

Ward Boundary Review Analysis

Laura M. Kennedy, Returning Officer The City of Calgary

Date of Release: June 2020

Contents

Acknowledgements3
Project Team3
Executive Summary4
Background4
Minor Review Policy Criteria5
Returning Officer's Role6
Ward Boundary Review Timeframe6
Current Ward Boundaries7
2019 Population Distribution8
2019 Population & Elector Count Deviation9
Methodology10
Scenario A: Proposed Ward Boundaries12
Scenario B: Proposed Ward Boundaries13
Public Engagement14
Engagement Communication14
Recommended Ward Boundaries15
Recommended Ward Boundaries16
Summary of Recommended Ward Boundaries17
Population Deviation Analysis: Recommended Ward Boundaries
Recommended Ward Boundaries: Population Distribution (2019)
Recommended Ward Boundaries:Population Forecast 2024
Additional Data21
Implementation of Approved Ward Boundaries22
Data Sources & Insights23
Appendix A: Concept Scenarios Population Deviation Analyses24

Appendix B: Select Data	26
Community Association Boundaries (2020)	26
Dwelling Types by Ward (2019)	27
Era of Development (2020)	28
Age Cohorts by Ward (2019)	29
Median Total Income by Ward (2015)	30
Highest Education – Trades & Apprenticeship (2015)	31
Recent Immigrants from China (2015)	32
Recent Immigrants from India (2015)	33
Recent Immigrants from Philippines (2015)	34
Recent Immigrants Identifying as Catholic (2011)	35
Persons Identifying as Muslim (2011)	36
Persons Identifying as Sikh (2011)	37
Appendix C: Individual Recommended Ward Maps	38

Acknowledgements

The Returning Officer respectfully acknowledges that the ward boundary review took place on the traditional territories of the peoples of the Treaty 7 region in Southern Alberta, which includes the Blackfoot First Nation tribes of Siksika, the Piikuni, the Kainai, the Stoney Nakoda First Nations tribes of Chiniki, Bearspaw, and Wesley and the Tsuut'ina First Nation. The city of Calgary is also homeland to the historic Northwest Métis and to Métis Nation of Alberta, Region 3.

The Returning Officer acknowledges the many Calgarians who took the time and commitment to learn about the ward boundary review process and provide their input, online and in person.

Project Team

The Returning Officer's Project Team included representation from the City Clerk's Office, Corporate Analytics and Innovation, and Customer Service and Communications.

Executive Summary

In preparation for the 18 October 2021 General Election, the Returning Officer led an independent, minor review of The City's ward boundaries. The Returning Officer's mandate was to develop a scenario aligning with criteria set out in the Ward Boundary Review and Determination Policy CP2019-04 (the Policy), in particular the desire for relatively equal population among wards. Currently, The City's wards have an imbalance of population in Wards 3, 7 and 12.

Through online and in-person engagement, two ward boundary scenarios were shared with the public. These scenarios achieved improved population parity among wards and address other policy criteria. The engagement exercise solicited public feedback on the proposed scenarios and assisted with informing the Returning Officer about important relationships between communities and opportunities to improve current ward boundaries.

Public feedback was considered alongside select data to help refine a more viable scenario, in keeping with the scope of a minor review.

The recommended scenario improves population parity between the wards for the 2021 term of Council, reflects public input and includes boundary changes in alignment with the Policy.

Background

A ward is geographic area of representation created for local electoral purposes. The Municipal Government Act (MGA) enables Council to establish a system of wards within the city.

As set out in Bylaw 19M91, as amended, the city is currently divided into 14 wards, each represented by a City Councillor elected by ward. The Mayor is elected city-wide, representing all Calgarians.

Similar to the review of electoral boundaries federally and provincially, the primary objective of a ward boundary review is to achieve relative population parity, supporting effective representation. Although population parity is the primary consideration when changing ward boundaries,¹ other criteria may be relevant including community association boundaries, accommodating geographical limitations and anticipated growth and ensuring easily identifiable boundaries. A robust program of public engagement is critical to the process. Among other things, participant feedback identifies community interests and relationships between communities as well as forum to guage preference for proposed ward boundary scenarios.

A minor ward boundary review process is an independent process led by the Returning Officer.

¹ Leading case law: Reference re Provincial Electoral Boundaries, [1991] 2 S.C.R. 158.

Minor Review Policy Criteria

Total Population

All calculations will be based on the total population from the most recent civic census. The total population is intended to be relatively equal between the wards and based on allowable deviation from the mean population.

Total Electors

All calculations will be based on the total number of Electors from the most recent Provincial data. The total Elector count is intended to be relatively equal between the wards and based on allowable deviation from the mean total Elector count.

Deviation

The allowable deviation from the mean population or total Elector count is +/-15%. The maximum allowed deviation is +/-25%.

Natural or Physical Boundaries

Wherever possible, the ward boundaries will be easily identifiable to the public by utilizing natural or physical boundaries such as major roadways, escarpments, rivers, parks, etc.

Future Growth

The potential for growth in each ward over the next ten (10) years will be considered.

Communities of Interest

Wherever possible, ward boundaries will ensure communities with common interests or sharing a common roadway access are kept within the same ward.

Community District Boundaries

Wherever possible, the ward boundaries and The City developed Community District Boundaries will coincide.

Community Association Boundaries

Wherever possible, Community Association boundaries will also be given consideration, but it must be noted that these boundaries are not controlled by The City and can change at the decision of the communities involved.

Block Shaped Wards

Wards are to be relatively block shaped.

Returning Officer's Role

Section 6.2.3 of the Policy sets out the role of the Returning Officer in a minor review of ward boundaries:

