

Targeted Geoscience Initiative III

Geoscience ... “mapping to help sustain the reserves of base metals in established mining communities”

TGI 3

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Targeted Geoscience Initiative



- **TGI 1 (2000-03)**
 - Public geoscience focused on the Mining sector
- **TGI 2 (2004-05)**
 - Focused on Northern Canada and Energy issues
- **TGI 3 (2005-10)**
 - Focused on base metals in existing mining communities



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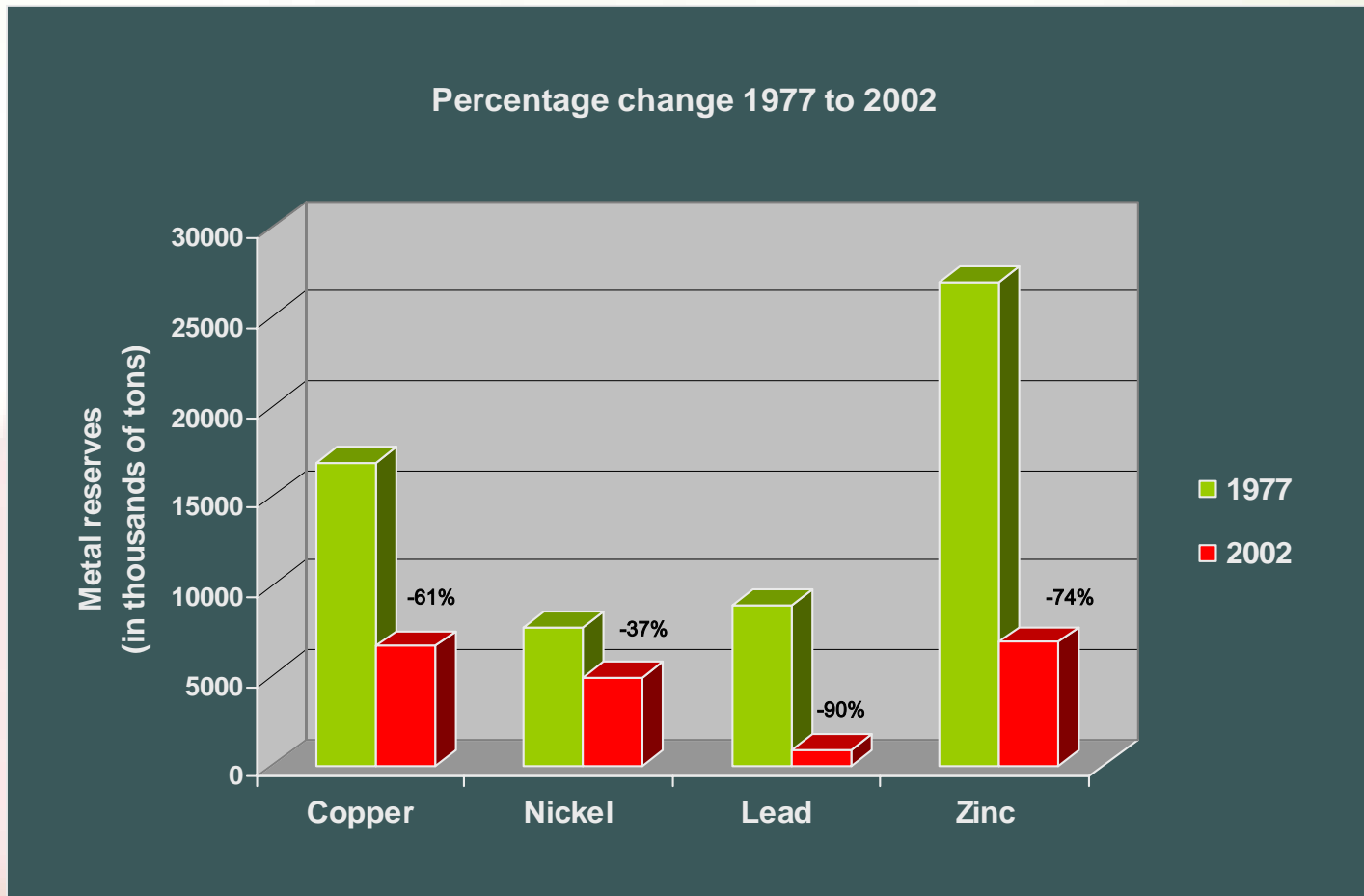
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The issue for Canada ...

