

**Alberta
Early Development Instrument
Community Profile Report
2016 Data Collection**

Mackenzie District



Acknowledgement

We wish to extend our greatest appreciation to all of our partners for their hard work and commitment to the Alberta Early Development Instrument (EDI) Program. A very special thank you to the Early Childhood Coalitions of Alberta as well as Family and Community Support Services Association of Alberta (FCSSAA) and their support staff for everything they do to support dissemination of these reports throughout Alberta's local communities.



To all of the incredible teachers who have committed their time and energy to filling out EDI questionnaires, we express our sincere gratitude. Without you, none of this would be possible.

The Community Profiles use currently available 2016 EDI data.

For more information, please contact Alberta Connects

<https://informalberta.ca/public/service/serviceProfileStyled.do?serviceQueryId=1049614>

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Introduction

The Importance of the Early Years

Healthy child development has been identified by both the World Health Organization and the Public Health Agency of Canada as a powerful social determinant of lifelong health and well-being. The foundation of lifelong health is shaped from the earliest days of life. Early childhood is the period from conception to six years of age when significant development occurs across a range of skill areas including: physical (motor), speech and language, social and emotional, and cognitive and intellectual abilities. Brain architecture can change throughout life; however, in-utero and during the early childhood period, brains are the most sensitive to positive and negative experiences.

Our children's experiences and environment help shape the brain architecture - for better or worse. Early positive experiences are important for healthy development, while early negative environments such as chronic exposure to toxic stressors disrupt healthy development.

The information collected through the EDI supports our understanding of the current state of children's developmental health and facilitates informed decision-making, locally and provincially, that supports positive change for children's developmental trajectories.