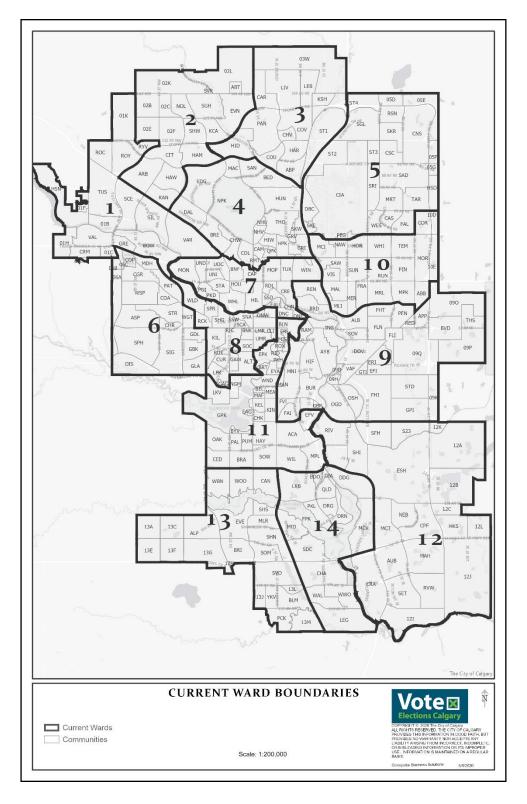
- 6.2.3.3 Develop ward boundary scenarios and other matters directed by Council, in keeping with the criteria identified in this policy;
- 6.2.3.4 Recommend review timelines and a public and stakeholder engagement plan for Council's consideration;
- 6.2.3.5 Obtain public and stakeholder feedback on ward boundary scenarios and other matters directed by Council;
- 6.2.3.6 Provide Council with his or her recommendations; and,
- 6.2.3.7 Review this policy at the conclusion of a review and submit any recommendations for Council's consideration.

The Returning Officer's minor review of ward boundaries is impartial and independent of Council and City Administration.

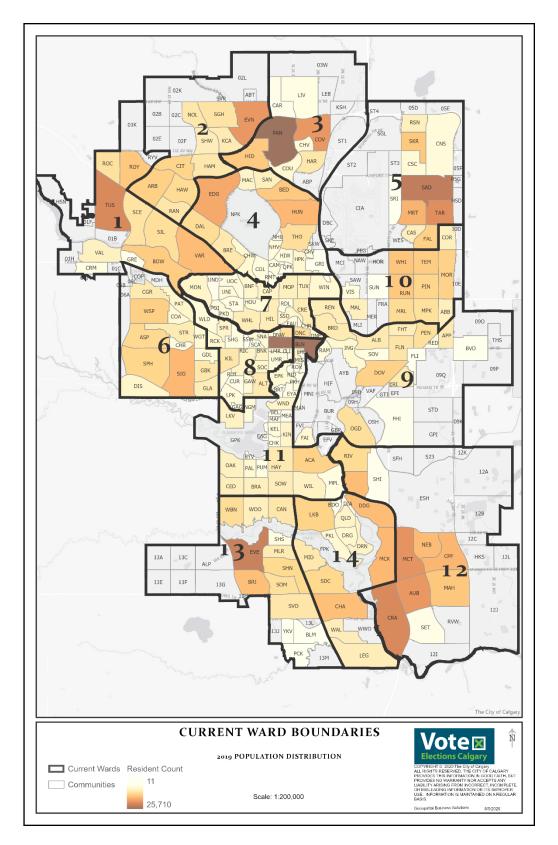
Ward Boundary Review Timeframe

Activity	Timeframes
Develop ward boundary scenarios	December 2019 – January 2020
Obtain participant feedback on ward boundary scenarios	February 2020 – May 2020
Report back to Council with recommendations, including proposed ward boundary maps	June 2020
First reading of bylaw to adopt ward boundaries with non-statutory Public Hearing	July 20 2020
Public notice, opportunity to submit petition regarding ward boundaries	July 2020
Second and third reading of bylaw to adopt ward boundaries	October 2020
Educate electors, candidates and media on changes to ward boundaries	2021

Current Ward Boundaries



2019 Population Distribution



2019 Population & Elector Count Deviation

The Policy provides that the allowable deviation from the mean population and mean elector count is +/-15% and no greater than +/-25%. Data from August 2019 showed the following:

Ward	Year	Population (Source: 2019 Civic Census)	Deviation	Elector Count (Source: Elections Alberta)	Deviation
1	2019	89,254	-2.8	64,150	8.52
2	2019	92,115	0.3	57,207	-3.22
3	2019	70,824	-22.9	44,856	-24.12
4	2019	97,111	5.7	68,010	15.05
5	2019	95,717	4.2	41,628	-29.58
6	2019	91,219	-0.7	62,841	6.31
7	2019	77,280	-15.9	47,576	-19.52
8	2019	92,999	1.3	57,918	-2.02
9	2019	91,695	-0.2	59,436	0.55
10	2019	92,901	1.2	57,801	-2.22
11	2019	100,003	8.9	71,985	21.78
12	2019	110,175	20.0	66,060	11.75
13	2019	91,235	-0.7	60,078	1.63
14	2019	93,183	1.5	68,024	15.08

Population deviations in 9 out of the 14 wards fall within the +/- 15 point range. Wards 3, 7 and 12 exceeded the allowable deviation from the mean population and Ward 5 exceeded the allowable deviation from the mean elector count. Both Ward 3 (-22.9%) and Ward 7 (-15.9%) have experienced limited population growth since the 2017 boundary changes, with the majority of new residential development north of the Bow River occurring in wards 2 and 5. Due to heavy residential development, Ward 12 has a nearly 20-point surplus.

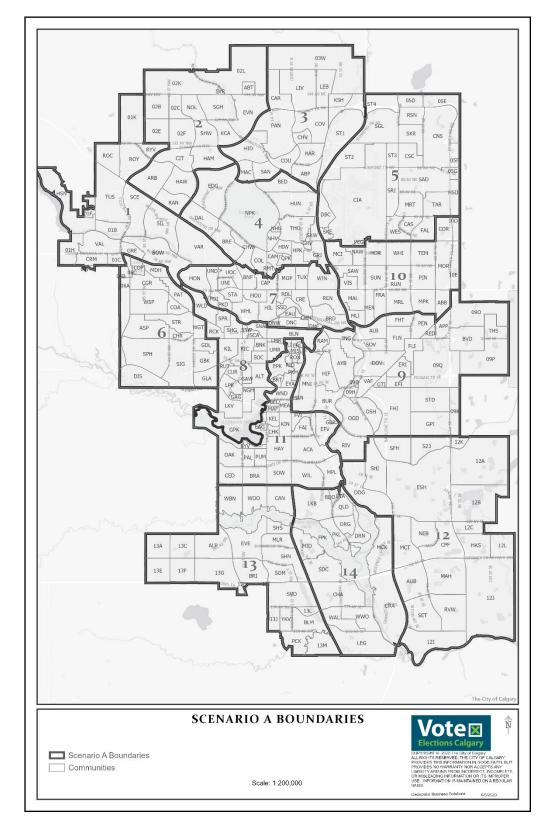
Given that fewer than 7 wards were found to be outside the allowable deviation from the mean population or elector count, as set out in the Policy, on 22 October 2019 Council authorized a minor review of ward boundaries to be led by the Returning Officer.

