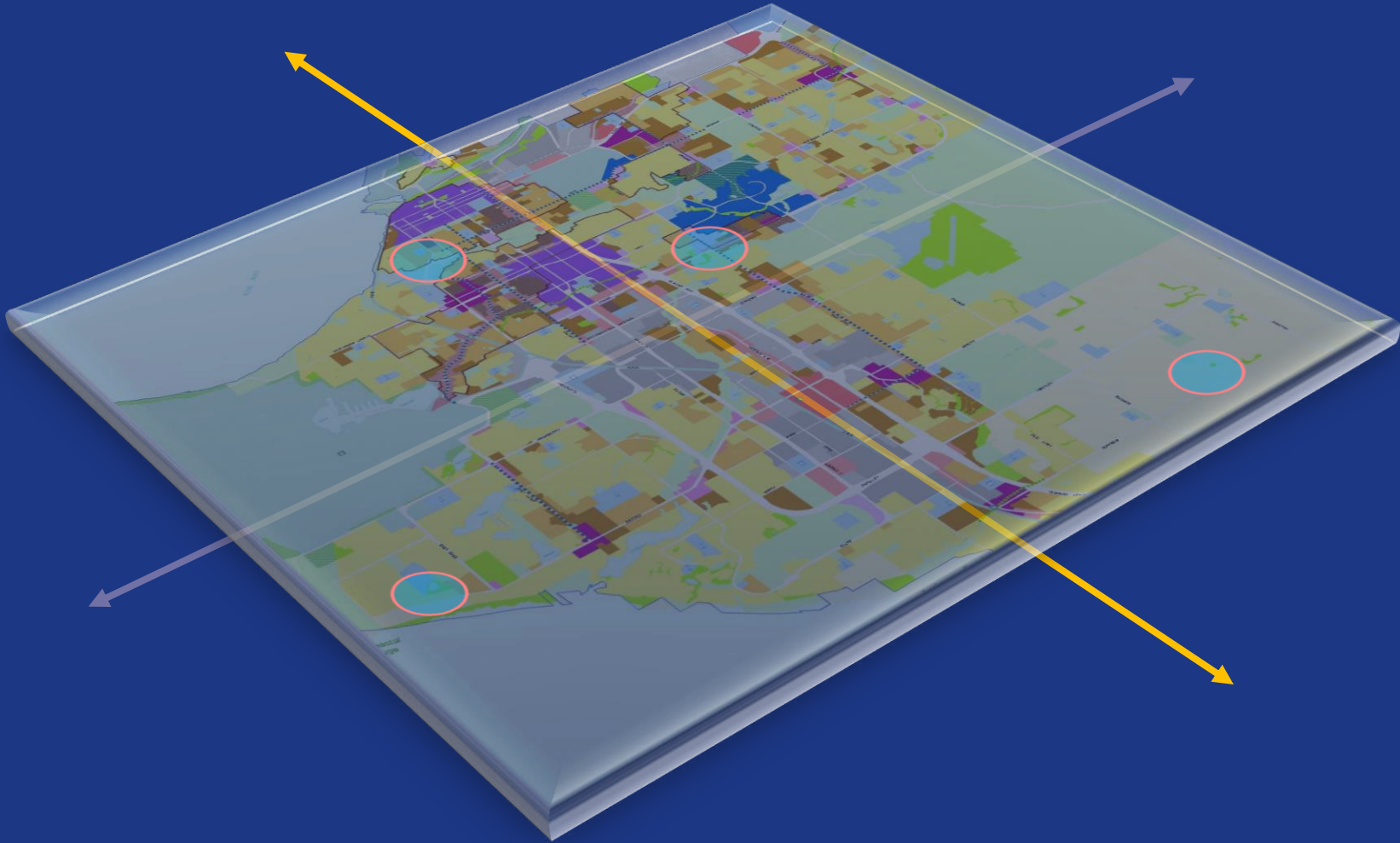
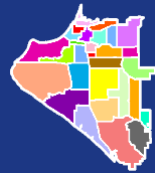


# Where Will We Need New Schools?



for 2020 APA Alaska Planning Conference, February 10, 2020

# ...Maybe Nowhere?



Education

## Debate rages in Chugiak-Eagle River over post-earthquake plans for schools

✍ Author: Matt Tunseth ⓘ Updated: December 10, 2019 📅 Published December 10, 2019



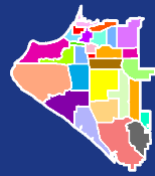
*Michelle Strange speaks to the crowd during a public forum on the future of Chugiak-Eagle River schools on Monday, Dec. 9, 2019 at Mirror Lake Middle School in Chugiak. (Matt Tunseth / Chugiak-Eagle River Star)*

Anchorage Daily News,  
December 10, 2019:

“...the debate continued between neighbors who support paying to repair earthquake-damaged Gruening Middle School and those who hope to combine the area’s two public high schools.”

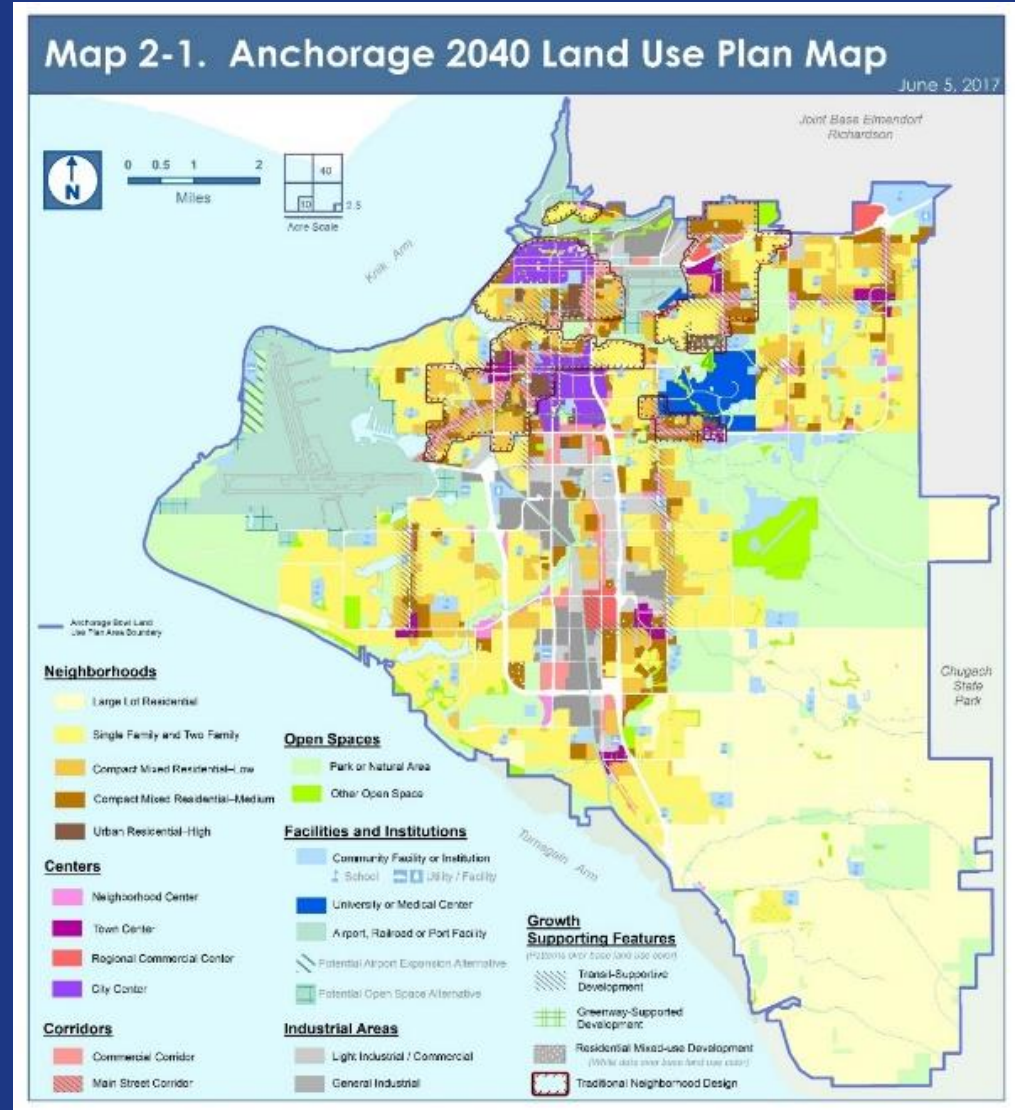


# What Does the Community Plan Say?

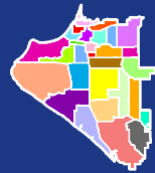


## Anchorage 2040 Land Use Plan

- Blueprint for Direction of Growth.
- Delineates Place Types.
- Forecasts Future Population.
- Includes Policies and Actions.
- Chugiak-Eagle River has its own land use plan and policies.

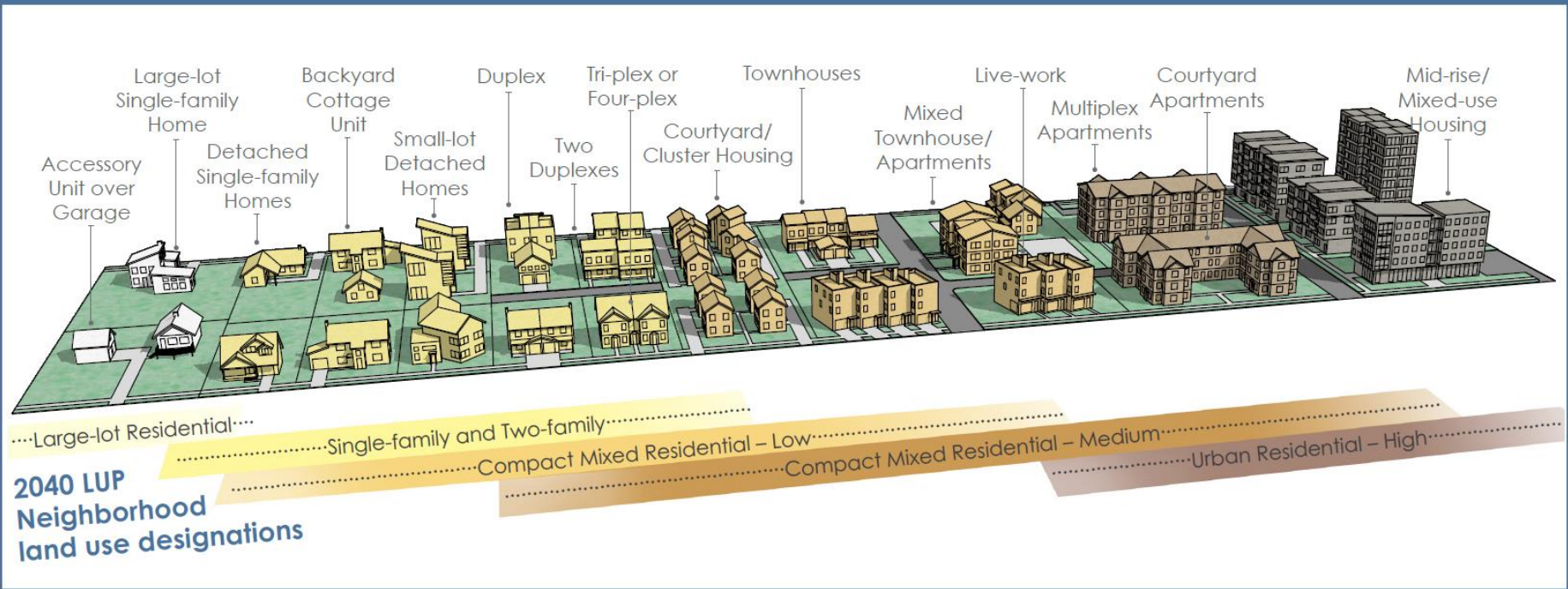


# 2040 Neighborhood Types



Each Land Use Plan Map color has its own housing types and densities

Figure 2-5. Neighborhood Housing Types

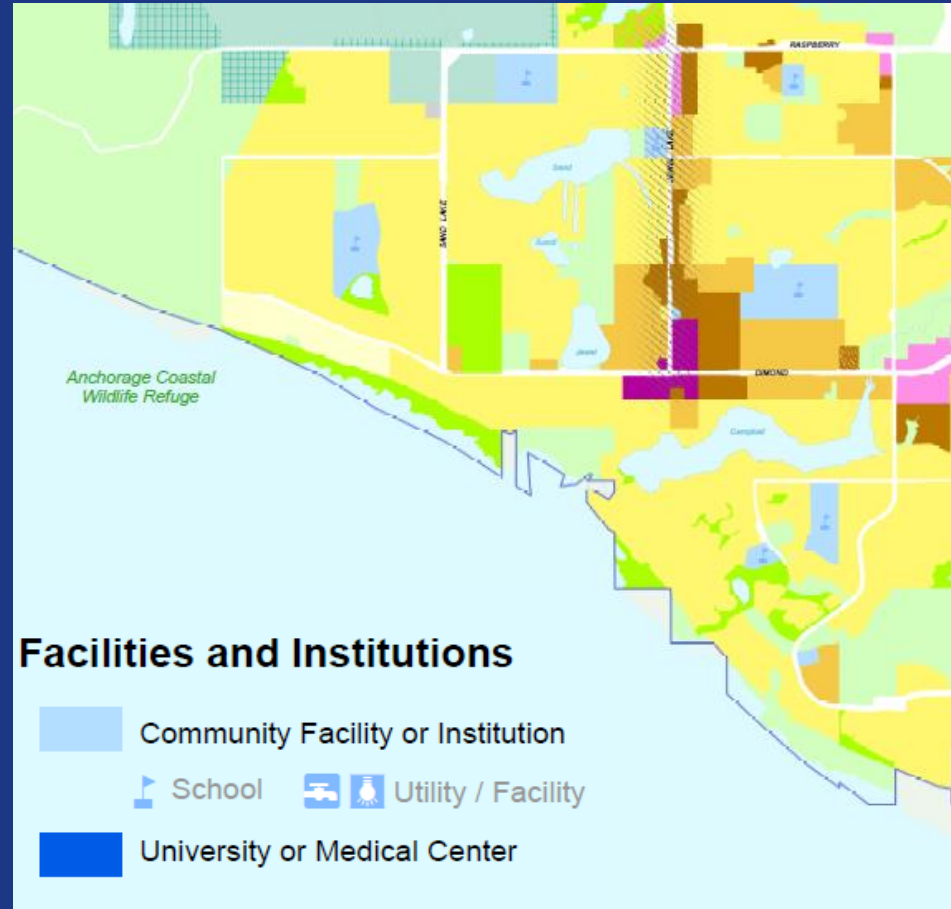


# 2040 Community Facility Types



Map Colors and Symbols Delineate Types of Public Facilities

- Retains Existing Schools, School Sites.
- Delineates Different Facilities.
- Amend Map as Facility Sites Added.