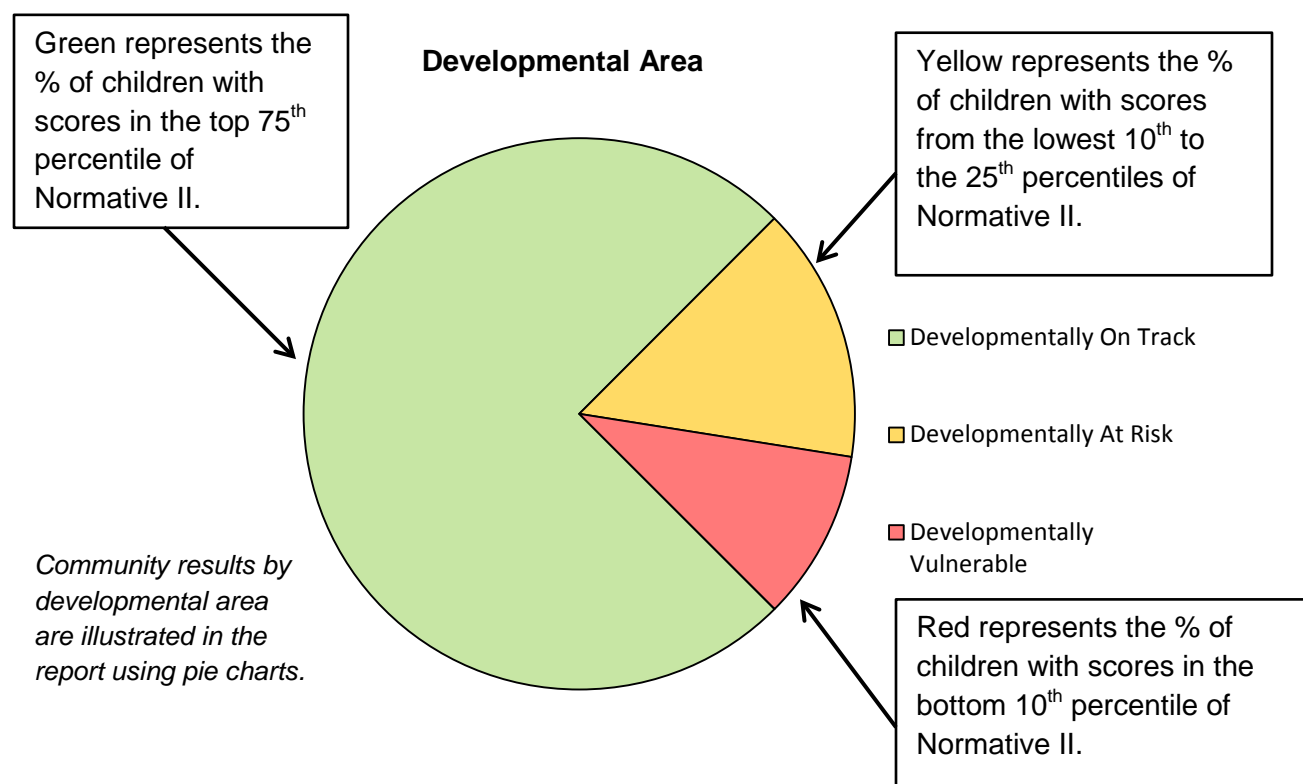


Interpreting Results

EDI data is collected using the Early Development Instrument, a tool to assess children's level of development in their pre-school years. The tool was developed at the Offord Centre for Child Studies at McMaster University. The EDI questionnaire is completed by their teachers, for children attending kindergarten.

Using the teacher's responses, each child is given a score between 0 and 10 for each of the five domains (developmental areas). These individual scores are aggregated and children's scores are assessed as groups at a community and sub-community level. The group's average score is then calculated for each of the five developmental areas. Groups with higher average scores are doing comparatively better; while groups with lower average scores indicate possible concerns.

EDI results shown in this Community Profile Report are calculated using percentiles. The average EDI scores for each developmental area are divided into categories representing the highest scores to the lowest scores in the community. The cut-off for each group is based on a Canadian wide sample referred to as Normative II.



The Report

The EDI Community Profile Report (CR) provides local policymakers and key stakeholders with local-level information on children's developmental outcomes during the kindergarten year. The CR provides information on children's development by community and can be used with other information to explore possible factors contributing to the observed outcomes in children. For the purpose of this CR, communities and sub-communities are based on pre-existing local geographic boundary identified by the community. A map which shows the boundaries for the community and its sub-communities (if applicable) is provided on the next page. Sub-communities are labelled by letter alphabetically (A, B, C, etc.). EDI indicators calculated for community and sub-community level are based on children with valid Alberta postal codes only. 101 children were excluded in the community and sub-community analyses, but they were included in the provincial analysis.