Methodology

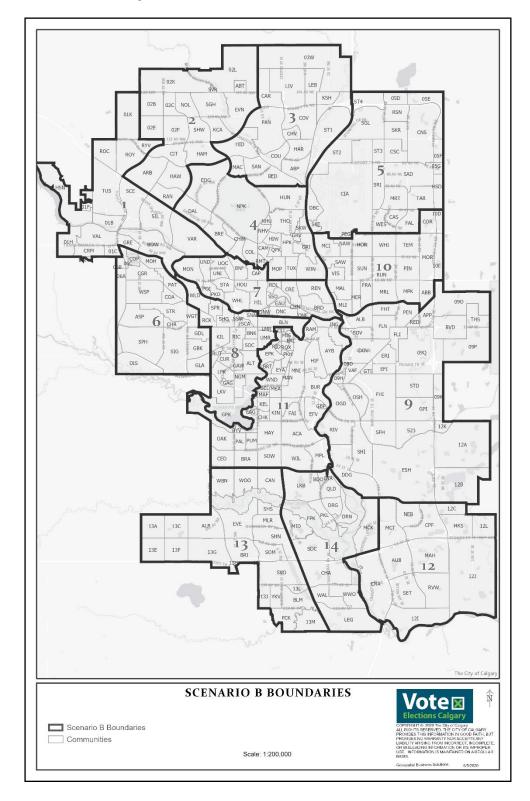
- The 2019 Civic Census was the foundational data set for the analysis, used to identify population and dwelling counts by community, as well as age-based statistics and dwelling-type make up.
- Base map layers such as the aerial photography, street network and hydrography provided context to the location of communities and relative position to natural and physical barriers.
- Elections Alberta data was used for electoral counts. This data was used to calculate the deviation of electors by ward.
- Opportunities to move communities adjacent to Wards 3, 7 and 12 to address population deviation were considered first, to minimize change to existing ward boundaries. Community boundaries were maintained and not split across wards.
- The 2016 Federal Census was used for language, income and education analysis. This analysis comprised of reviewing whether communities of interest were deeply disrupted by any actions taken in the initial adjustments and helped to validate the change was acceptable.
- The 2011 National Household Survey was used for religious affiliation analysis. This analysis comprised of reviewing whether communities of interest were deeply disrupted by any actions taken in the initial adjustments and helped to validate the change was acceptable.
- To support the Ward Boundary Review Analysis, Calgary Growth Strategies provided a custom projection for future growth based on a five year trend (2014-2019). This data was used to approximate expected change and inform how growth would impact deviations under the different boundary scenarios. Population growth was assumed to be distributed 80% to developing areas and 20% to developed areas. This projection is not meant to replace the corporate forecasting in Corporate Economics' Calgary and Region Economic Outlook, which will be released after this report is submitted. The projection also does not take into account COVID-19 related population growth impacts. Finally, the projection does not necessarily align with The City's Scenario Series population and employment forecast, which is in the process of being updated but has not yet been finalized.
- Throughout the process, the Returning Officer and Project Team met regularly to ensure alignment with the Policy and governance of the review process.
- Two ward boundary concept scenarios (Scenario A and Scenario B) were developed. Scenario A incorporates incremental changes and Scenario B incorporates additional changes but is expected to have greater growth resilience based on population projections.
- Deviation analyses for scenarios A and B is found in Appendix A.

Challenges developing concept scenarios included:

- Limited ability to address elector count deviations in Ward 5, given the number of newcomers per household.
- Major roads, rivers, park lands and other geographical features as well as the location of industrial and commercial lands limited the practicality of moving communities to or from neighbouring wards to address population deviation.
- The large size of communities in the city's periphery made it challenging to make moderate changes without negatively impacting the receiving ward's population deviation.
- In some cases, community associations contain up to 5 communities (e.g., Northern Hills) making it challenging to contain community association boundaries in the same ward per Policy objective.



Scenario A: Proposed Ward Boundaries



Scenario B: Proposed Ward Boundaries

Public Engagement

Public engagement on Scenarios A and B occurred between 19 February 2020 and 03 April 2020 through an online survey and in-person events.

Calgary Catholic School District and Calgary School Board trustees represent one or more ward boundary review areas aligned with The City's wards. As a result, both school boards were engaged in the review process and invited trustees to provide their feedback on the concept scenarios through the engage website.

The public engagement process assisted the Returning Officer to identify the strengths and weaknesses of each scenario, scenario preference, important relationships between communities and opportunities to improve current ward boundaries.

Details on the public engagement process including survey responses are outlined in the What We Heard report.

Engagement Communication

To build awareness of the ward boundary review process and encourage citizens to provide feedback on the concept scenarios, a comprehensive communications strategy was developed.

A mix of communications focused on informing all Calgarians of the review work being done, targeting citizens living in areas that were identified as exceeding population deviation, and reaching those that could be impacted by the proposed changes in the two concept scenarios.

Tactics included social media, bold signs, newspaper ads, and using existing networks to promote engagement (e.g., Councillor's offices, Neighbourhood Partnership Coordinators and Federation of Calgary Communities).

Social media content was geo-targeted to reach audiences in affected areas and areas located close to pop-up events as well as by age (adults 18+). As well, bold signs were strategically located in the areas most likely to be impacted by the proposed scenarios.

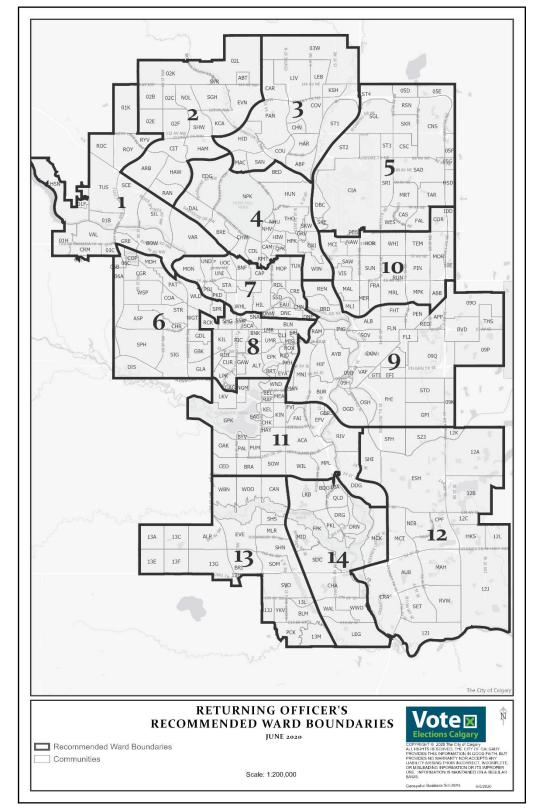
A series of emails encouraging awareness and participation in engagement opportunities were targeted to Calgary community associations. A news release was distributed to The City's media relations contact list, which includes a wide variety of media outlets, including, ethnic media.