# Policy Guidance for Growth



## Goal 1 Plan for Growth and Livability

Anchorage achieves residential and commercial growth, which improves community resiliency and citizens' quality of life as it supports their vision for the future expressed in the Comprehensive Plan.

### Accommodates

- Housing and Employment Needs

### Aligns

- Land Use & Infrastructure



# Guidance for Public Facilities



## Goal 5 Infrastructure-Land Use

Coordinated and targeted infrastructure investments catalyze new growth, provide an acceptable return on investment, and equitably improve safety and quality of life.

### Relates Growth to:

- Existing Infrastructure Capacity
- Planned Improvements

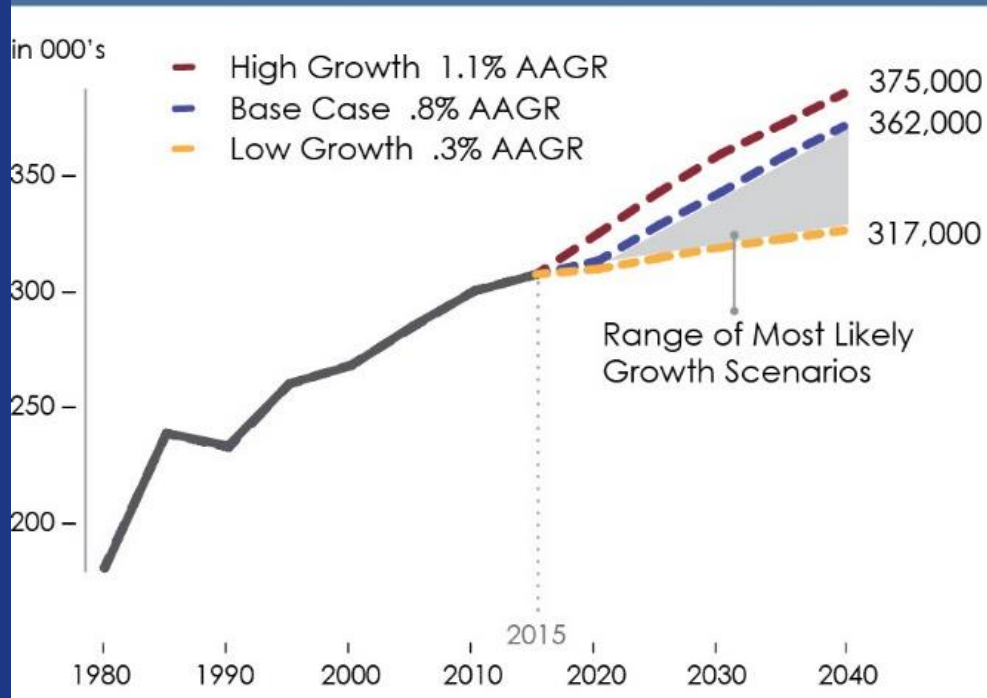
- **Policy LUP 5.5.** Ensure that adequate public facilities such as **schools** and fire stations are available when and where they are needed, in an efficient and equitable distribution of services, based on long-term projections for population, **student enrollment**, and the location of future growth.



# 2040 Growth Forecast



**Fig. 1-4. Population Growth Forecasts**  
Municipality of Anchorage, 2015-2040



- +47,000 Residents in Bowl
- +6,000 Residents in Eagle River
- No Change on Military Base.

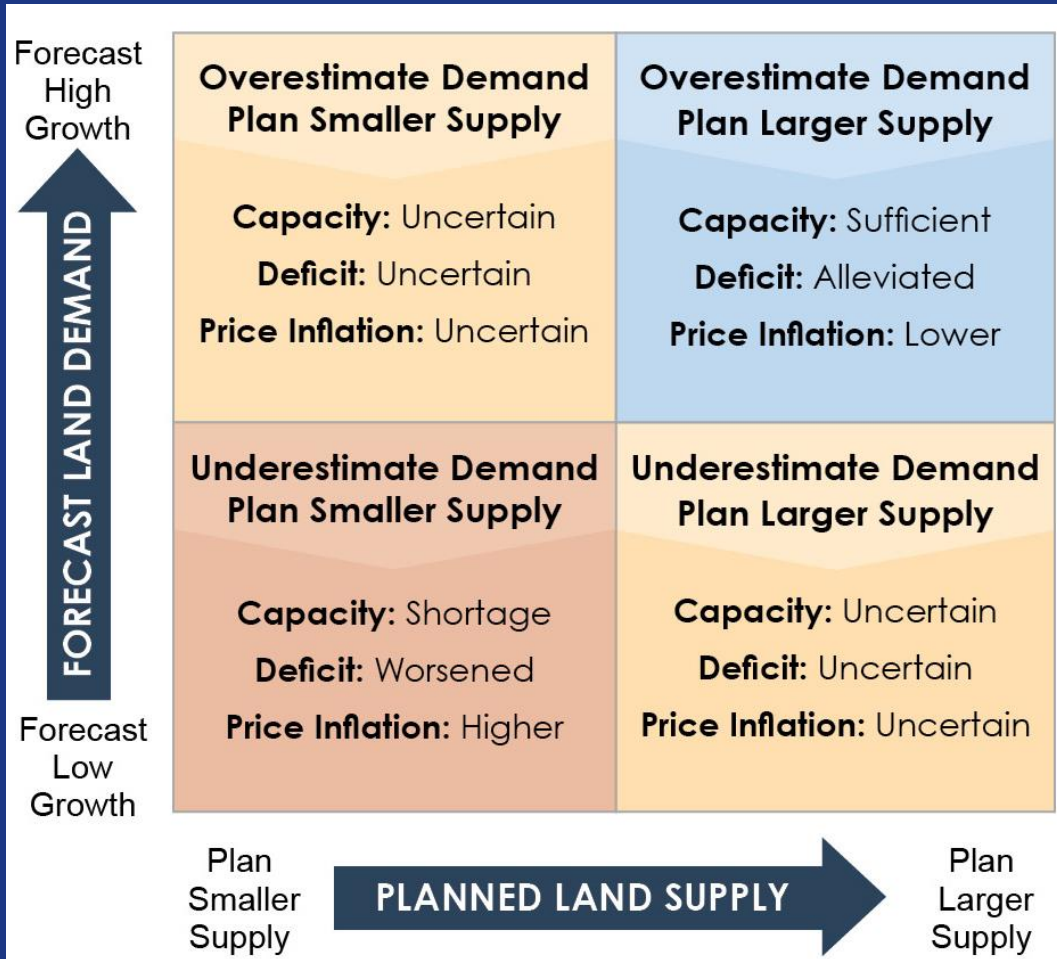




# Land Policy Implications



The Greatest Risk is to Underestimate Land Needs.



- Applies to All Uses.
- Balance and Prioritize Uses.

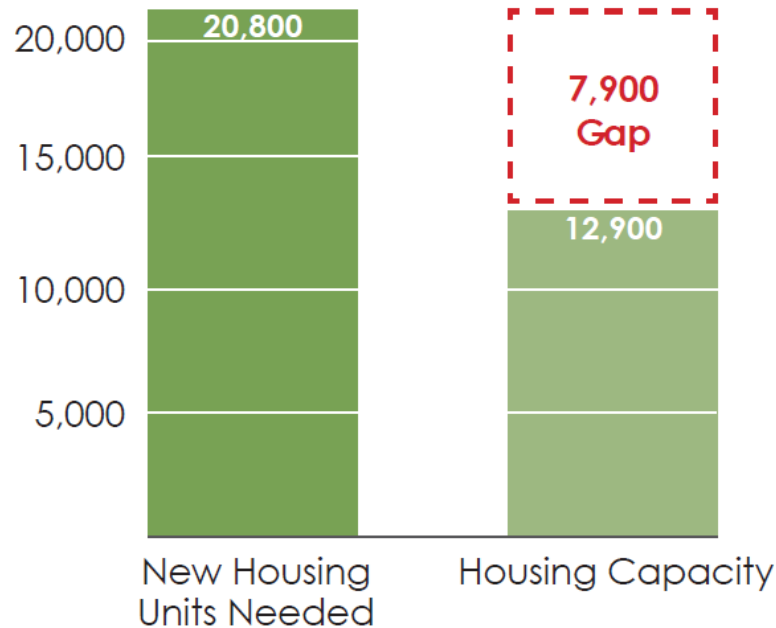


# Residential Land Shortage

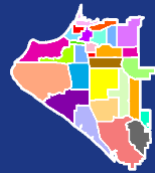
Based on current zoning and development trends.



**Fig. 1-7. Housing Need and Land Capacity**  
Anchorage Bowl, 2015-2040

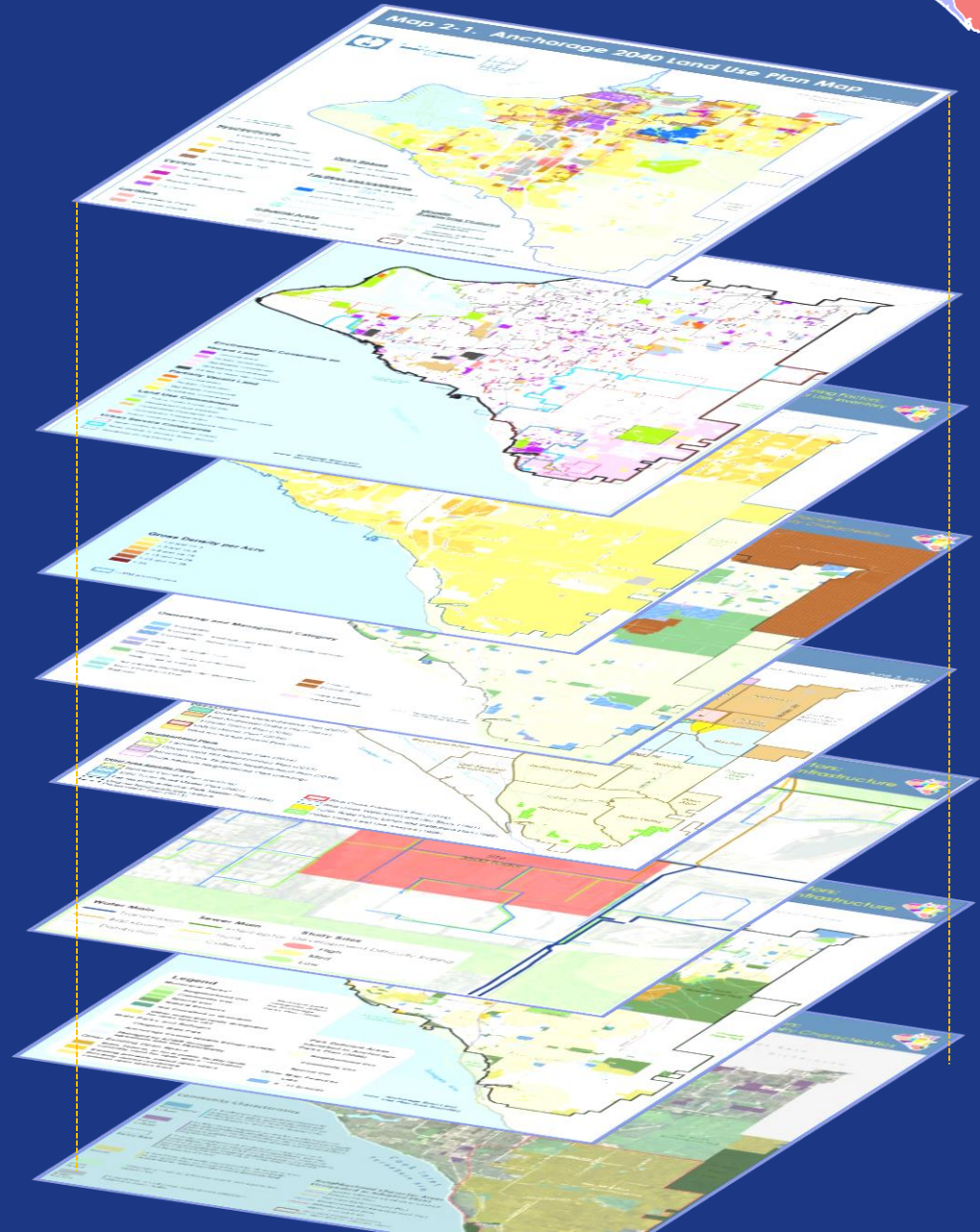


# Data-driven Plan



## Layers:

- Community Consultations
- Existing Uses/Housing
- Public Land Ownership
- Development Trends
- Buildable Land Supply
- Redevelopment Potential
- Infrastructure Capacity
- Forecast Land Needs



# Community Input: Housing Capacity



## Public Engagement:

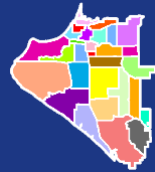
- Private Sector and Public Agency Expert Advisory Groups
- 150 Consultations w/110 Stakeholder Groups
- 20 Public Meetings and 3 Focus Groups
- 500+ Pages Documentation of Comments



People most wanted to know: How Much Population and Housing will the Plan Accommodate?