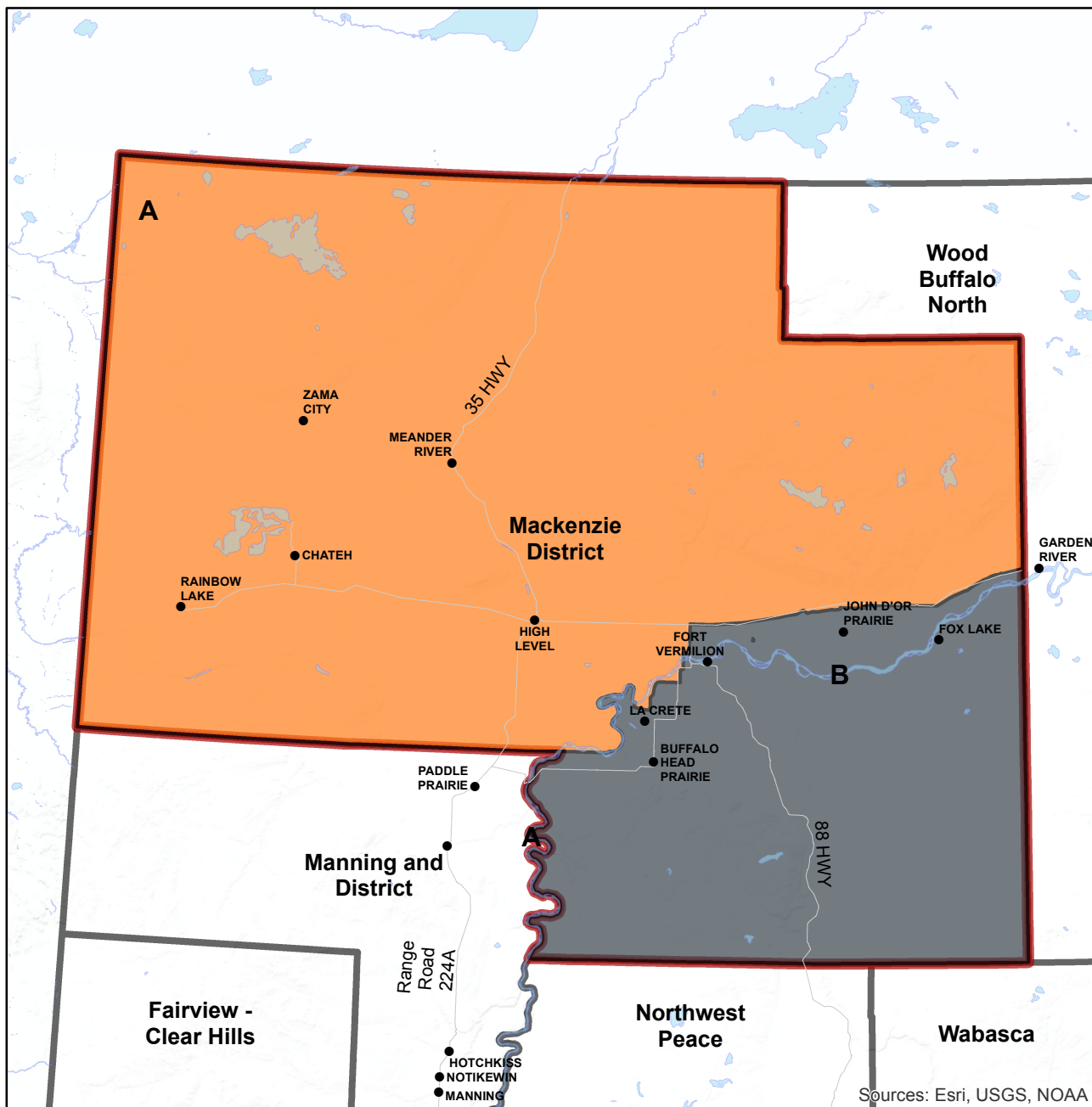
The CR is designed to mobilize and engage local leaders around a data-driven and action-oriented process to inform local planning and improvement activities. It helps early childhood stakeholders look back to assess how to support development for the youngest citizens of the community and to look forward to create community action plans that engage all community members in supporting children to succeed in the early years, throughout the school years and beyond. Over time, the data in the CR can be tracked to help assess the impact of past initiatives and investments made on behalf of young children and families and to demonstrate the importance of allocating resources dedicated to early childhood.

Additional Information and Resources on the EDI in Alberta can be found on the Early Childhood Coalitions of Alberta website at <http://ecdcoalitions.org>

For information on how the EDI has been used in Canada, visit the websites at the Offord Centre for Child Studies at <http://www.offordcentre.com/> and the Human Early Learning Partnership (HELP) at <http://www.earlylearning.ubc.ca>.