Recommended Ward Boundaries

Feedback obtained through the pubic engagement process were discussed and reviewed by the Project Team. Feedback was organized by question, ward and community to identify reoccurring themes and to identify important relationships between communities.

Public engagement feedback further informed criteria used to refine recommended ward boundaries, including:

- The primary objective of the review is to address population balance. This was well understood by participants in the engagement process.
- Some wards contain communities presenting unique challenges for an elected official (e.g., socio-economic considerations in the urban core, infrastructure projects in established and developing areas, presence of special interests and ability to readily access constituents given geographic size of ward). While these are relevant considerations, the requirement to address population imbalance should take precedent.
- Community boundaries should be contained in the same ward. Participants identified that where close relationships exist between communities (e.g., shared interests, activities and facilities, a history of association), the communities should be contained in the same ward. While desirable, the requirement to address population imbalance should take precedent.
- Natural and physical barriers are used to identify ward boundaries, but they are not impermeable, particularly where there is a requirement to address population imbalance. As noted, major roads, rivers, park lands and other geographical features as well as the location of industrial and commercial lands limited the practicality of moving communities to or from neighbouring wards to address population deviation.
- The Policy provides that the total elector count is intended to be relatively equal between wards. This objective is difficult to address through a minor ward boundary review given the size of wards, settlement patterns of newcomers and households with persons under 18 years of age. Elected officials represent constituents regardless of whether they qualify to vote under the Local Authorities Elections Act.
- Boundary changes were reviewed to determine opportunities to support the objective of block shaped wards, were possible.
- Incremental ward boundary changes are preferred. This approach respects the evolution of the ward boundaries created for the 2017 General Election and is in keeping with the typical scope of a minor review of ward boundaries.



Recommended Ward Boundaries

Summary of Recommended Ward Boundaries

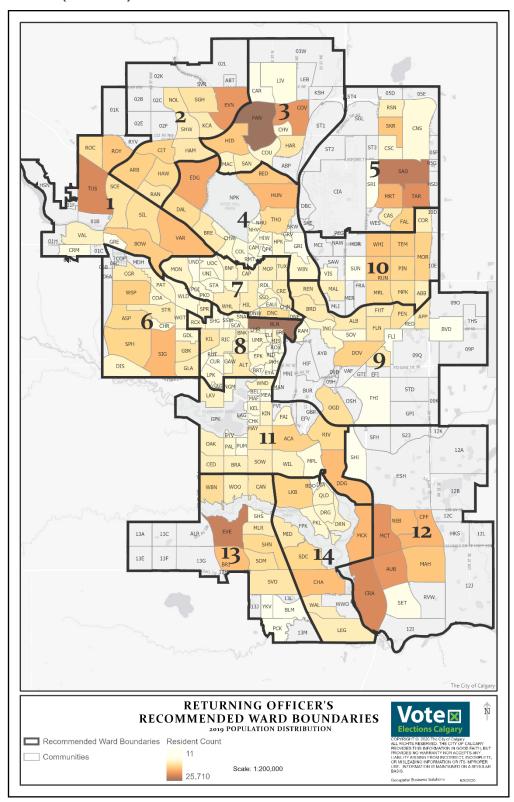
- To adjust the population deviation in Ward 3, MacEwan Glen and Sandstone Valley move from Ward 4 to Ward 3.
- Winston Heights will be fully contained in Ward 4 (currently in Ward 7 and a portion in Ward 4).
- Downtown Commercial Core and Downtown West move from Ward 8 to Ward 7, to reflect a cohesive grouping of inner-city communities, using block formation.
- Beltline (currently split between Ward 8 and Ward 11) are unified in Ward 8. Mission and Elbow Park move from Ward 11 to Ward 8.
- Communities, on the east bank of the Elbow River currently in Ward 11, move to Ward 8 (Britannia, Elboya, Erlton, Parkhill, Rideau Park and Roxboro). Ward 8 also reflects a cohesive grouping of inner-city communities using block formation.
- To adjust the population deviation in Ward 8, Wildwood and Spruce Cliff move from Ward 8 to Ward 6.
- Fairview, Fairview Industrial, East Fairview Industrial, and Glendeer Business Park move from Ward 9 to Ward 11 (establishing Glenmore Trail SE and Deerfoot Trail SE as the boundary between Wards 11 and 9).
- To accommodate projected population growth in Wards 12 and 14, Douglasdale/Douglasglen (currently in Ward 14) and Riverbend/Quarry Park (currently in Ward 12) move to Ward 11. This move also adjusts the population deviation in Ward 11 due to the loss of communities north of 50th Avenue SW to Ward 8. Ward 11 reflects a grouping of established communities, generally using a block formation.
- Split commercial or industrial properties moved into the same ward, in alignment with the Policy:
 - The commercial property bound by 112th Avenue NW and 85th Street NW in Ward 2 moves to the balance of the property in Ward 1; and,
 - Commercial properties on the east side of Barlow Trail NE, north of McKnight Boulevard in Ward 5 move to Ward 10.
- There are no changes proposed to Ward 13.

