

The NTS 1:50,000 Maps Project:

Building digital tools for
open access to Canada's
historical topographic
maps and data

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The 1:50,000 Maps Collection

- National map series
 - Canada-wide coverage
 - 1948 - present day

- Produced by Natural Resources Canada
- Over 30,000 maps total
- Each map covers approx. 1,000 square kilometres
- Collections held by most universities in Canada, public libraries, archives
 - Often regional coverage only
 - Most collections are print only

Project Background - 2010 to 2022

- Started as a shared map inventory project (c. 2010)
 - Cross-institutional participation
- ACMLA digitization funding proposal (2017)
- Digitization of map collection by McGill Libraries (2018-2020)
 - ~28,000 map sheets
 - Digitization done on-site by Ristech, using existing shared inventory for metadata
- Delivery sent to Canadiana and UTL/SP (2020)
- Georeferencing of Ontario maps, release in GeoPortal by UTL (2020-2021)

- Georeferencing of Canada-wide maps by UTL/McGill (2021) ● [online Canadiana collection](#) (2022) ● [1:50K Historical Topographic Maps, Data & GIS](#) collection released (2022) ● Ongoing georeferencing of 1st edition maps covering rural areas & north (2022-)

Research Uses

Digitization & georeferencing opens these maps to new research uses

- New editions are published every few years (varies by sheet), making the maps an excellent resource for tracking change over time
- Level and type of detail also varies
 - Cities & administrative boundaries (including reserve boundaries)
 - Buildings, schools, churches, roads, bridges, rail lines, industry, commerce, mining
 - Terrain, land formation, spot height,





“Map collections like these that map out an area over time and are georeferenced to overlay over current geographies, truly allow us to uncover and trace the land and its changing natural and human-made features, lost over time due to urban development,”

says Marcel Fortin, Head, Map and Data Library, University of Toronto Libraries, who partners with and supports several Historical GIS projects including the Lost Rivers of Toronto and the "Changing the Narrative: Connecting Indigenous and Settler Histories at Black Creek Pioneer Village" projects.

Current national coverage



Multiple Access Points



Historical National Topographic System (NTS): 1:50,000 Scale Maps, Data, & GIS [Project Website](#)

[Scholars Portal Datasets](#) > [Historical National Topographic System \(NTS\): 1:50,000 Scale Maps, Data, & GIS](#) >

St Marys Ontario. 1:50,000. Map Sheet 040P06, ed. 4, 1985

[Dataset ID](#)



Government of Canada; Army Survey Establishment, 2821. 'St Marys Ontario. 1:50,000. Map Sheet 040P06, ed. 4, 1985'. <https://doi.org/10.5883/SP0FKG2T>, Scholars Portal Datasets, V1

[Cite Dataset](#)

[Learn about Data Citation Standards](#)

Description

This is a georeferenced raster image of a printed paper map of the St Marys, Ontario region (Sheet No. 040P06), published in 1985. It is the fourth edition in a series of maps, which show both natural and man-made features such as relief, spot heights, administrative boundaries, secondary and side roads, railways, trails, wooded areas, roadways including lakes, rivers, streams and rapids, bridges, buildings, mills, power lines, terrain, and land formations. This map was published in 1985 and the information on the map is current as of 1982. Maps were produced by Natural Resources Canada (NRCan) and its preceding agencies, in partnership with other government agencies. **Please note:** image / survey capture dates can span several years, and some details may have been updated later than others. Please consult individual map sheets for detailed production information, which can be found in the bottom left hand corner. Original maps were digitally scanned by McGill Libraries in partnership with Canadians.org, and georeferencing for the maps was provided by the University of Toronto Libraries and Eastview Corporation, (2021-11-09)

Subject

Earth and Environmental Sciences

Scholars GeoPortal

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anytime

Downloadable content only

St Marys Ontario. 1:50,000. Map Sheet 040P06, ed. 4, 1985

Dataset ID

0 Download



Borealis datasets provide DOIs and links to GeoPortal for further exploration and analysis

Exploration & Analysis

- Discover maps by region
 - Index map with dynamic map



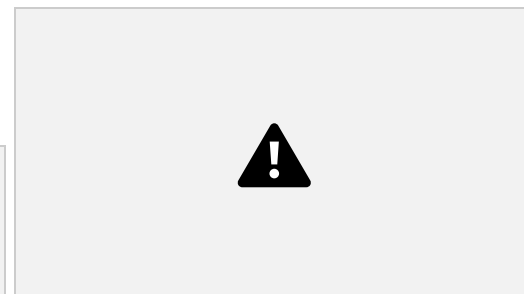
display

- Georeferenced maps & GIS data provided for research reuse
 - JPG Image File
 - ISO 19115 Metadata
 - GeoTIFF Dataset
 - Control Ground Points (CGPs)
- Overlay historical maps on current basemap as web map tiles (GeoPortal support only)
- Explore changes over time and embed in local research environments (e.g. ArcGIS Online)

Demo Time!

- [1:50K map index](#)
- [North Vancouver \(East\), B.C. 092G06, ed. 1, 1949](#)
 - [Southesk Lake, Alberta 083C11, ed.1, 1955](#)

Advisory Group and National Collaboration



Next Steps

- Continue with remaining first editions for all of Canada, including rural areas and the North
- Ongoing discussion about a national infrastructure to support historical maps in libraries
 - Eye to reinvestment in the Scholars GeoPortal infrastructure
- Enhance discovery of the maps through integration in national research data discovery systems such as the Federated Research Data Repository's Discovery Service and library catalogues

Questions? Get in touch

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