Mackenzie District Community & Sub-Community Coalition Map



Sources: Esri, USGS, NOAA

Legend

- Municipalities
- AB Major Roads & Highways
- Lakes & Rivers
- Highlighted Community
- Community Coalition Boundaries



Prepared by the Analytics and Performance Reporting Branch, Alberta Health

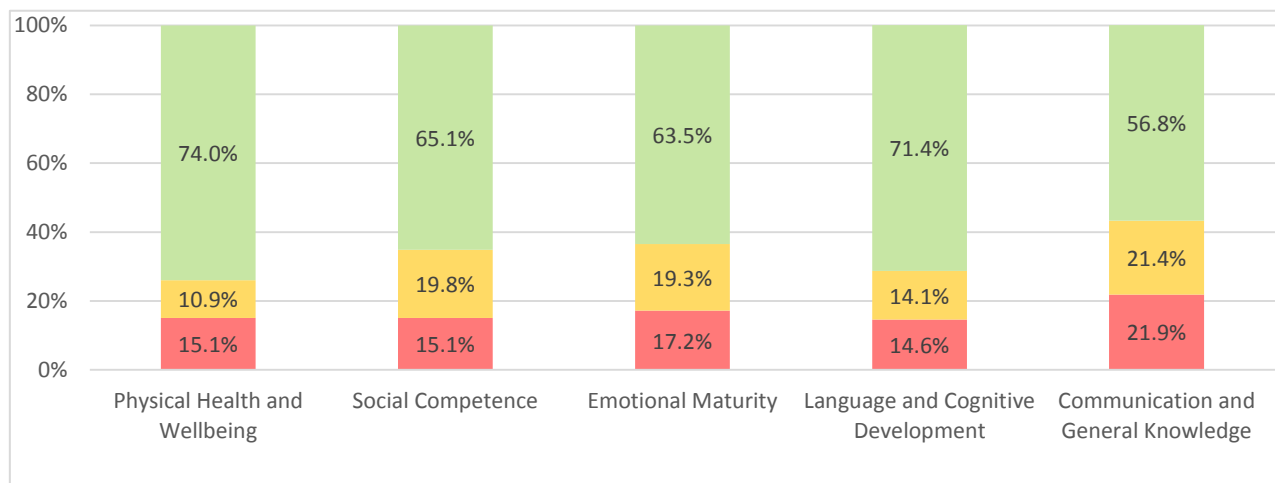
2016 EDI Collection at a Glance for Mackenzie District

In 2016, 282 EDI questionnaires were collected. Of those, 3 children have special needs status (diagnosed disability or delay that requires special assistance) and were not included in this report. Results for children with diagnosed special needs are analyzed separately at the provincial level only. An additional 87 EDI questionnaires have been removed from the community analysis due to not meeting the criteria for inclusion, (eg. missing data, under one month in the classroom, etc.). The CR for Mackenzie District includes 42 EDI questionnaires completed on children for whom English is a second language.

The average EDI scores for each developmental area are divided into the following categories representing the highest to the lowest scores in the community and province:

