road comes from the south.) Red Sucker Lake and Gods River respectively achieve 102 and 78 percent cost coverage for a southern route; and 76 percent and 50 percent cost coverage for a western route.

Transportation Cost Savings/Costs for AWR Connections (%)

AWR from:



Other Benefits of an All-Weather Road System, such as Economic Spin-offs related to All-Weather Road construction and new investment or employment, are not included in the foregoing analyses. These could increase the overall project benefits (on a 20-year present value basis) for a route from the south by another \$100 to \$150 M. Cost coverages of 160 to 180 percent or benefit-cost ratios of 1.6 to 1.8 are possible for the southern route.

Also not included in the foregoing analyses are socioeconomic aspects such as:

- Improved dietary - health regimes
- Improved access to health care
- Increased educational opportunities
- Improved family ties (particularly with teenage students)
- Broadened social contacts
- Quicker justice/law enforcement services
- Better access to fishing/hunting/trapping territories