... declining base metal reserves



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The issue for Canada ...

... declining base metal reserves



Economies of resource-based communities are vulnerable because of declining base metal reserves



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TGI renewal = TGI 3



- Federal budget renewed the Targeted Geoscience Initiative (TGI 3) for **\$5million/yr for 5 years = \$25 million**
- TGI 3 Objective as per Budget 2005:
“... focused on mapping to help sustain the reserves of base-metals in established mining communities”



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Definition of “Mapping”

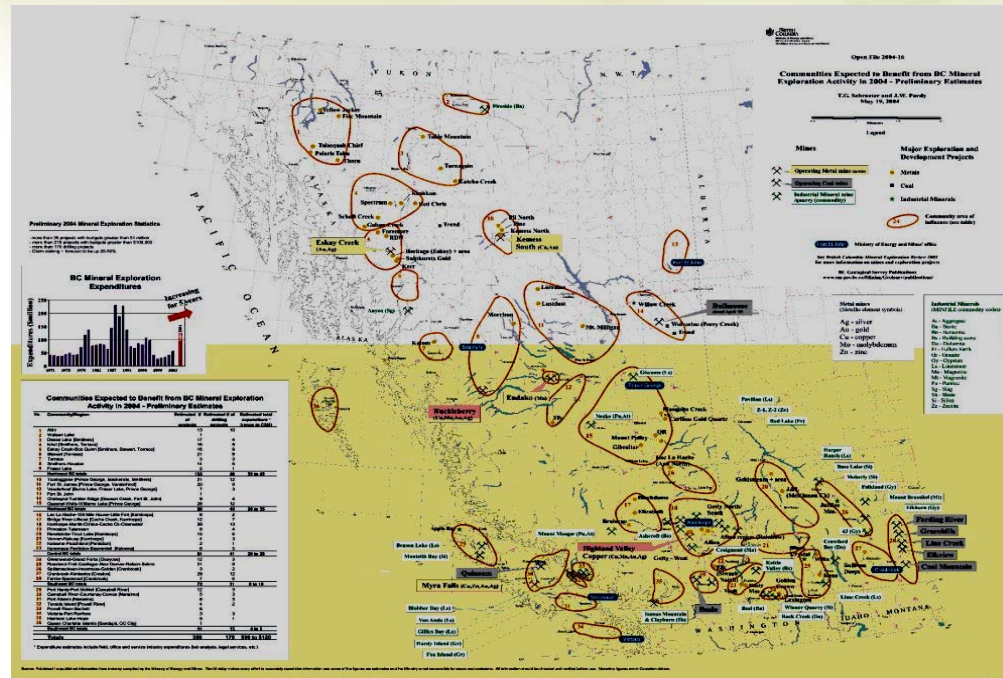


- Any spatially systematic geoscience activity in the fields of geology, geochemistry and geophysics including:
 - **Compilation**
 - **New mapping**
 - **“Deep-Search” methods for hidden deposits**
 - **3D “knowledge cubes”**



Definition of “Mining Community”

TGI 3



- Economic spheres of influence
- Districts rather than individual communities
- Exploration, mining, processing