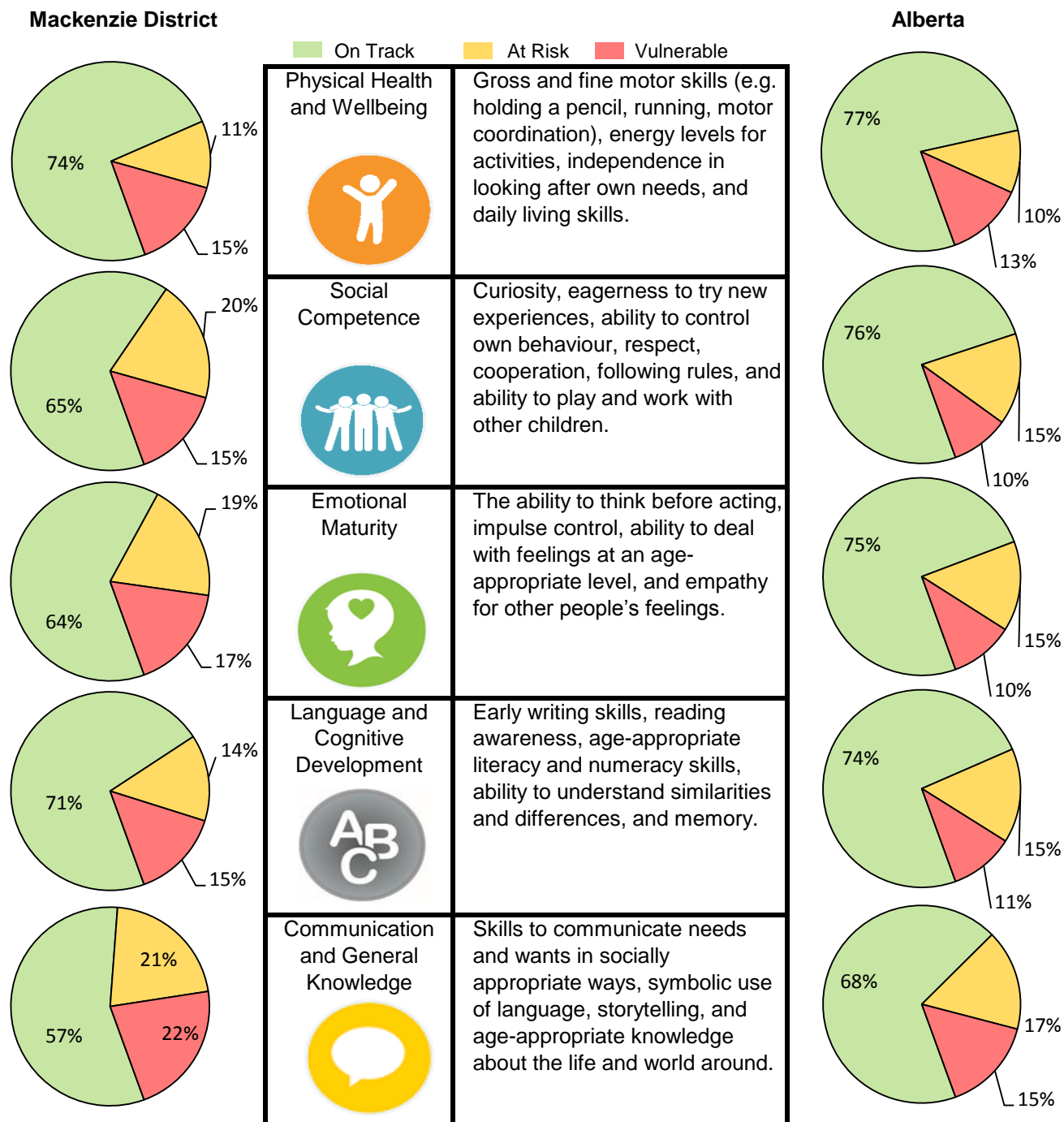
<p>On Track</p> <p>Children scoring in the top 75 percentile of the comparison population (Canadian Normative II). This represents scores that are as expected or higher than expected for their age.</p>	<p>At Risk</p> <p>Children scoring from the lowest 10th to the 25th percentiles. These scores are lower than expected for children at that age suggesting this group is at risk for continuing on a low achievement and health trajectory.</p>	<p>Vulnerable</p> <p>Groups of children who score below the 10th percentile, and are considered vulnerable for problems in later childhood.</p>
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Figure 1: Mackenzie District - All five domains



Participation rates of school authorities varied across Alberta communities for the 2016 collection. EDI results are more representative for communities with higher levels of participation, therefore we encourage communities to consider the number of EDI questionnaires analyzed as well as the estimated number of kindergarten aged children residing within community boundaries. Use discretion when interpreting the EDI results.

Results for each area of development are shown below with the community's results to the left and Alberta's results shown on the right side of the page. When reviewing your community's results in the different areas of development, it is important to keep in mind that they are interdependent and each contributes to a child's overall development.