Population Deviation Analysis: Recommended Ward Boundaries

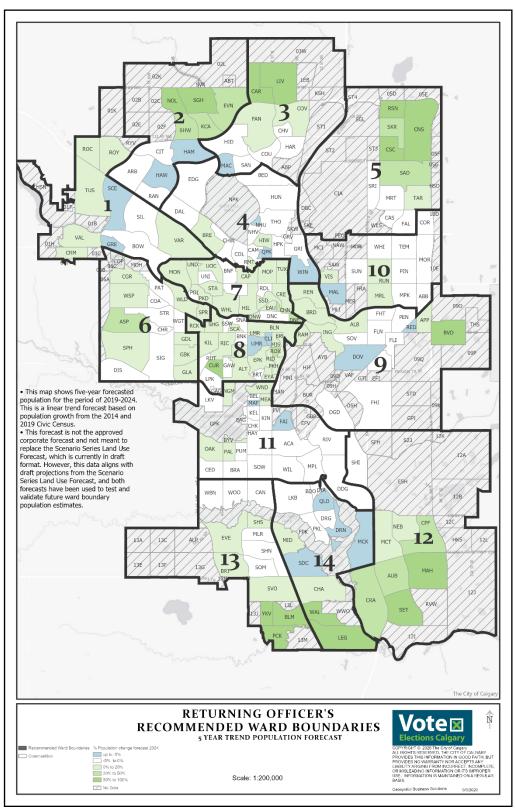
Ward	Population (2019 Civic Census)	Current Deviation (2019 Civic Census)	Recommended Boundaries Population (2019 Civic Census)	Recommended Boundaries Deviation (2019 Civic Census)	Recommended Boundaries Population Projection (2024) *	Recommended Boundaries Population Projection (2024) Deviation *
1	89,254	-2.8	89,254	-2.8	90,977	-9.22
2	92,115	+0.3	92,115	+0.3	112,769	12.52
3	70,824	-22.9	81,482	-11.3	88,029	-12.16
4	97,111	+5.7	89,707	-2.3	91,395	-8.81
5	95,717	+4.2	95,717	+4.2	122,527	22.26
6	91,219	-0.7	98,601	+7.4	103,135	2.91
7	77,280	-15.9	84,399	-8.1	89,217	-10.98
8	92,999	+1.3	97,747	+6.4	104,477	4.25
9	91,695	-0.2	88,049	-4.1	89,340	-10.86
10	92,901	+1.2	92,901	+1.2	94,280	-5.93
11	100,003	+8.9	103,271	+12.5	104,359	4.13
12	110,175	+20.0	96,167	+4.7	122,718	22.45
13	91,235	-0.7	91,235	-0.7	94,411	-5.80
14	93,183	+1.5	85,066	-7.4	95,439	-4.77
Total Population	1,285,711		1,285,711		1,403,073	

*Source: Calgary Growth Strategies (draft projections) from 5-year trend (2014-2019)

Recommended Ward Boundaries: Population Distribution (2019)



Recommended Ward Boundaries:Population Forecast 2024



Additional Data

Select socio-economic and community data associated with recommended ward boundaries is found in **Appendix C**, including:

- Community association boundaries (2020)
- Dwelling types by ward (2019)
- Era of development (2020)
- Age cohorts by ward (2019)
- Highest Education Trades & Apprenticeship (2015)
- Median total income by ward (2015)
- Recent immigrants from China (2015)
- Recent immigrants from India (2015)
- Recent immigrants from Philippines (2015)
- Recent immigrants identifying as Catholic (2011)
- Persons identifying as Muslim (2011)
- Persons identifying as Sikh (2011)

Individual recommended ward maps are found in Appendix D.

Implementation of Approved Ward Boundaries

Following passage of the bylaw to implement ward boundary changes, the Returning Officer will develop voting subdivision maps, critical for planning the 18 October 2021 General Election, as well as information for perspective candidates.

Communicating to Calgarians, school boards and candidates about the changes will be part of the 2021 election communications campaign. Ensuring that the new boundaries are well communicated will be one of the primary objectives of the campaign, particularly with those who are impacted.

It is anticipated that elections communications will include (in addition to many of the traditional means for communications) translated materials, online information and new search tools to help people determine what ward they are in.

Data Sources & Insights

- The 2019 Civic Census and 2016 Federal Census.
- August 2019 elector count extract from Elections Alberta.
- Population growth data was obtained from Municipal Development Plan targets and 5year population growth trends based on the 2019 Civic Census. Calgary Growth Strategies staff were consulted in the interpretation of this data.
- 2011 National Household Survey. Calgary Neighbourhoods (Research and Reporting) were consulted on the interpretation of select socio-demographic data.
- Documentation was obtained from the 2017 City of Calgary ward boundary review and historical City of Calgary ward boundary maps.
- Historical and current aerial photographs revealing the pattern of community development and infrastructure.
- Recent comparable Canadian ward boundary review documentation (City of Edmonton, City of Toronto). Consultation with City of Toronto and City of Edmonton staff.

Appendix A: Concept Scenarios Population Deviation Analyses

Scenario A

Ward	Population (2019 Civic Census)	Current Deviation (2019 Civic Census)	Scenario A Population (2019 Civic Census)	Scenario A Deviation (2019 Civic Census)	Population Projection (2024) *	Population Projection (2024) Deviation *
1	89,254	-2.8	89,254	-2.8	90,977	-9.22
2	92,115	+0.3	92,115	+0.3	112,769	12.52
3	70,824	-22.9	81,482	-11.3	88,029	-12.16
4	97,111	+5.7	86,072	-6.3	87,954	-12.24
5	95,717	+4.2	95,717	+4.2	122,527	22.26
6	91,219	-0.7	91,219	-0.7	95,630	-4.58
7	77,280	-15.9	101,451	+10.5	107,593	7.36
8	92,999	+1.3	96,619	+5.2	103,151	2.93
9	91,695	-0.2	83,876	-8.6	83,705	-16.48
10	92,901	+1.2	92,901	+1.2	94,280	-5.93
11	100,003	+8.9	89,656	-2.3	90,212	-9.99
12	110,175	+20.0	89,164	-3	112,764	12.52
13	91,235	-0.7	91,235	-0.7	94,411	-5.80
14	93,183	+1.5	104,950	+14	119,071	18.81
Total Population	1,285,711		1,285,711		1,403,073	

*Source: Calgary Growth Strategies (draft projections) from 5-year trend (2014-2019)