# Existing Housing and Buildable Land Supply

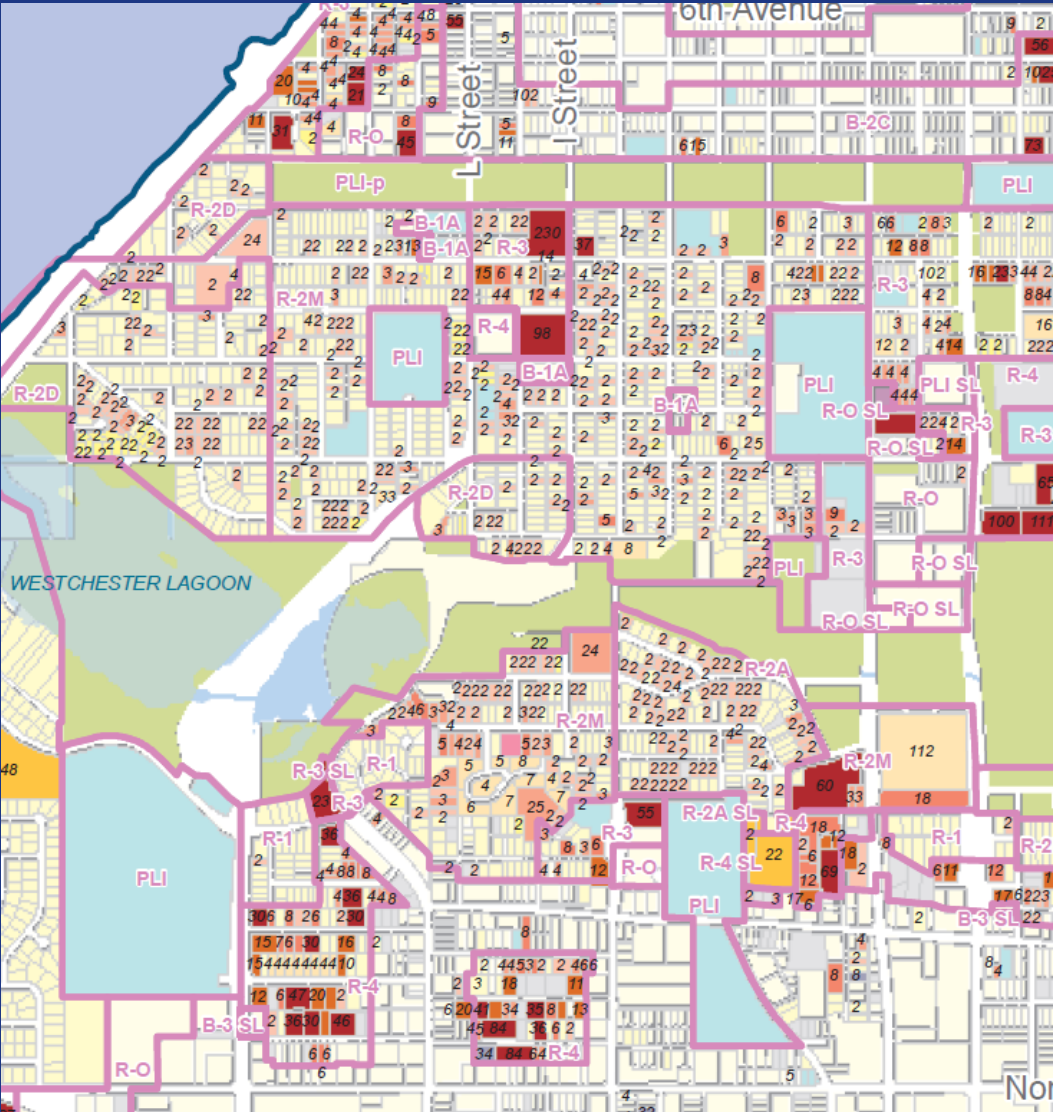


- Existing Housing Stock Inventory

- Anchorage Bowl
- Chugiak-Eagle River

- Buildable Lands Inventory

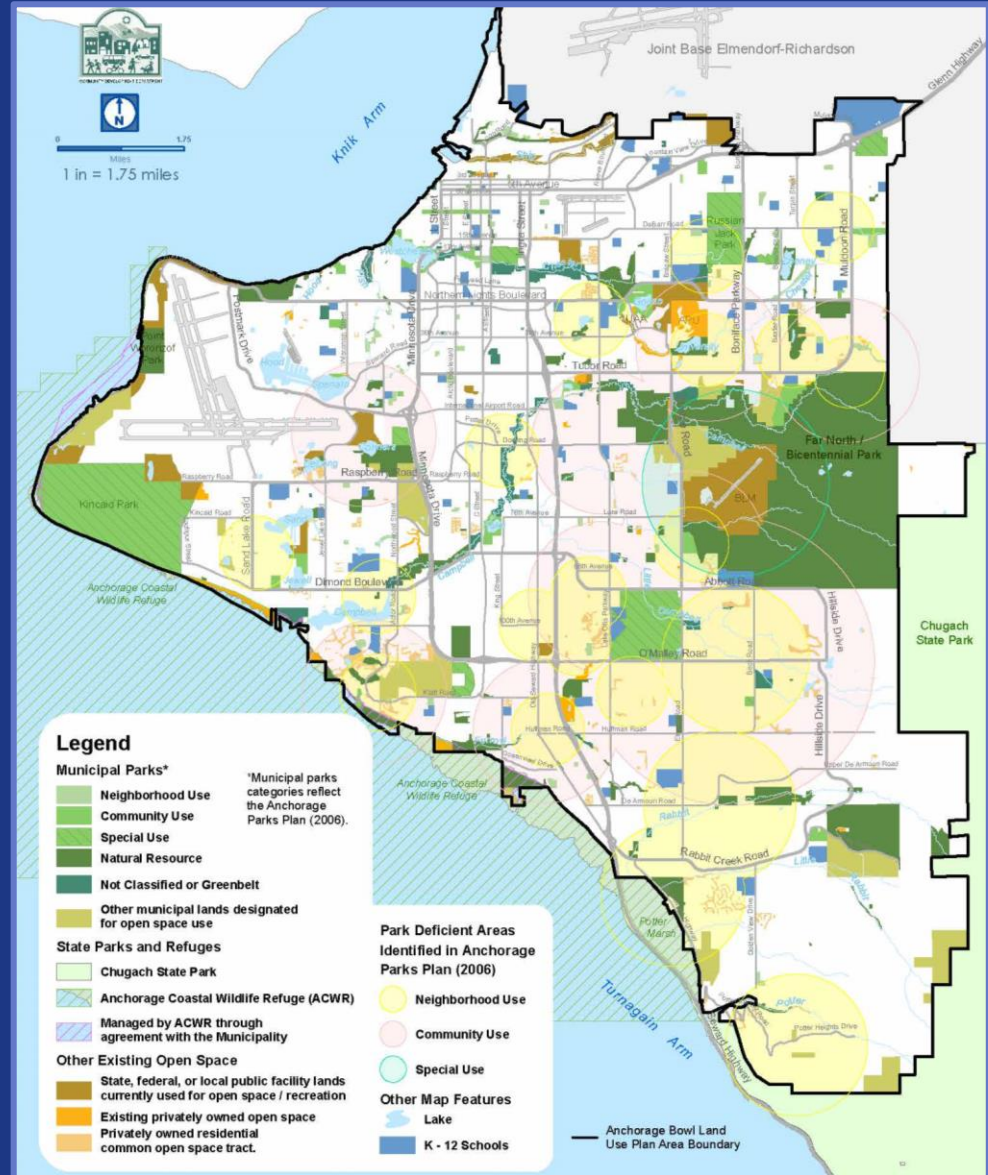
- Vacant
- Partially Vacant
- Likely to Redevelop



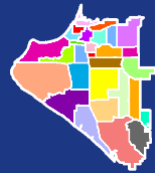
# Committed Lands



- Public Lands
- Future Public Facilities
- All Non-park Open Spaces
- Facility/Airport Impact Areas

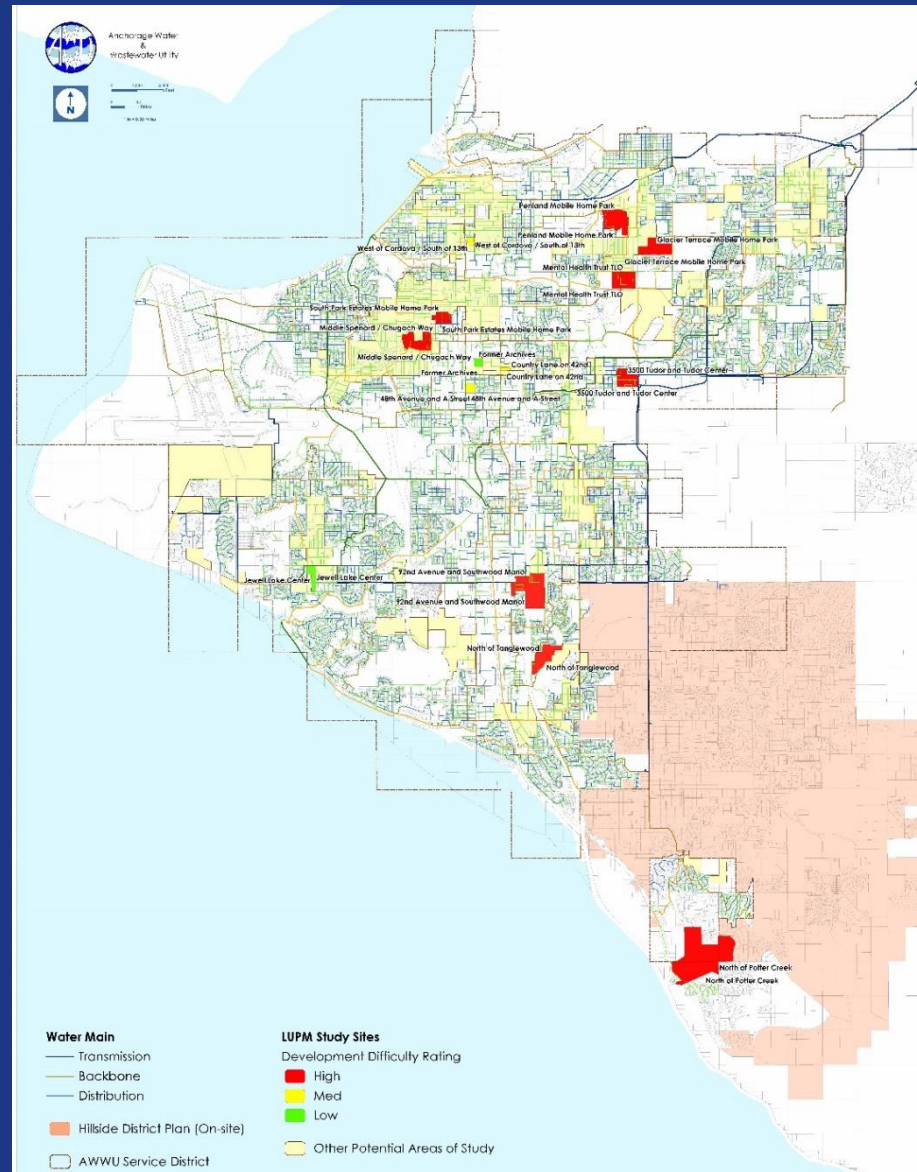


# Infrastructure



## Capacity for Housing Growth:

- Water/Wastewater Service
- Existing and Planned Streets
- Pedestrian and Transit Facilities