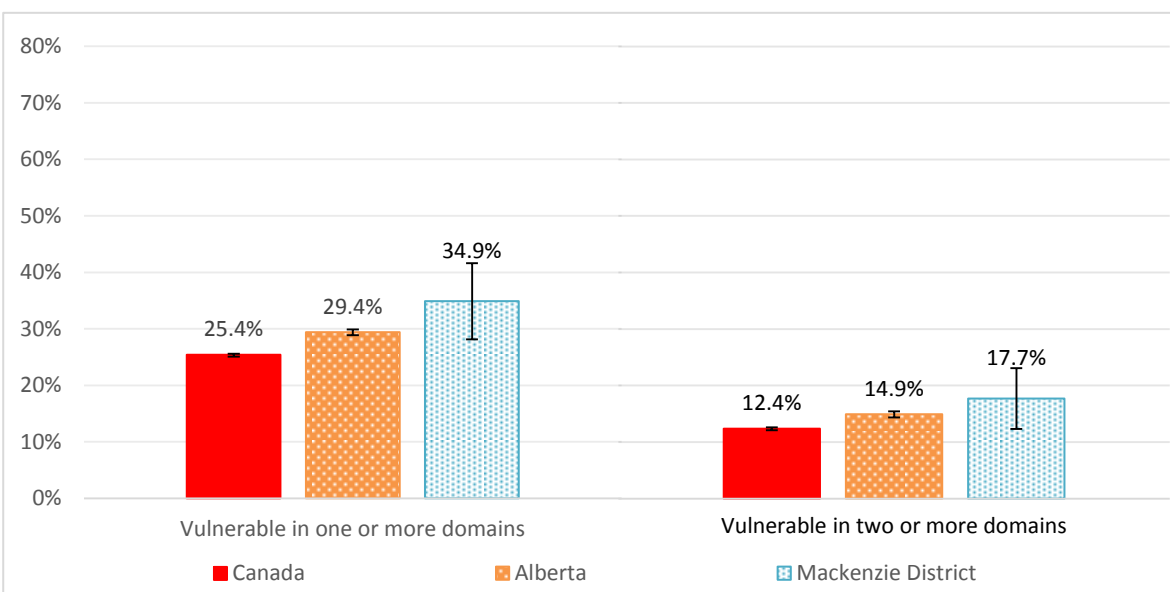


Vulnerability

A child is considered vulnerable when his or her EDI score for an area of development is equal to or lower than the score corresponding to the 10th percentile of the Canadian Normative II for that area of development. The Canadian Normative II is based on a Canada wide sample of 174,799 children. Children who are vulnerable in areas of early development are more likely to face challenges in school learning than those who are not vulnerable. A lower percentage of children considered vulnerable is a positive indicator of healthy development at age 5.

Figure 2 (below), shows a comparison of Mackenzie District, Alberta, and Canada's Normative II results for children vulnerable in at least one or at least two developmental areas.

Figure 2: Vulnerability in one or more, and two or more domains.