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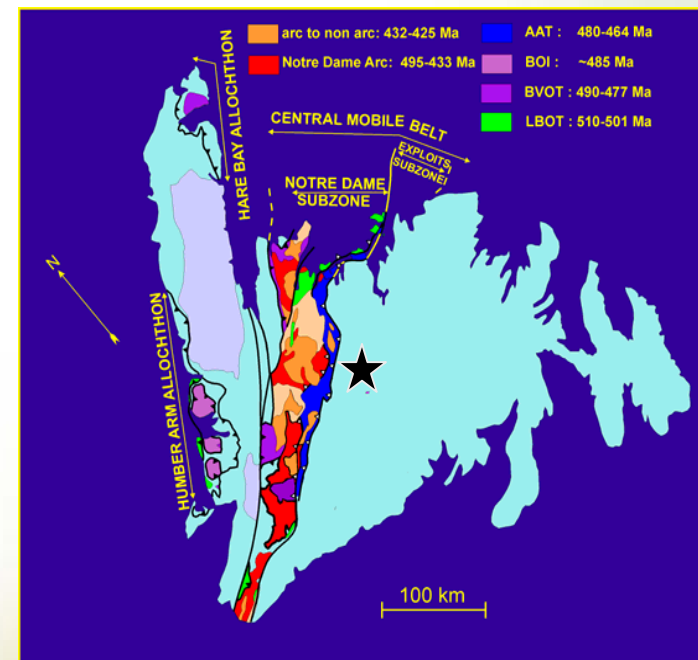
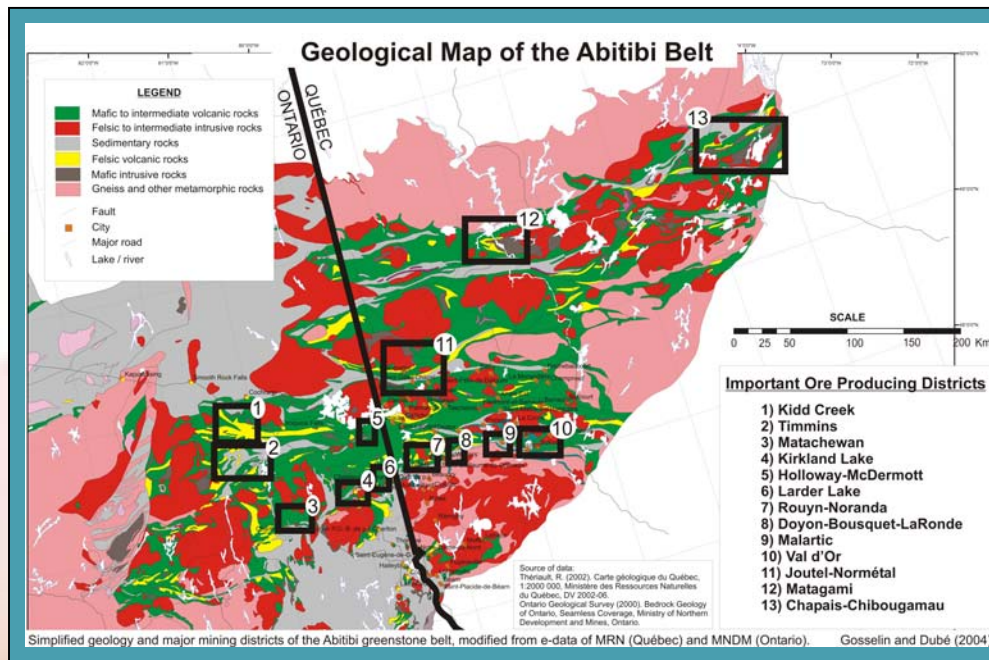


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Definition of “Mining Community”



- Rather than individual communities, TGI 3 projects can be defined in terms of **geological domains** that contain one or more **mining districts**.