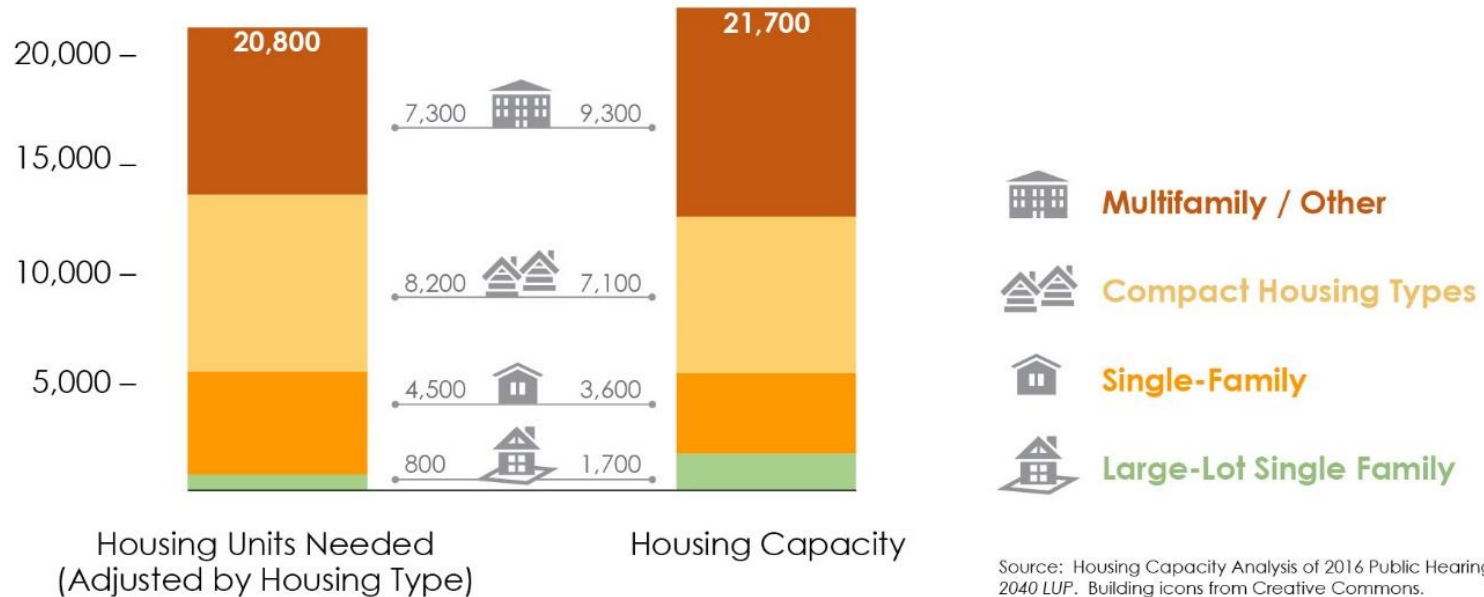
# 2040 Plan Accommodates Housing Needs



## Relieves Housing Gap

- Reclassifies lands and promotes other changes to yield more housing.
- Allocates forecast demand and capacity by housing type.

**Figure 1-10. Housing Need and Land Capacity for Housing under 2040 LUP**  
By Housing Type. Anchorage Bowl, 2015-2040.

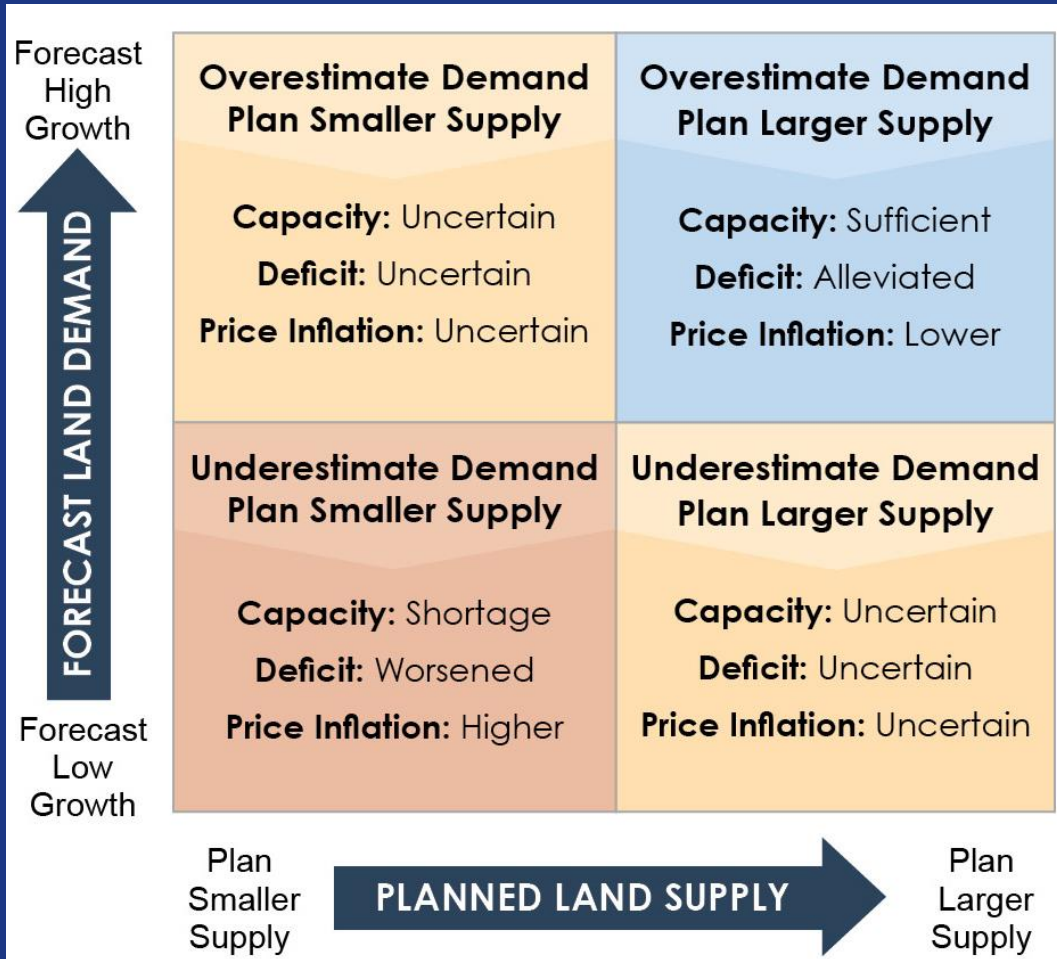




# Land Policy Implications



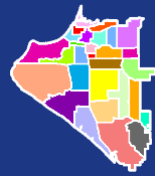
The Greatest Risk is to Underestimate Land Needs.



- Tensions with Capital Investments and Planning
  - *Cost/Overbuild Risk*
  - *Timeframe/Phasing*
  - *Capacity/Safety Standards*
  - *Age/Condition, Maintenance/Repairs*



# Phasing of Growth and Public Investment



## Reinvestment Focus Areas (RFAs)

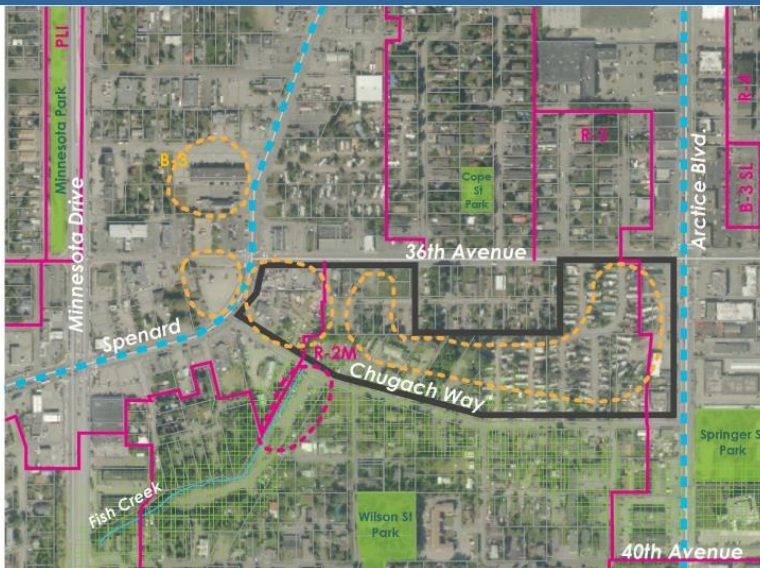
- Areas well-suited to absorb growth.
- Areas most likely to grow in near term.
- Catalysts for wider reinvestment.

**Fig. 3-1. Central Spenard Reinvestment Focus Area**

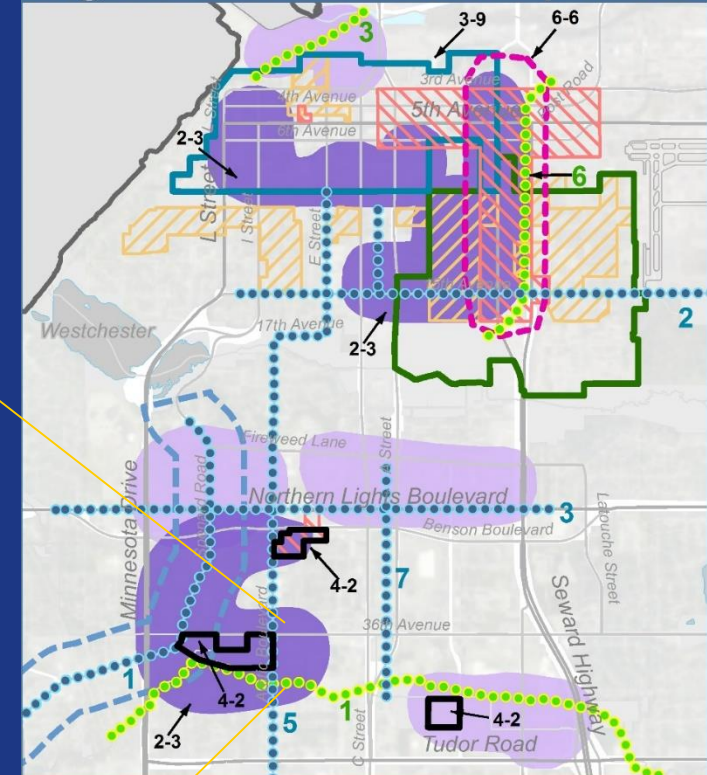
**Action Items from Actions Checklist Table Fig. 3-4:**

- 2-2 and 2-3: Central Spenard RFA
- 4-3: By-Right Parking Reductions
- 4-5: Utility Engineering Design Criteria
- 4-6: Reduced Internal Driveway Widths
- 4-7: Accessory Dwellings
- 4-10: Small Lot Housing
- 5-3: Infrastructure Asset Inventory
- 5-1: CIP Priorities

- Park or Natural Area
- Transit-Supportive Development Corridors
- Greenway-Supported Development Corridor
- Targeted Area Rezoning Boundary\*



**Figure 3-5. Actions Map Inset**



# Example of Investments in an RFA

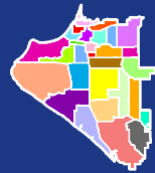


## Creekside/Muldoon Town Center

- “Complete” Streets (Creekside Drive)
- Civic Institutions (Begich Middle School)
- Public Spaces (Muldoon Town Sq. Park)
- Green Infrastructure (Restored Chester Creek)



# Targeted Investments: Operational Plans



## Coordinate Muni Operations:

- Frequent Public Transit Routes
- AWWU Water / Wastewater Plans
- Residential alley paving (\$300K/yr.)

## Informs Agencies re City Goals:

- Encourages investments that support the direction of growth.
- Even if agency only has \$\$ to focus on short-term needs.
- Eventually operations should merge with the 2040 vision.



# Capital Improvement Programs



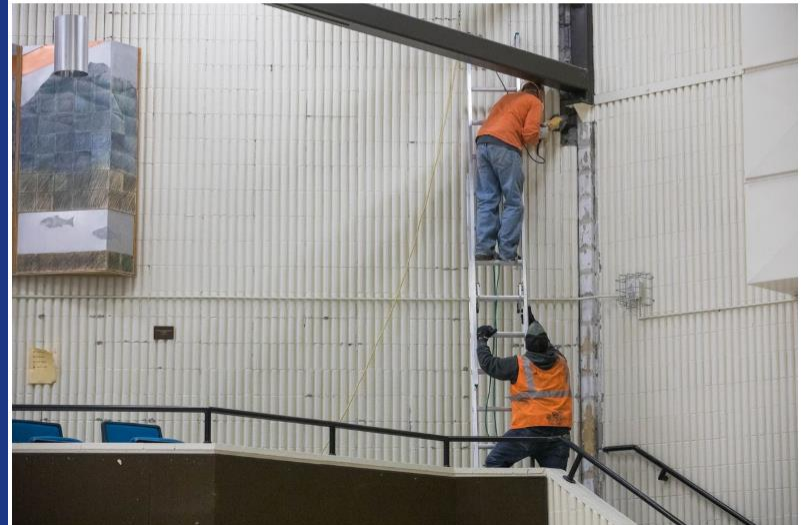
Capital Improvement Project (CIP) Evaluation Criteria includes:

- Consistency with Comprehensive Plan
- Location in Areas of Anticipated Growth
- Reinvestment Focus Areas (RFAs)

## Education

### Anchorage School Board approves \$82.8 million bond proposal mostly targeting earthquake-related repairs

✍ Author: Tegan Hanlon ◻ Updated: November 20, 2019 📅 Published November 20, 2019