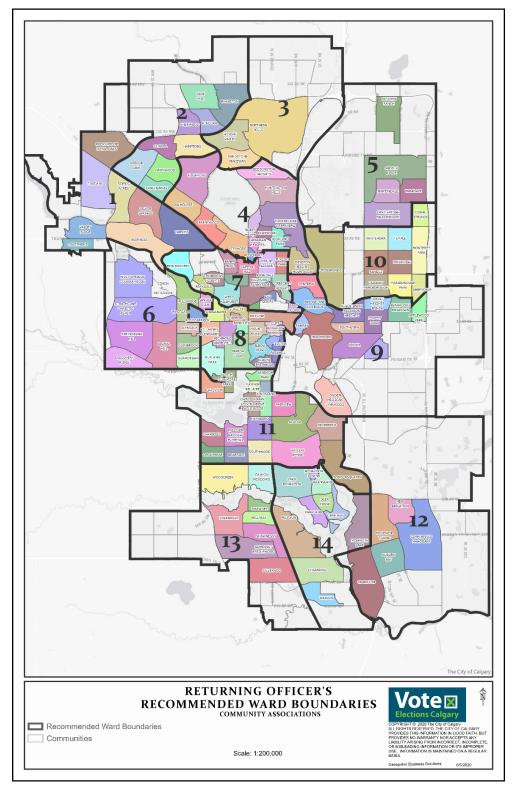
Scenario B

Ward	Population (2019 Civic Census)	Current Deviation (2019 Civic Census)	Scenario B Population (2019 Civic Census)	Scenario B Deviation (2019 Civic Census)	Population Projection (2024) *	Population Projection (2024) Deviation *
1	89,254	-2.8	89,254	-2.8	90,977	-9.22
2	92,115	+0.3	92,115	+0.3	112,769	12.52
3	70,824	-22.9	92,996	+1.3	99,632	-0.59
4	97,111	+5.7	89,408	-2.64	91,462	-8.74
5	95,717	+4.2	95,717	+4.2	122,527	22.26
6	91,219	-0.7	91,219	-0.7	95,630	-4.58
7	77,280	-15.9	86,601	-5.7	92,482	-7.72
8	92,999	+1.3	96,619	+5.2	103,151	2.93
9	91,695	-0.2	89,938	-2	89,985	-10.21
10	92,901	+1.2	92,901	+1.2	94,280	-5.93
11	100,003	+8.9	96,868	+5.5	97,610	-2.60
12	110,175	+20.0	95,774	+4.3	122,718	22.45
13	91,235	-0.7	91,235	-0.7	94,411	-5.80
14	93,183	+1.5	85,066	-7	95,439	-4.77
Total Population	1,285,711		1,285,711		1,403,073	

*Source: Calgary Growth Strategies (draft projections) from 5 year trend (2014-2019)

Appendix B: Select Data

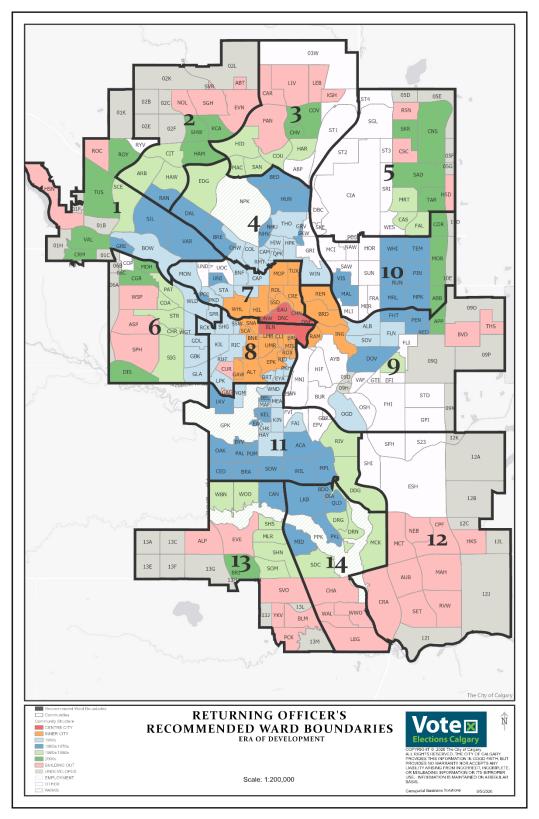
Community Association Boundaries (2020)



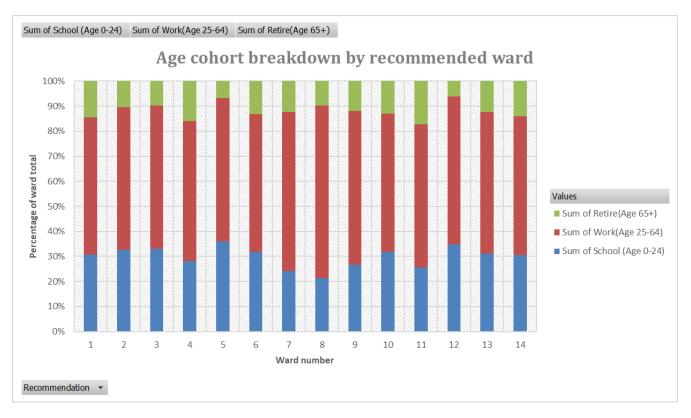


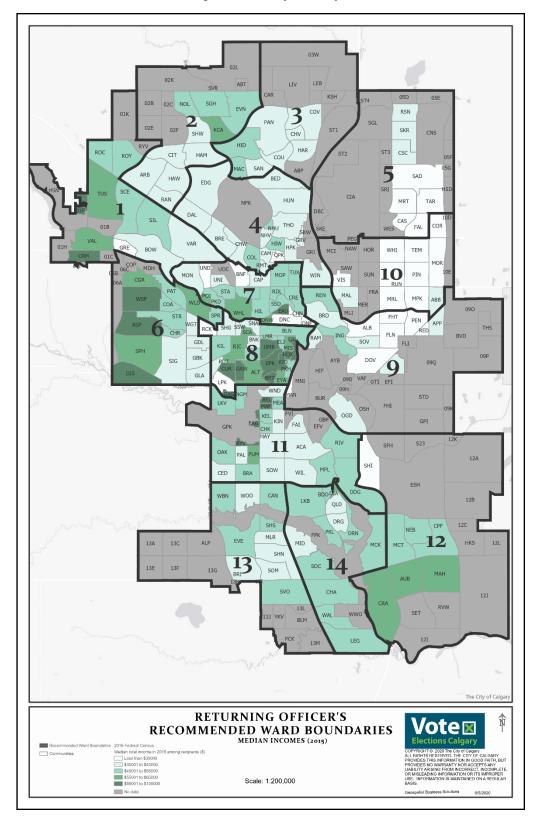
Dwelling Types by Ward (2019)