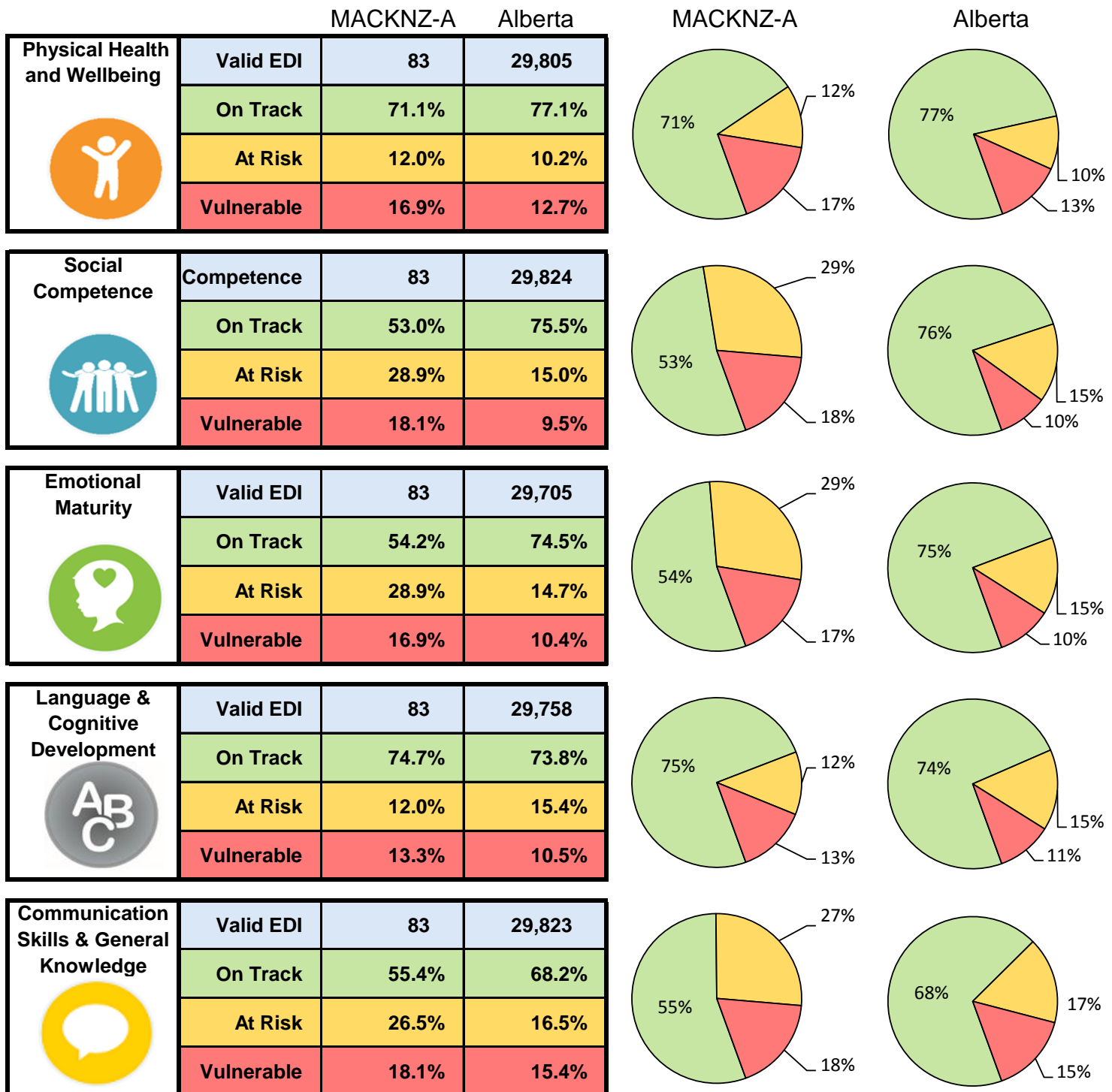


The rate of developmental vulnerability on one or more EDI domains for Mackenzie District is 34.9%, which is 5.5% higher than Alberta's rate. Because the community's confidence interval (28.2% to 41.6%) overlaps with Alberta's (28.9% to 29.9%), the community rate is considered comparable to the Alberta average.

Confidence intervals in the graph are calculated based on observed percentage and sample size. Results from a small sample size will be less stable, and show wider confidence intervals. Larger sample sizes can produce a narrower confidence interval. The interval is a visual representation of the variability that could be anticipated with the result. If the same questionnaire was done again, with another sample from the same population group, you would expect the results to fall somewhere within the illustrated confidence interval.