Anchorage School District  
Capital Improvement Plan





# **Anchorage School District**

## **2020-2026 Capital Improvement Plan**

**February 10, 2020**

Tom Fenoseff, Sr. Director Capital Planning & Construction



**Anchorage School District**  
*Educating All Students for Success in Life*

# Six-Year CIP Overview

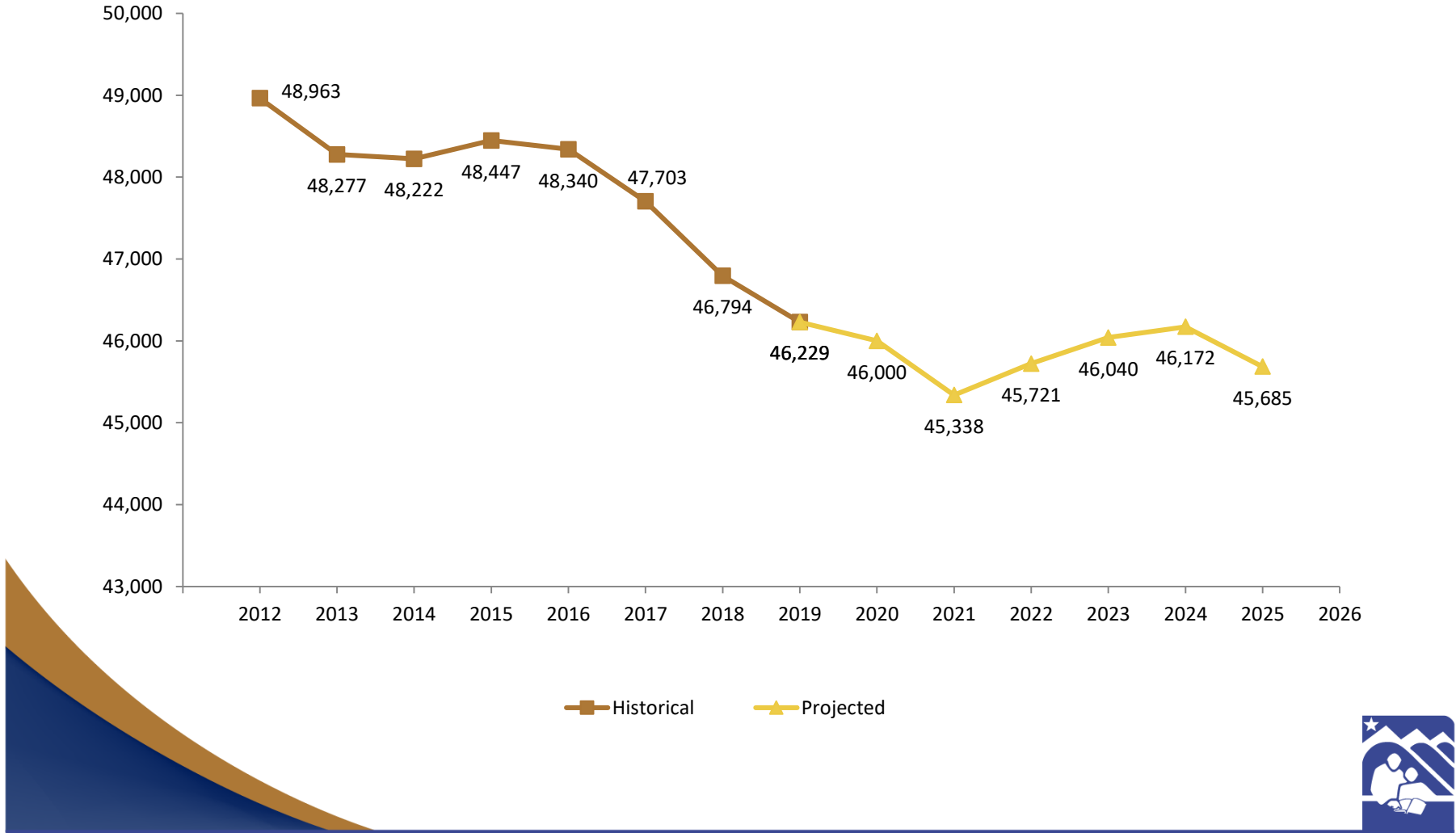
- Year 1 - April 2020 Bond Proposal
  - Total \$82.833 Million

Priority Level I	
Inlet View Elementary School Replacement School Design	\$3,346,000
Aquarian Charter School Capital Improvements	\$6,800,000
Earthquake Recovery Projects: Bartlett, East, King Tech, Fire Lake, Chugiak Elementary, Bear Valley, Chugiak High, Eagle River High, Mirror Lake, Dimond, Central, and Whaley.	\$26,926,000
Earthquake Recovery and Educational Improvement Projects: Gruening and Eagle River Elementary	\$42,510,000
Planning & Design Projects – 2022 Deferred Requirements Projects	\$3,251,000
Total:	\$82,833,000



# Development of the Six-Year CIP

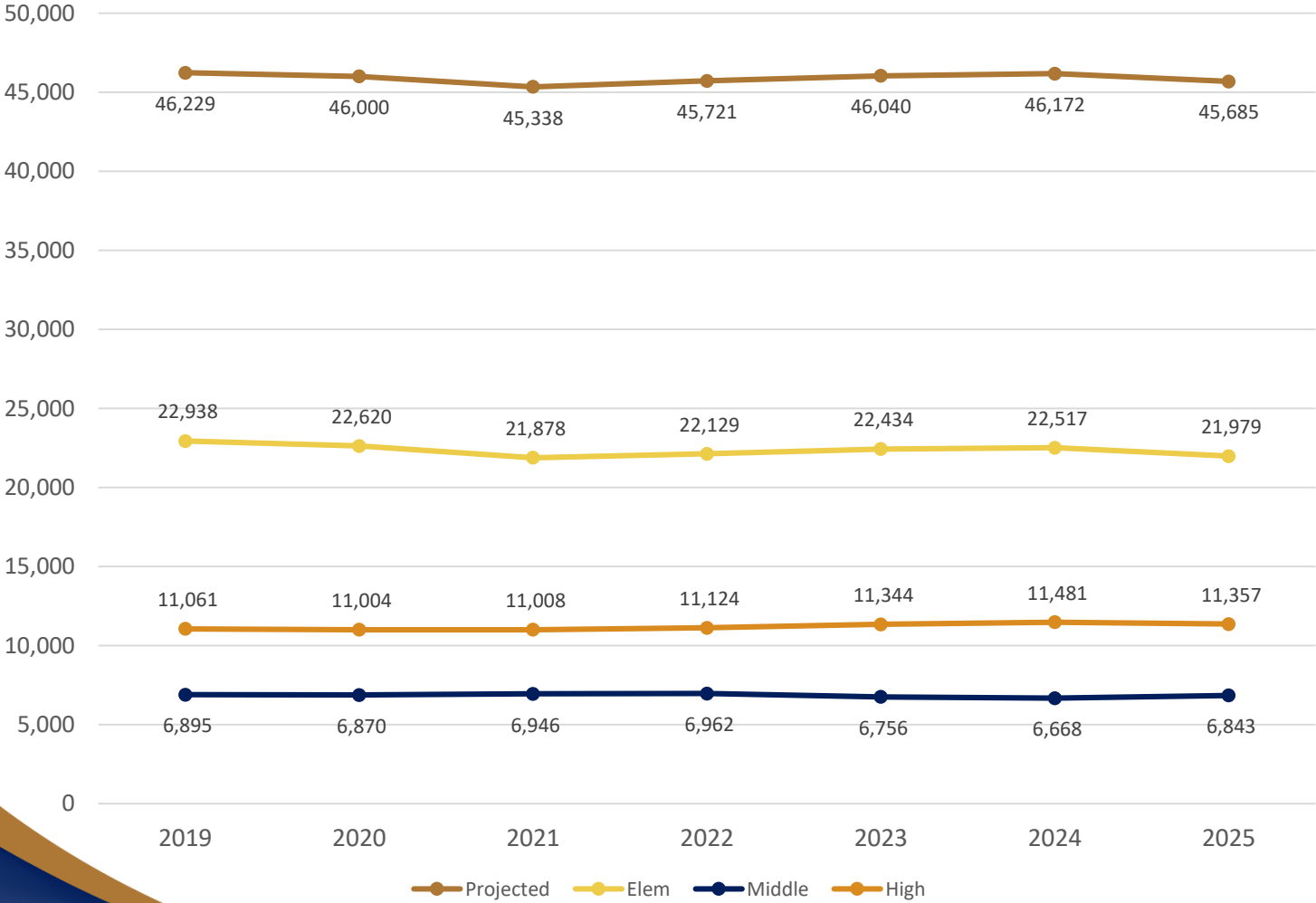
## September 30 Enrollment Historical vs. Projected



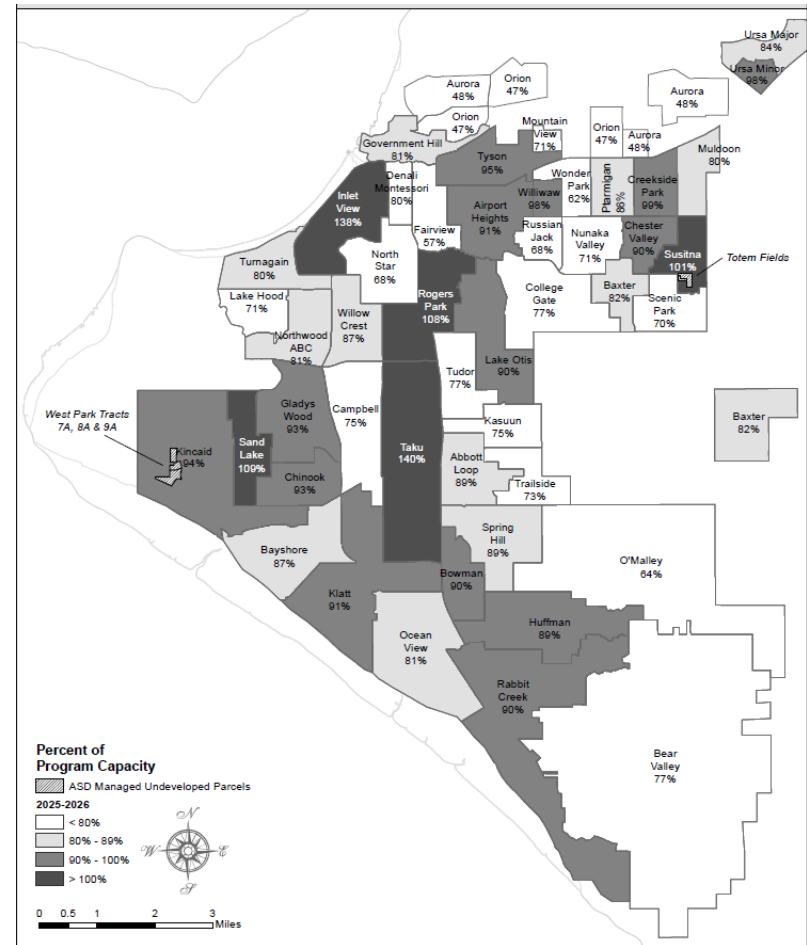
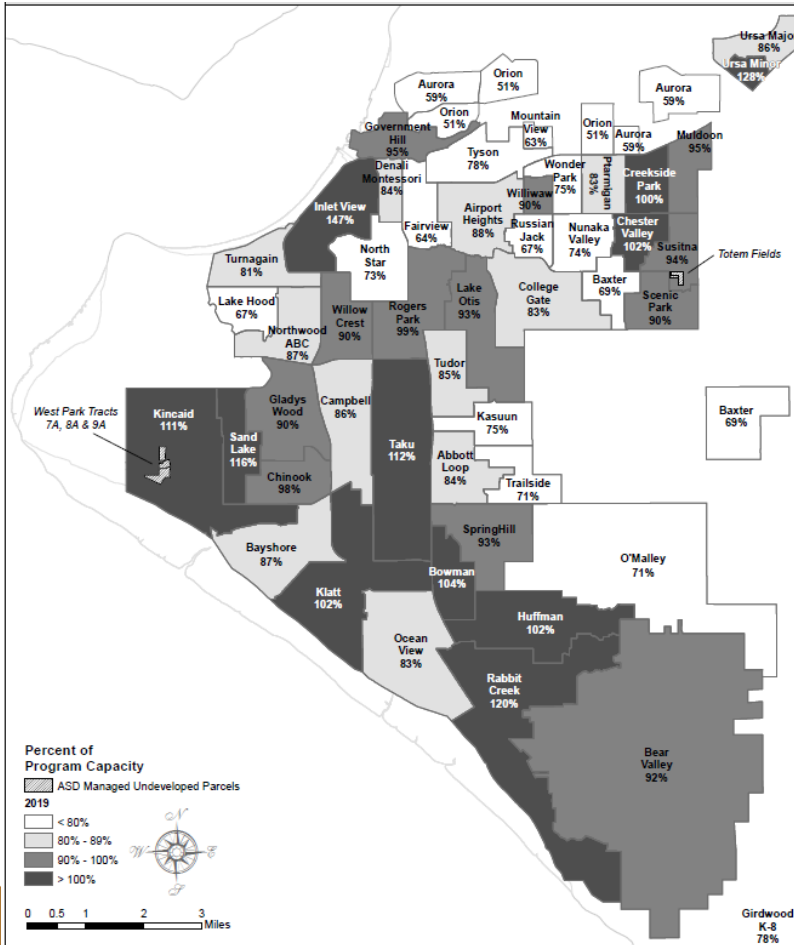