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2-Track Program



Outcome

More effective exploration due to increase in HQP



Training HQP

Increased discovery rate due to improved information base



3D Geoscience



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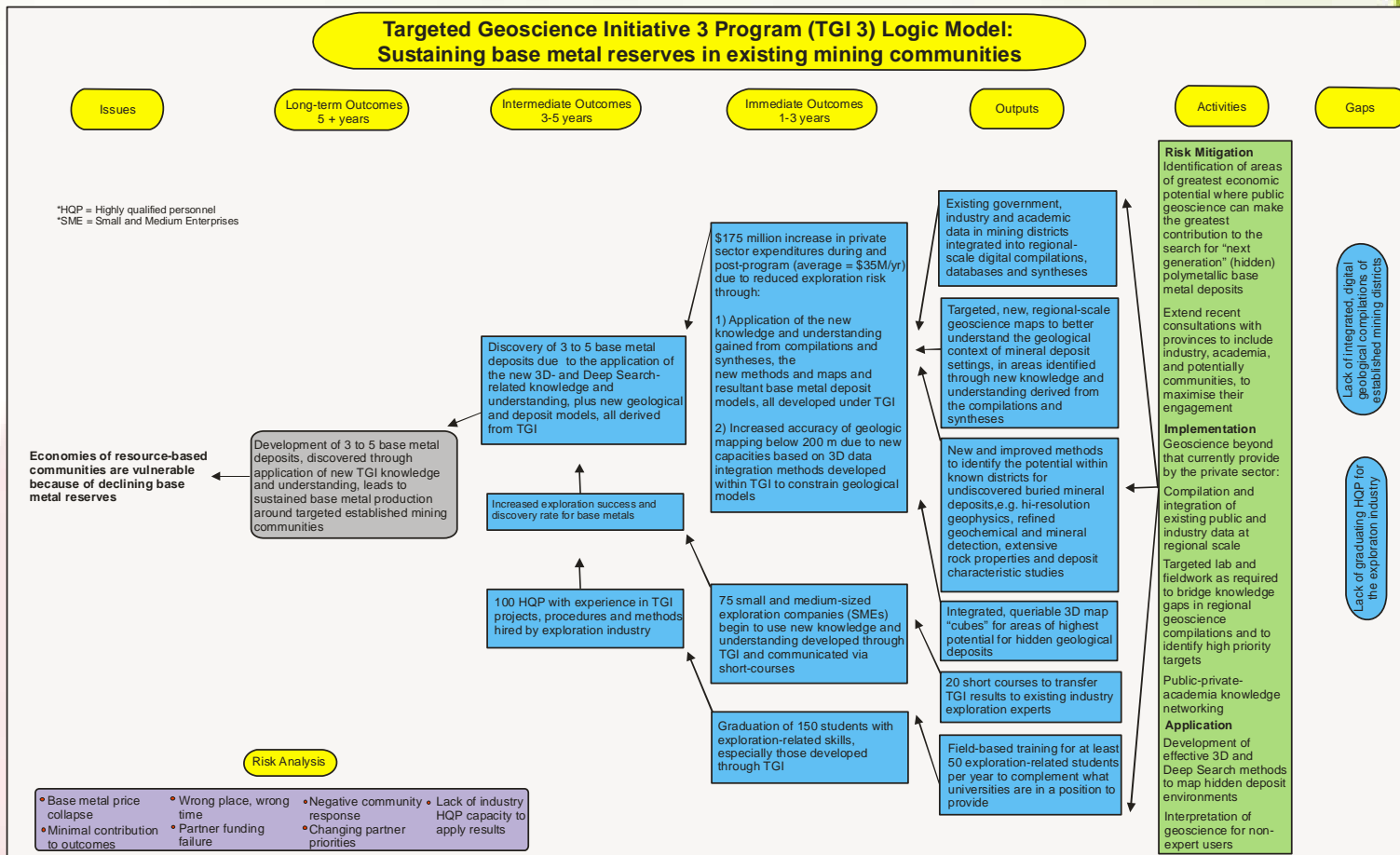
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Program Logic Model ...

What does it mean? What is its value? – Accountability!



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Outcome metrics ...



Immediate 1-3 years

- 75 junior exploration companies use new knowledge and understanding in exploration strategies
- 150 students graduate with increased exploration-related skills

Intermediate 3-5 years

- 100 HQP with TGI experience/exposure hired by the exploration industry
- \$175 million increase in private sector expenditures
- 3-5 new base metal deposits found due to application of TGI knowledge/methodologies

Long term: Development of 3-5 deposits leads to sustainable base metal production around targeted established mining communities



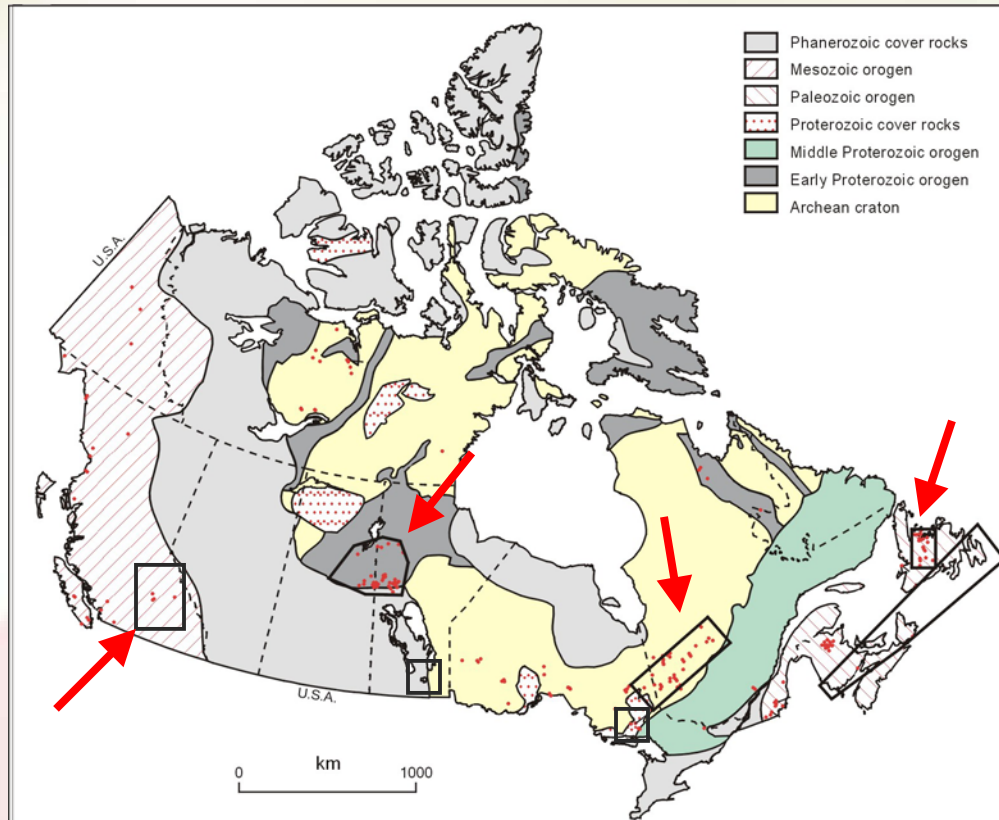
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Project areas discussed ...