Comparison of Alberta to Sub-community by Development Area

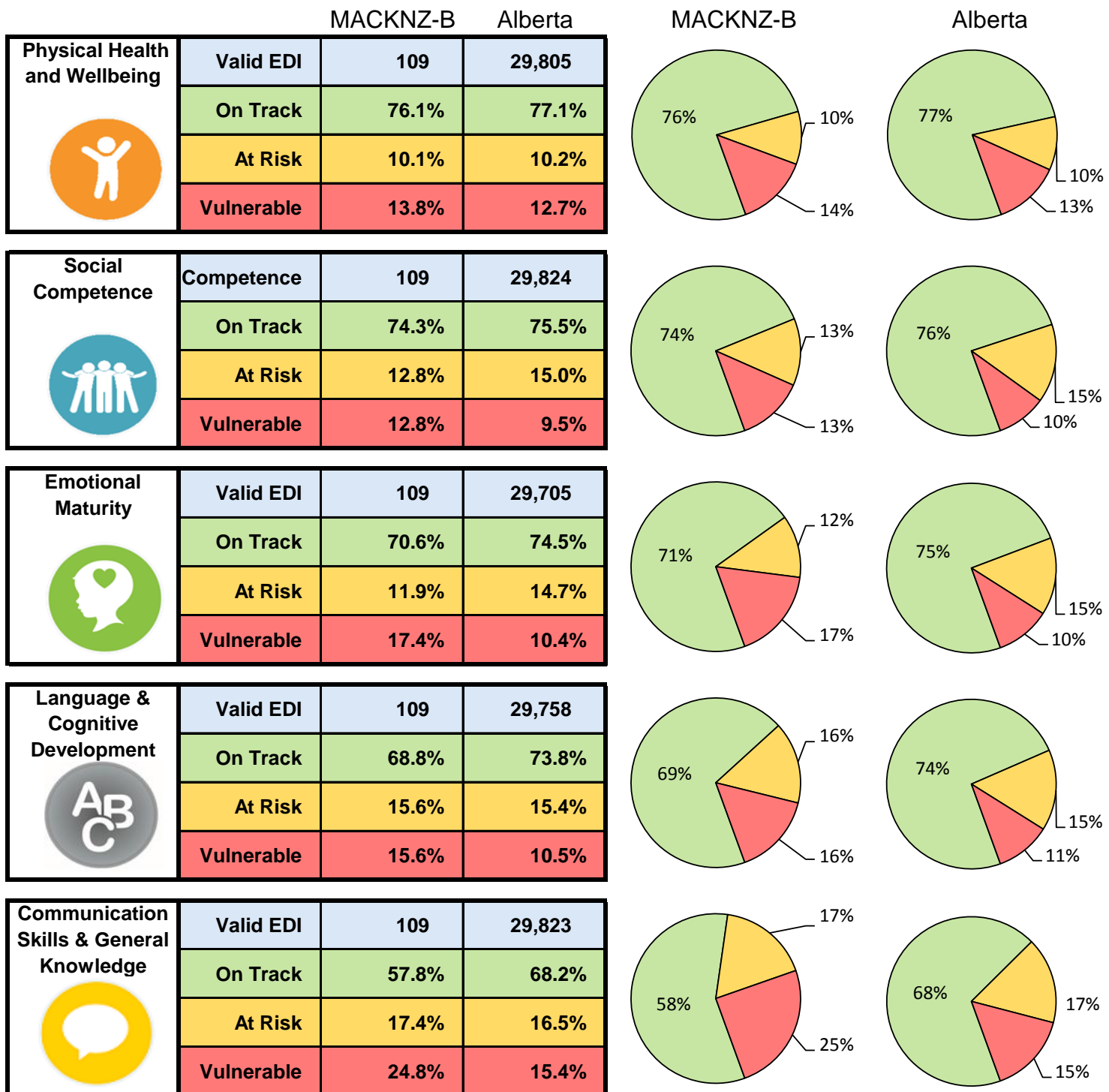
Sub-community boundaries were developed by communities and differ based on decisions made by communities during the Early Childhood Mapping Project (2009-2013). Sub-communities further break down the aggregated data to provide a more geographically detailed picture of early development. Each sub-community is represented by an acronym for the community name and a letter for the sub-community boundary. Their boundaries are illustrated in the community boundary map on page 5.



Note: Distribution of provincial results may not add to 100% due to missing values within a domain.

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