# Development of the Six-Year CIP

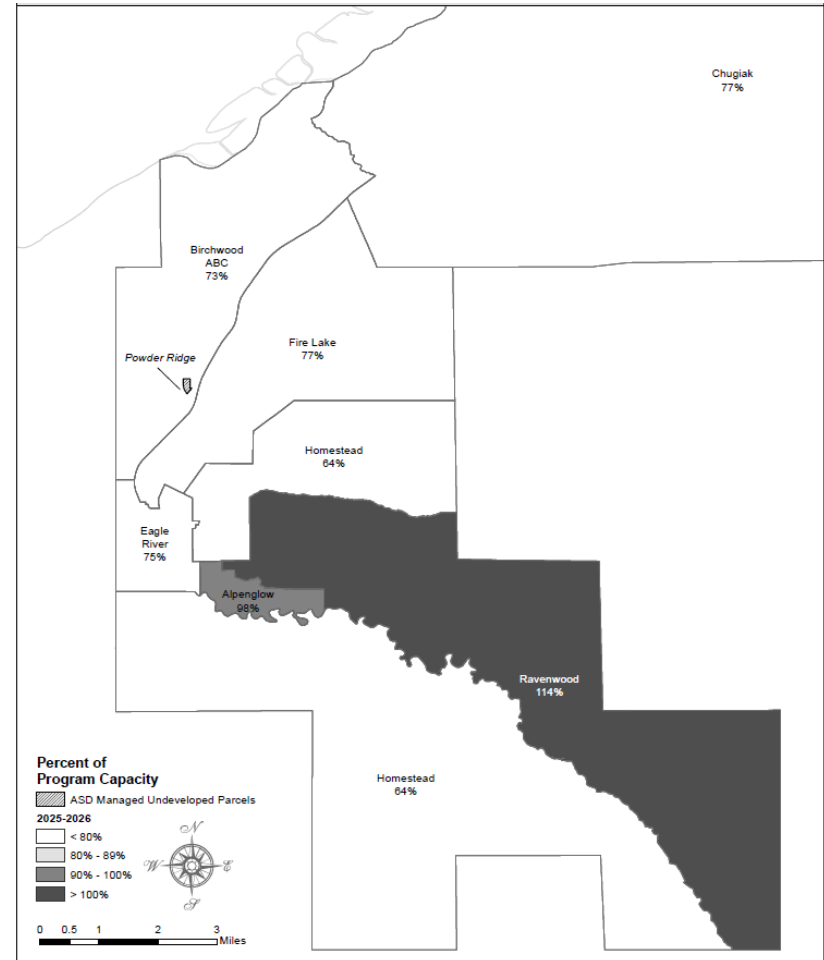
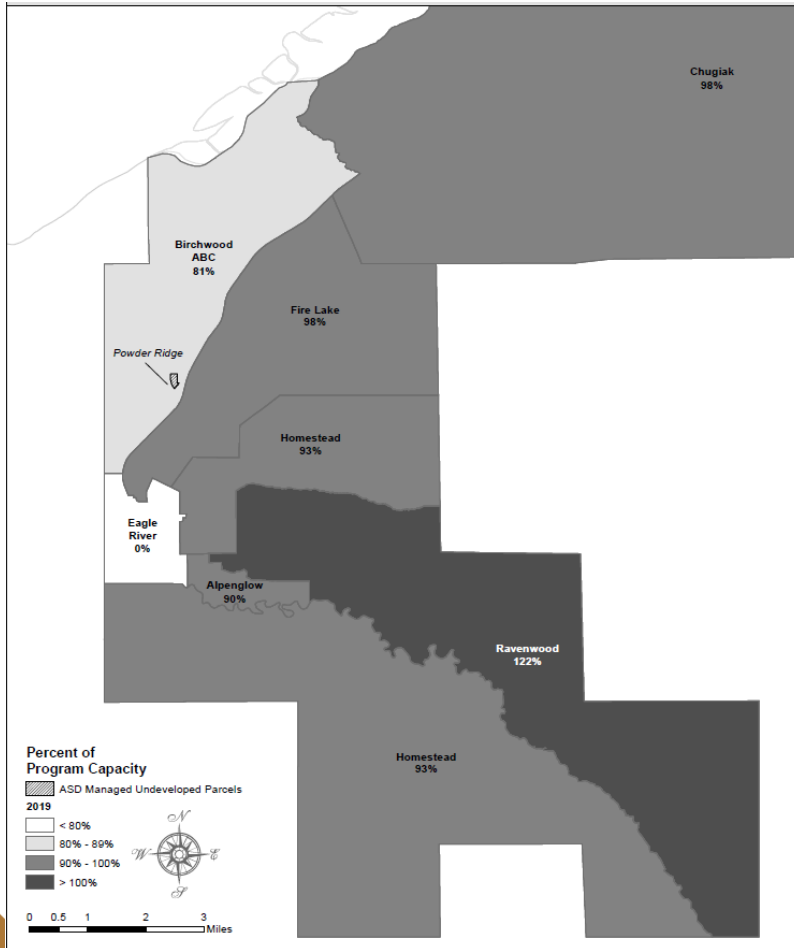
Current and Projected Enrollment  
Total and by Elem, Middle, High Schools



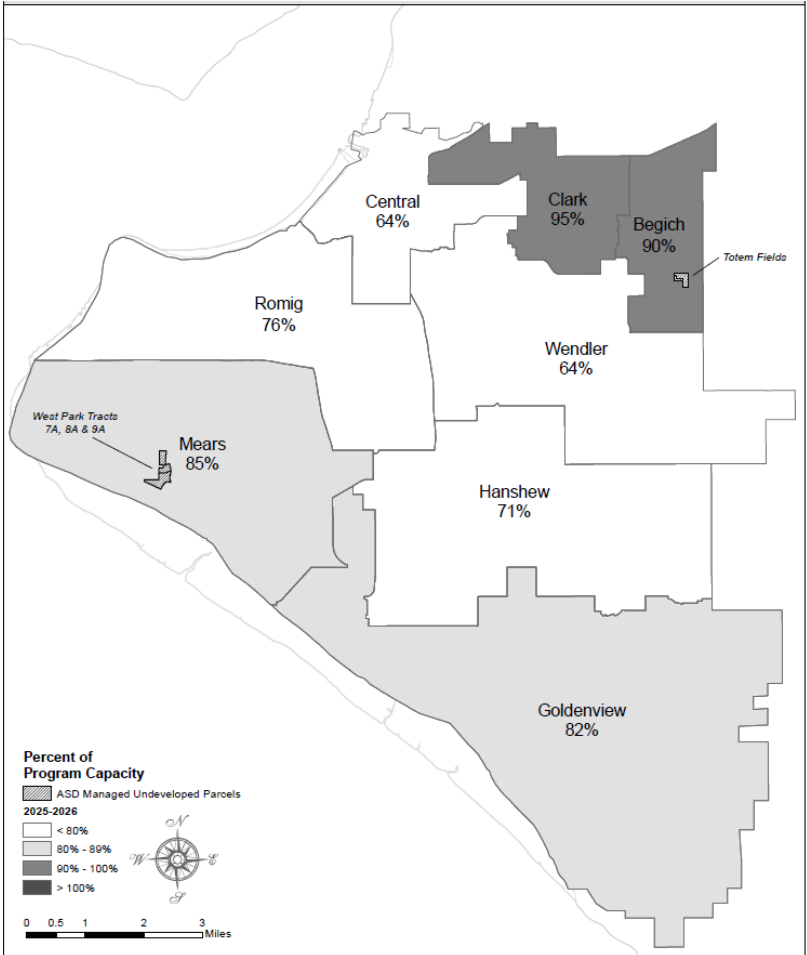
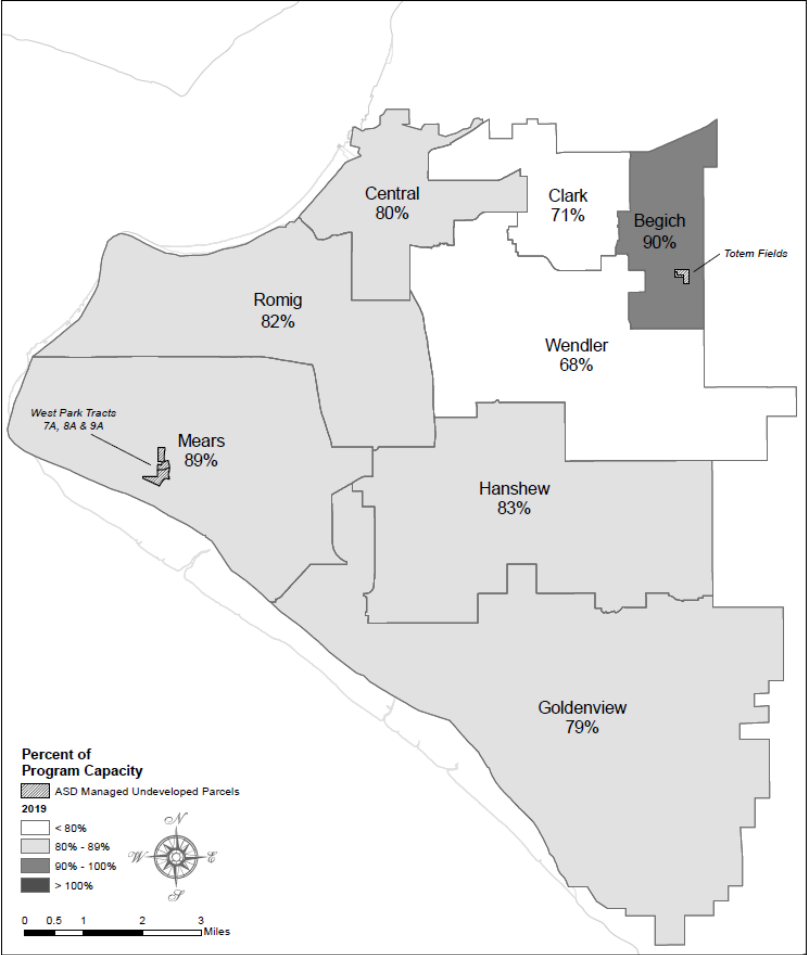
# Current vs Projected Elementary Capacity



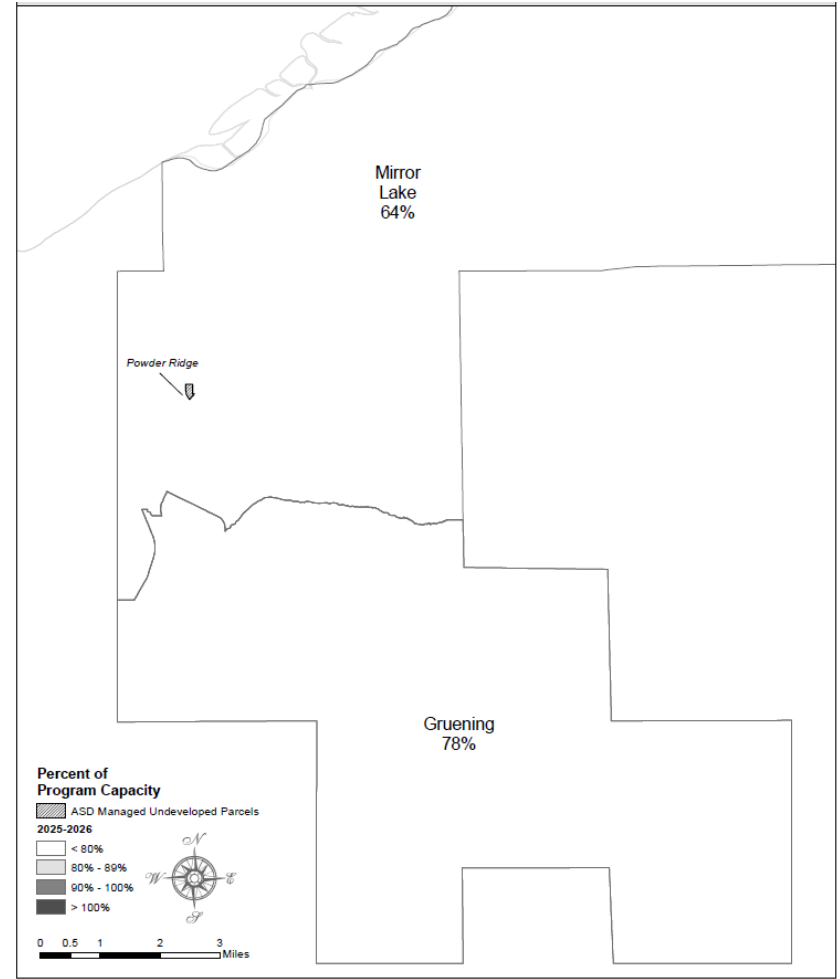
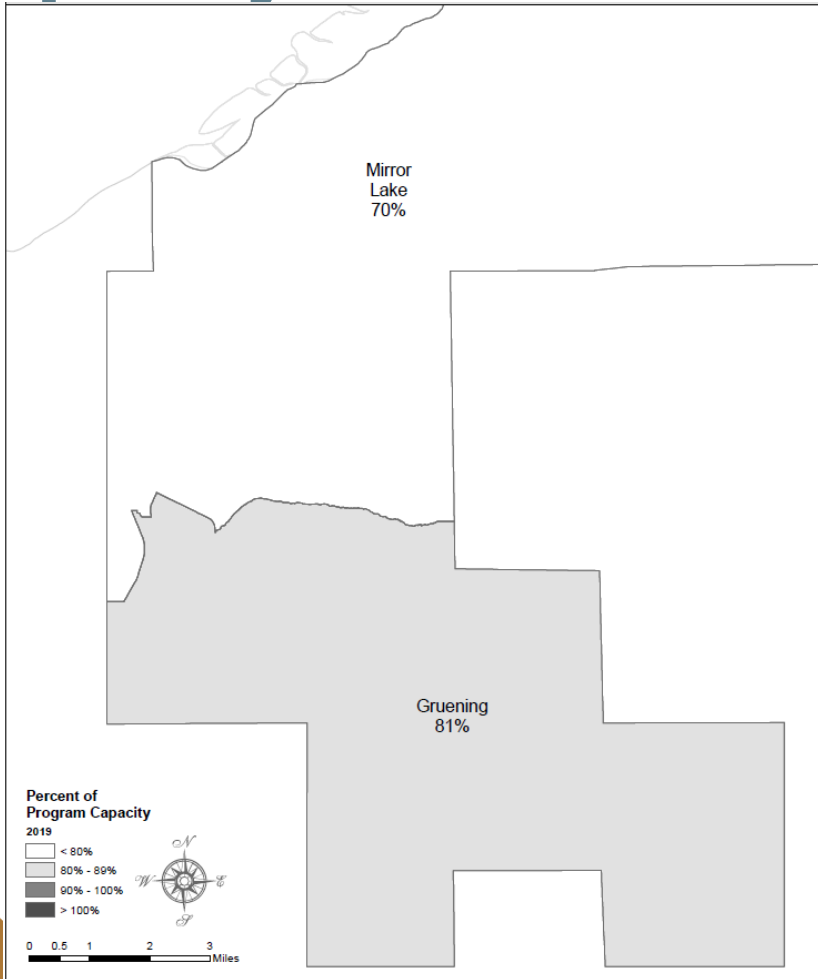
# Current vs Projected Elementary Capacity