- Dunnage Zone (VMS)**
- Avalon (Cu-Au)**
- Abitibi (VMS, Ni-Cu, Cu-Au)**
- Sudbury (Ni-Cu-PGE)**
- Bird/English River (Ni-Cu)**
- Juvenile THO (VMS, Ni-Cu, IOCG)**
- Southern BC (SEDEX, VMS, Cu-Au)**



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Governance ... potential model



Structure of the TGI Advisory Committee



*National
Steering ...*

Project ...

Structure of the TGI Project Committee



Provincial Cooperation Committees



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TGI 3 schedule ...



- *Treasury Board submission* 
- *TGI 3 strategy paper submission to ESS EXCOMM* 
- Project Planning  
- *Supplementary Estimates ...*
- *NRCan support now* 



TGI3 Summary ...



Issue

Economies of resource-based communities are vulnerable because of declining base metal reserves

Outcomes

- **\$175 million increase in private sector expenditures**
- **Development of 3-5 deposits leads to sustainable base metal production around targeted established mining communities**



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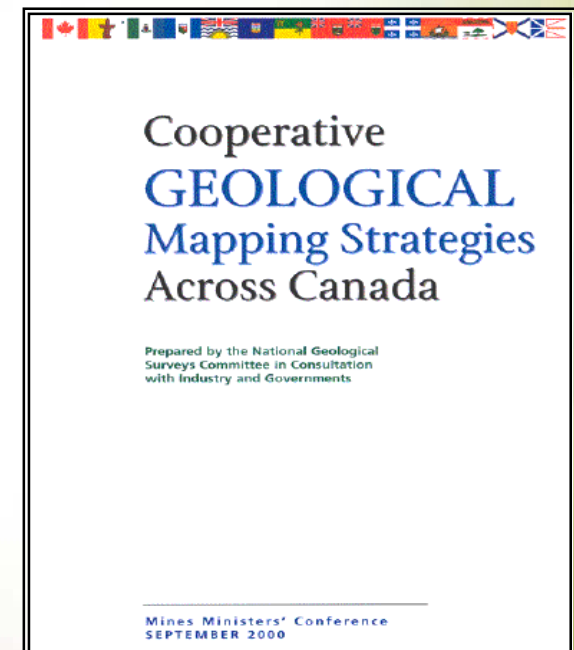


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Cooperative Geological Mapping Strategies Across Canada



- A **National** public geoscience initiative proposed jointly by the **National Geological Surveys Committee (NGSC)**
 - To renew the public geoscience knowledge base that is one of Canada's **key competitive advantages** in attracting investment in mineral and energy resource exploration
 - To support the **responsible development of Canada's natural resources** for the benefit of all Canadians



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Public Geoscience ...



- **A modern geoscience knowledge base enables Canada to attract mineral investment**
- **Geoscience stimulates enormous social, economic and fiscal returns for both communities and governments**
- **Geoscience knowledge provides other benefits, including**
 - Training a future generation of explorationists
 - Reducing technical and regulatory risks
 - Informing protected area strategies
 - Contributing to Canadian sovereignty and security
 - Providing environmental base-line information
 - Informing land use and land claim decision-making

