

# Understanding the Early Years

Building knowledge, mobilizing community & inspiring action to help children & communities thrive.

KAMLOOPS, BC

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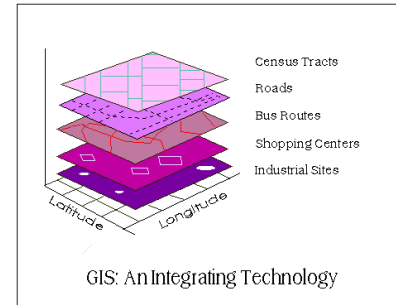
## Geographic Information Systems (GIS) for Early Childhood Development



The health and human service problems facing the world today exist in a geographic context and understanding issues ranging from population demographics to how socio-economic status relates to a child's early development requires a comprehensive understanding of their geography.

Geographic information systems are systems capable of:

- Integrating
  - Storing
  - Managing
- information that is referenced to the earth.



### Why use GIS for Early Childhood Development?

The visual display of information through a map can reveal patterns and relationships that may not be apparent in tabular displays. Therefore, maps produced in GIS provide information that can facilitate planning by community organizations and even preliminary marketing strategies for new programs and services within a neighbourhood and/or community. Displaying features like locations of public facilities in relation to proposed projects can add a new dimension to decision making including the ability to monitor and identify community problems. For example, the Early Development Instrument (EDI) survey started in the Kamloops Thompson School District 73 in 2003 and has since been surveyed in 2006 providing community organizations an opportunity to identify and monitor areas where children are thriving and where they are not over a three year period. Understanding these trends also offers information to develop policies and plans that support individual and community efforts. A considerable amount of information is collected within the community relating to a child's well-being (i.e., readiness for school, nutrition, family structure, and socio-economic status) and is well-suited for integration into GIS.

*There are several other benefits to using GIS:*

- Engaging community residents and organizations in partnerships through each system of GIS improves data quality and informs research question and analysis.
- GIS requires resources such as data related to natural resources, Census data, and community collected data, thus, necessitating relationships with all levels of government, community advocates and agencies.
- Early Childhood Development organizations such as Make Children First are a perfect example of the partnerships required to support GIS related projects.
- GIS also provides evidence to enforce laws and regulations that protect health and ensure safety in the community.

*Challenges to using GIS*

- It is important to identify those in the community with the capacity to use GIS and recognize that there is a significant commitment required from the community to provide opportunities for training and support as an ongoing process.
- Access to data can be challenging and requires strong relationships and external data that is up to date, clean, coordinated, and integrated with the rest of the information collected.
- The geographic location of the data must be determined. Quite often people focus only on their neighbourhood but in the context of GIS it is important to look beyond the neighbourhood in question in order to gain a better understanding of the community/region.

For additional information on the UEY initiative please contact Val Janz @ 250-554-3134 or for research related inquiries contact Jennifer Casorso @ [jcasorso@gmail.com](mailto:jcasorso@gmail.com).

research brief

Remember GIS is used to inform, educate, and empower people about issues that are important to them as a community and with access and planning it is a powerful tool.