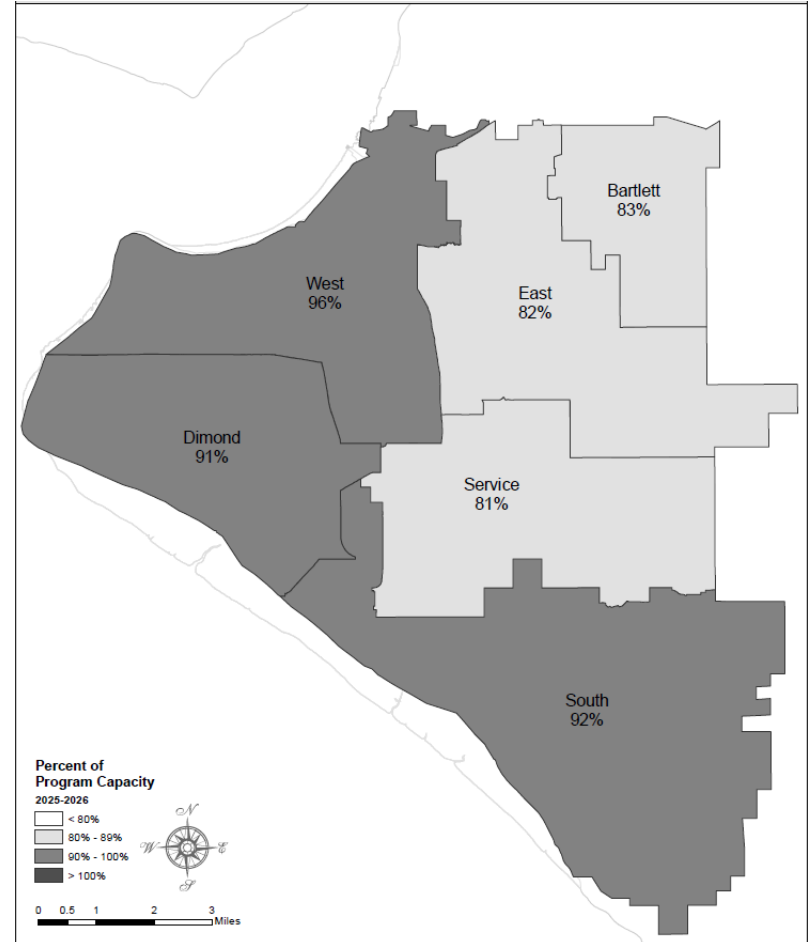
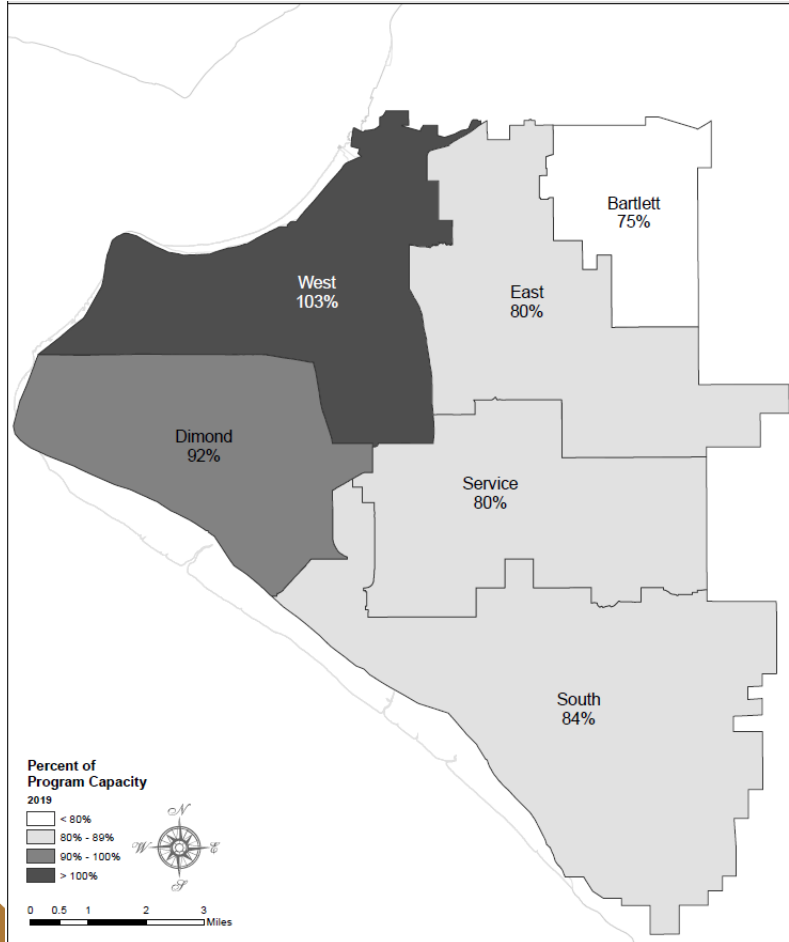
# Current vs Projected Middle School Capacity



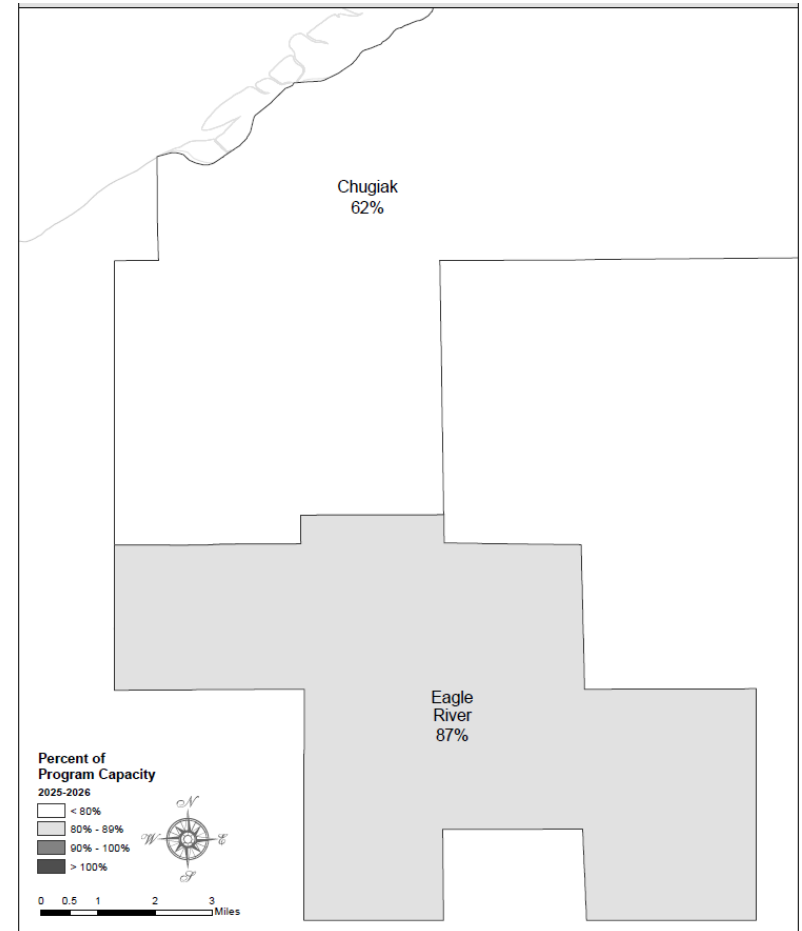
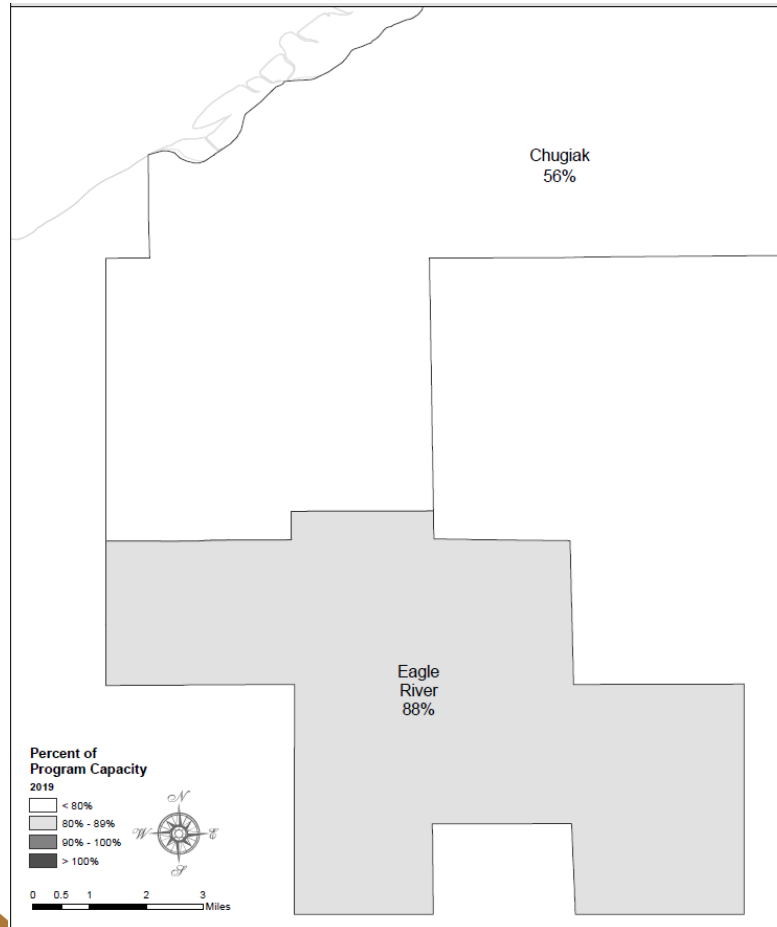
# Current vs Projected Middle School Capacity



# Current vs Projected High School Capacity



# Current vs Projected High School Capacity



# Anchorage 2040 Actions



Implementation Actions 5-4 and 5-7 for ASD and Planning Dept.

Figure 3-5. Actions Checklist

#	Action
5-4	Develop an enhanced measure of school facility capacity relative to long-term projections for student enrollment and designated housing growth, as a means to coordinate planning for future school facility needs with land use planning and allocation of growth.
5-5	Expand existing programs by which AWWU may finance or provide infrastructure ahead of development within the water and wastewater service area, to include reimbursement of AWWU costs.
5-6	Evaluate parameters and feasibility of a storm water utility, to address management and maintenance of storm water pipe infrastructure and runoff drainage problems.
5-7	Determine future school site needs under the 2040 LUP and incorporate adequate school capacity, sites, and investment into the Plan.





# Long-Term Student Enrollment Forecast



## Anchorage School District

- Provides Enrollment Data, School Attendance Area Boundaries, and School Program Capacity

## Anchorage Planning Department / Public Works GIS

- Allocates Existing and Forecast Housing by School Attendance Area

## UAA Institute of Social and Economic Research - Jennifer Schmidt

- Converts housing and enrollment data and Census ACS demographic data into projection of 2040 student population, by attendance area.



# ISER Ratio of Students to Housing Units



Students Per Household, by Housing Structure Type:  
ISER analysis based on ACS Data in 2015

Housing Structure Type	Elementary School	Middle School	High School
Large Lot Single Family	0.18	0.06	0.09
Single-family	0.25	0.08	0.13
Compact Single-family	0.71	0.10	0.68
Two-family	0.27	0.08	0.26
Townhouse	0.03	0.00	0.07
Multifamily/Other	0.18	0.05	0.09



# 2040 School Enrollment Forecast



## Overall Findings

- There will be more students in the Municipality, at all grade levels.
- This is due to the magnitude of forecast population/housing increase.
- The number of students will increase at a lower rate than housing.