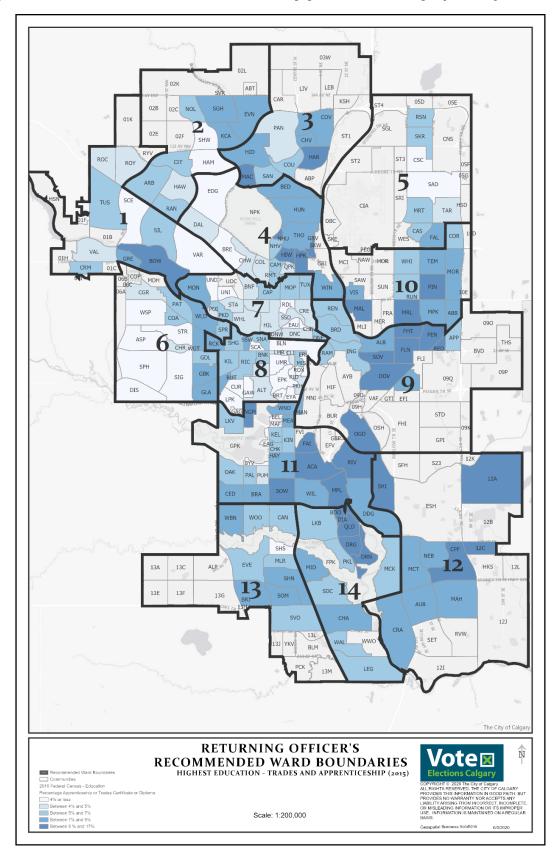


Age Cohorts by Ward (2019)

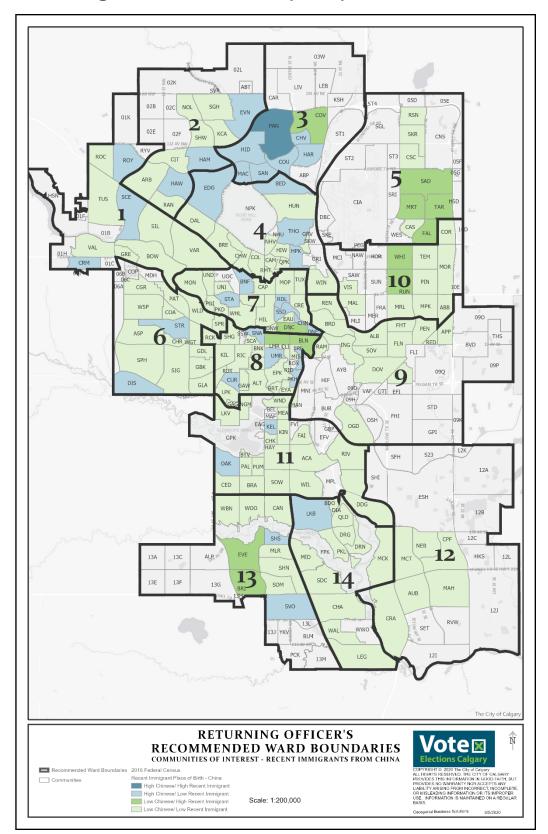




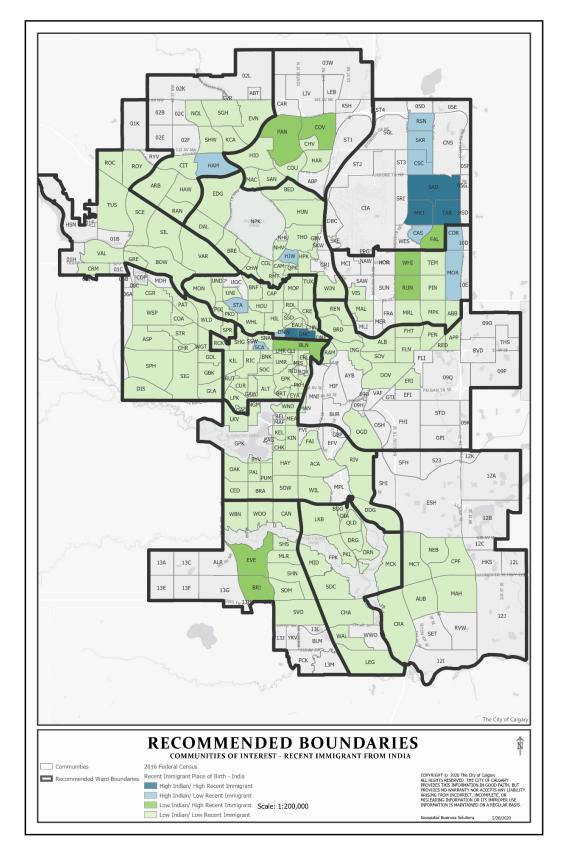
Median Total Income by Ward (2015)



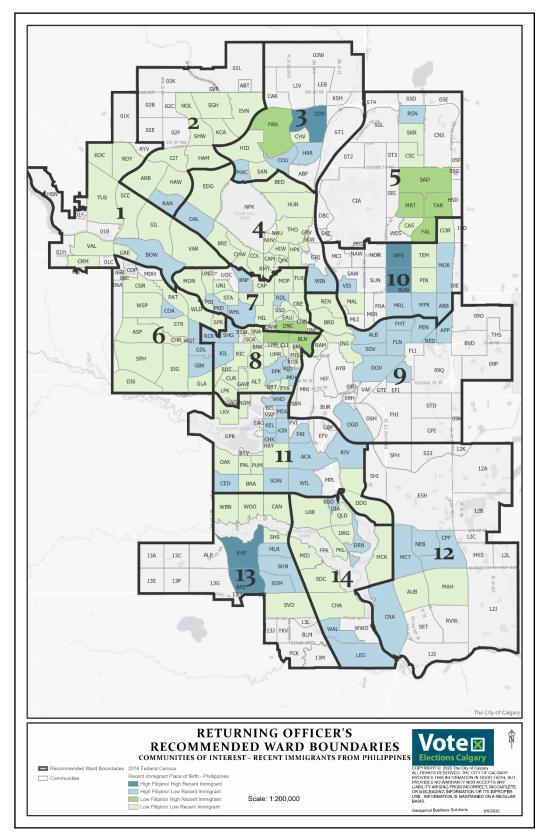
Highest Education – Trades & Apprenticeship (2015)



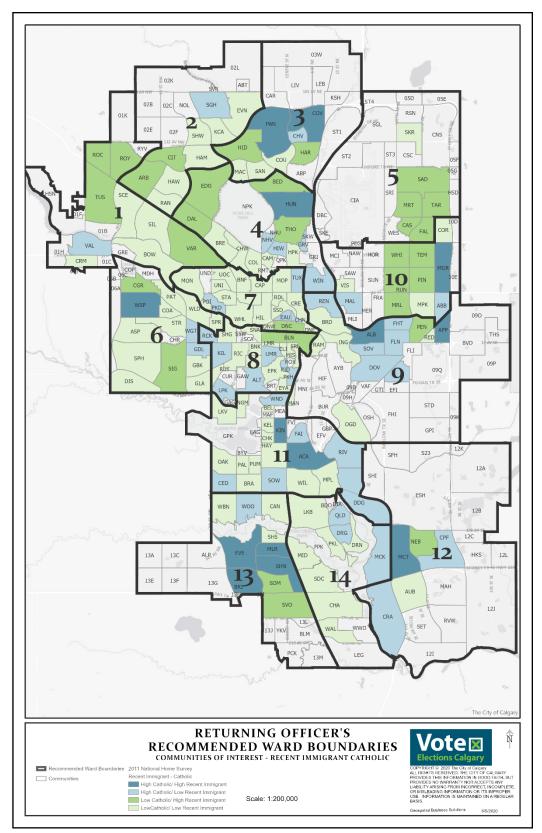
Recent Immigrants from China (2015)



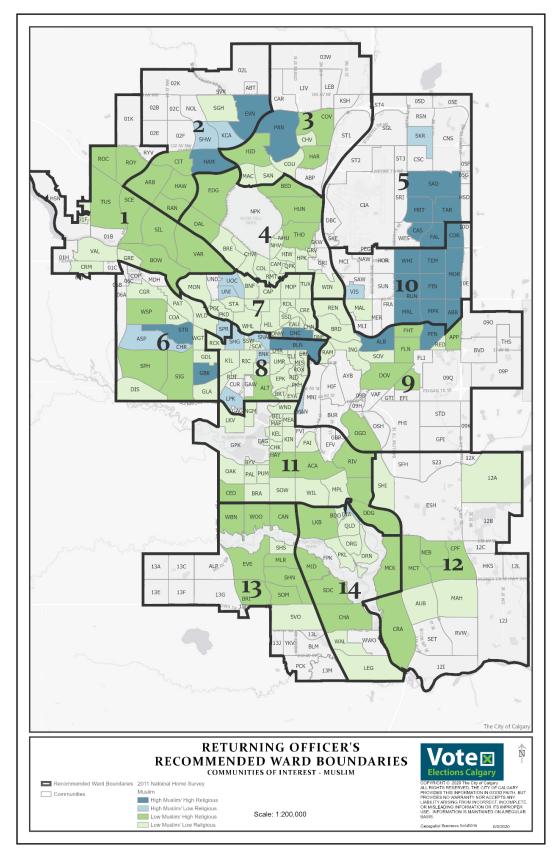
Recent Immigrants from India (2015)



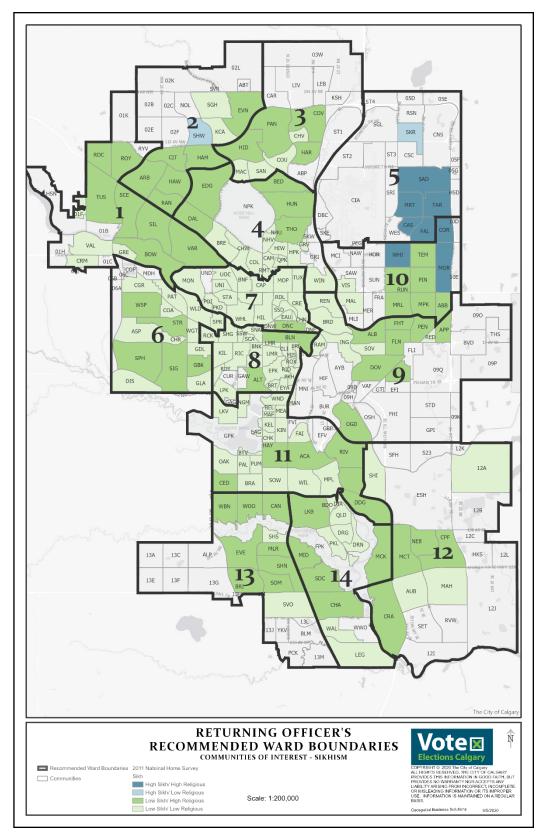
Recent Immigrants from Philippines (2015)



Recent Immigrants Identifying as Catholic (2011)

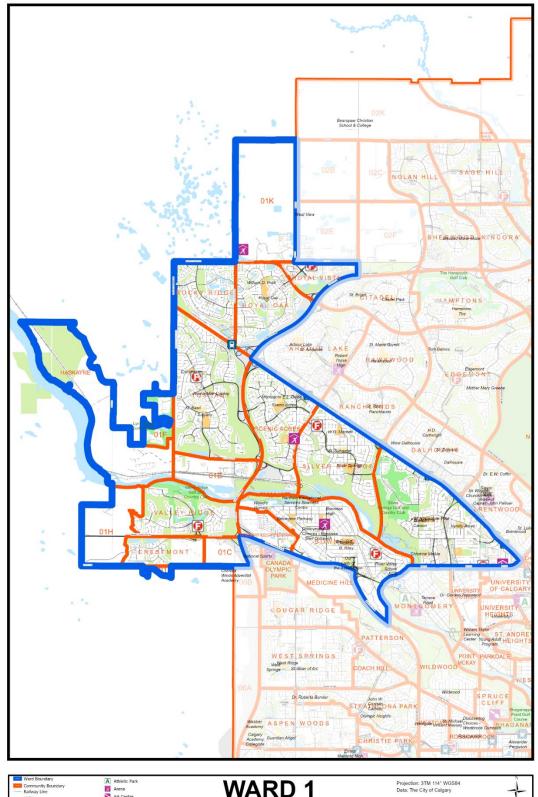


Persons Identifying as Muslim (2011)



Persons Identifying as Sikh (2011)

Appendix C: Individual Recommended Ward Maps



Ward Boundary Community Boundary Railway Line LRT Line	Athletic Park Arena Art Centre	WARD 1	Projection: 3TM 114* WGS84 Data: The City of Calgary	
Hydrography Golf Course	C-Train Stations	Recommended Boundary		COMMENT & 2001 The Crick Mapping Planging reported Thi control first any may be represented
Major Park Parks & Open Space	Indoor Pool	025500 1,0001,5002,0002,500		In any lot receive any many where the other others and the other other any other approximation of the other approximation (the D) of the providence of a minimum in a part and the harp more on the sector of the concerns of the other other other interview. Incomplete or whose only the other other other one and the other of the other other other others and the other interview.
Transportation Utility Corridor	Police Service	Metres	Date Published: May 28, 2020	Geospatial Business Solutions