## Change in Anchorage Student Population, 2016-2040

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Elementary                      12% to 28% increase

Middle School                0% to 24% Increase

High School                    -1% to +24% Change

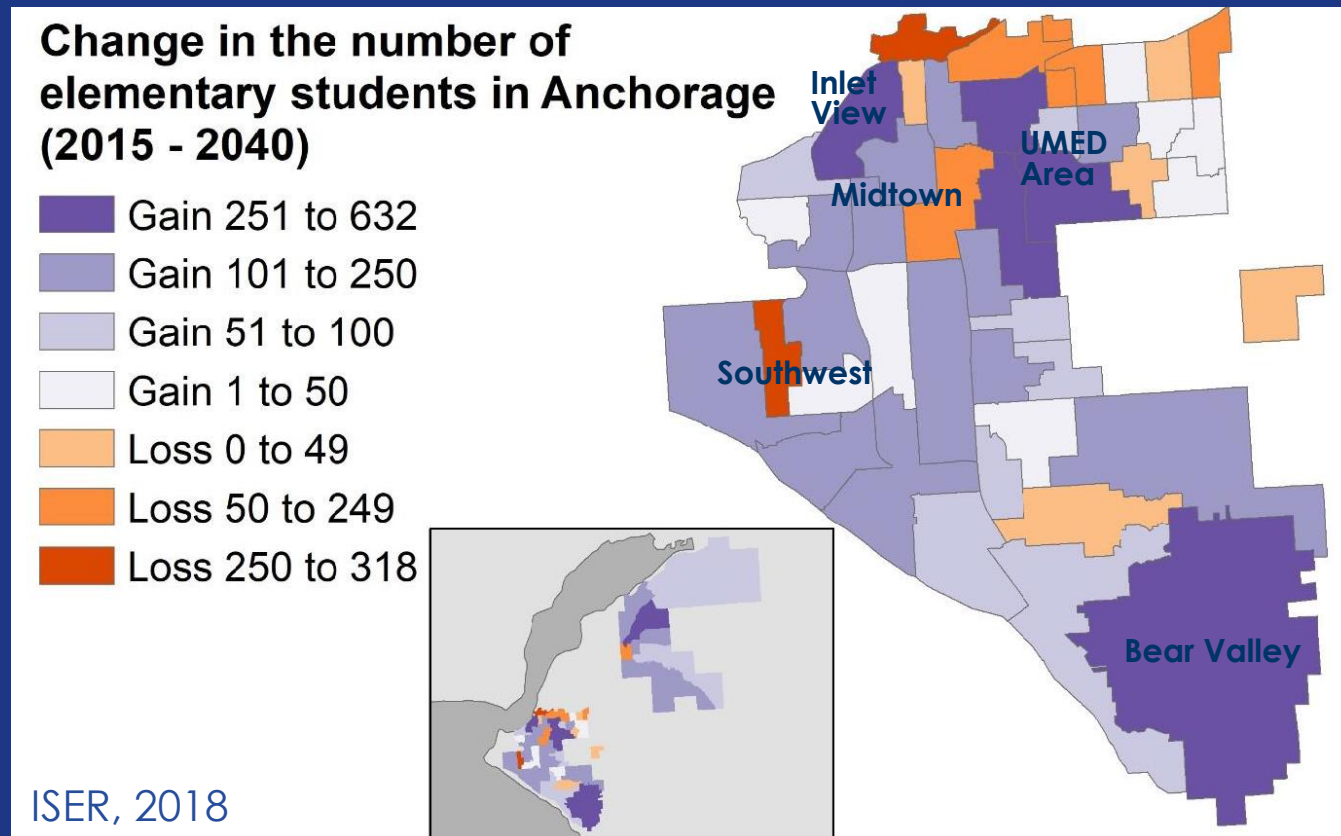


# 2040 School Enrollment Forecast



## Projection by School Attendance Area

- Change in student population varies by school attendance area.
- Variation is based on the number and type of projected housing units.



# ASD School Efficiency Study



Western Demographics, Inc., April 2018

- School utilization rates will increase in existing schools.
- Increasing utilization rates will justify new schools in some areas.
- Much of the new housing will be located where resulting students can be absorbed by existing schools.
- Forecast population growth constrains the extent of potential school closures/consolidations.



# Highlight Areas: Downtown

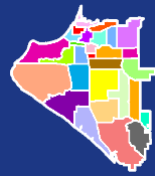


Downtown's 3 elem. school attendance areas gain 1,800 households.

- **Inlet View Elementary** enrollment is projected to be 780 – 980 students, at 450% – 580% of its existing (2020) school program capacity of 170.
- **Central Middle School** attendance area gains 3,500 households.
- Central's enrollment projection ranges from 320 – 820 students, at 60% – 160% of its existing (2020) school program capacity.

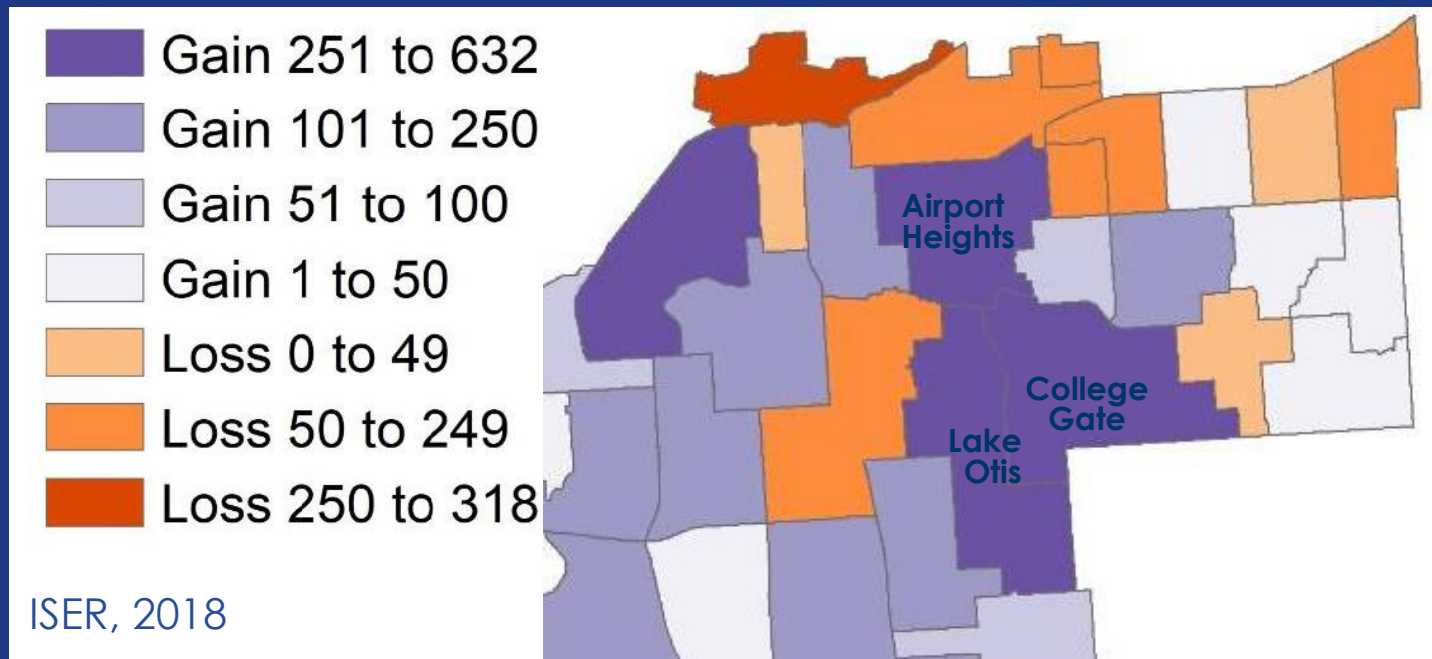


# Highlight Area: UMED



Five elementary school areas near UMED gain a total of 4,900 households.

- **Airport Heights** enrollment projected to be 190–230% of its current program capacity.
- **College Gate** enrollment projected to be 130–170% of current program capacity.
- **Lake Otis** enrollment projected to be 140–180% of current program capacity.

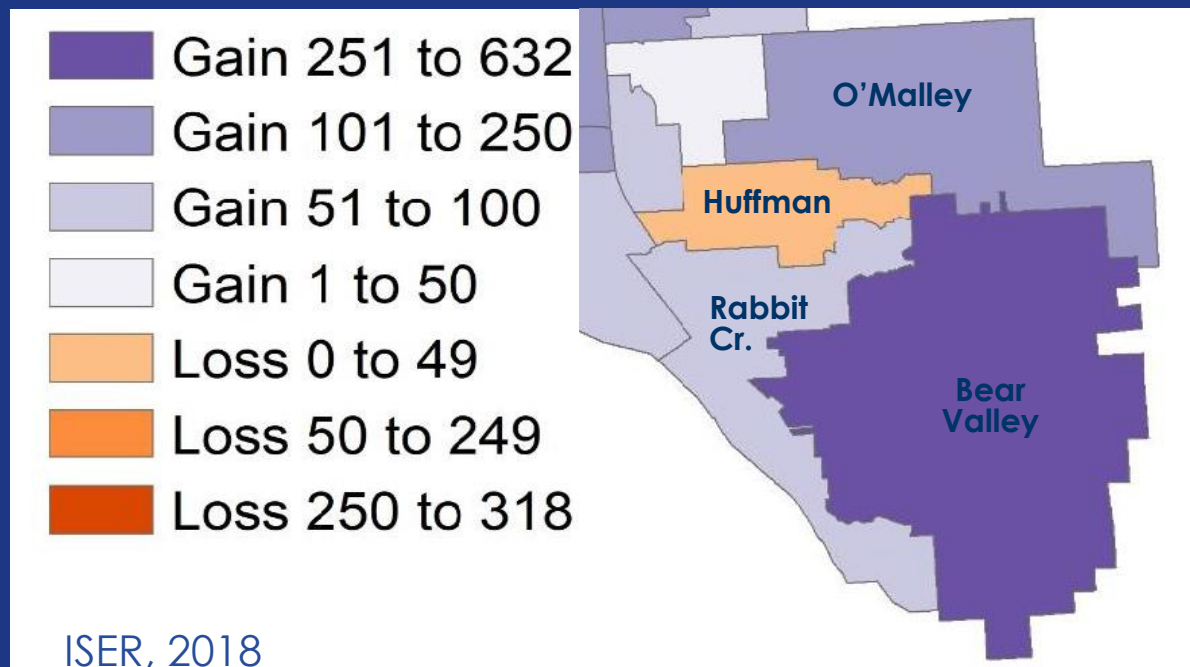


# Highlight Area: Hillside



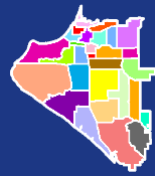
Bear Valley Elementary Attendance area gains 1,520 households

- **Bear Valley** enrollment projected to be 130–160% of its current capacity.
- Nearby **O'Malley, Rabbit Creek, Bowman, and Spring Hill** elementary enrollments are each projected to be over current program capacity.
- **Huffman Elementary** projected to be 75% - 90% of its current capacity.





# Highlight Area: Eagle River



Chugiak-Eagle River gains 6,000 households, 2015 – 2040.

- **Gruening M.S.** and **Mirror Lake M.S.** combined enrollment projected to be 1,220 – 1,870 students, or 70–110% of their combined 2020 program capacity.
- **Chugiak H.S.** and **Eagle River H.S.** combined enrollment projected to be 2,190 – 3,000 students, or 85–115% of their combined 2020 school program capacity.
- *School Closure Scenario:*  
*If Eagle River H.S. were closed, then Chugiak H.S. projected 2040 student enrollment would be 135–185% of its 2020 school program capacity...*

*...And what happens by 2050...?*

Education

## Debate rages in Chugiak-Eagle River over post-earthquake plans for schools

✍ Author: Matt Tunseth ◉ Updated: December 10, 2019 📅 Published December 10, 2019



Michelle Strange speaks to the crowd during a public forum on the future of Chugiak-Eagle River schools on Monday, Dec. 9, 2019 at Mirror Lake Middle School in Chugiak. (Matt Tunseth / Chugiak-Eagle River Star)



# The “Heroic Challenge” of Planning:

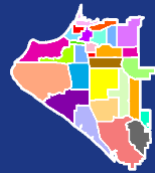


To Get the Public to Engage with its **Community Future**.

- Forecast and Compare **Future Community Scenarios**.
- Include **Public Facility Needs and Facility Impact Areas** when Planning Future Land Capacity for Housing and Employment.
- Involve Citizens, Experts, and Agency Partners in Forecasting and Building **Transparent, Agreed-upon, and Compelling Future Scenarios**.
- Add **Intermediate Timeframes** to Connect the Future Scenarios to the Present.
- Team Up with Partner Agencies to **Coordinate the Land Use Plan with Capital Facility Investments and Operations**.
- Prioritize Growth Opportunity Areas for Coordinating Capital Investments as **“Placemaking”**. (*e.g., strategic alley paving, public transit corridors, RFAs*)
- Integrate the Comprehensive Plan into Capital Improvement Planning.

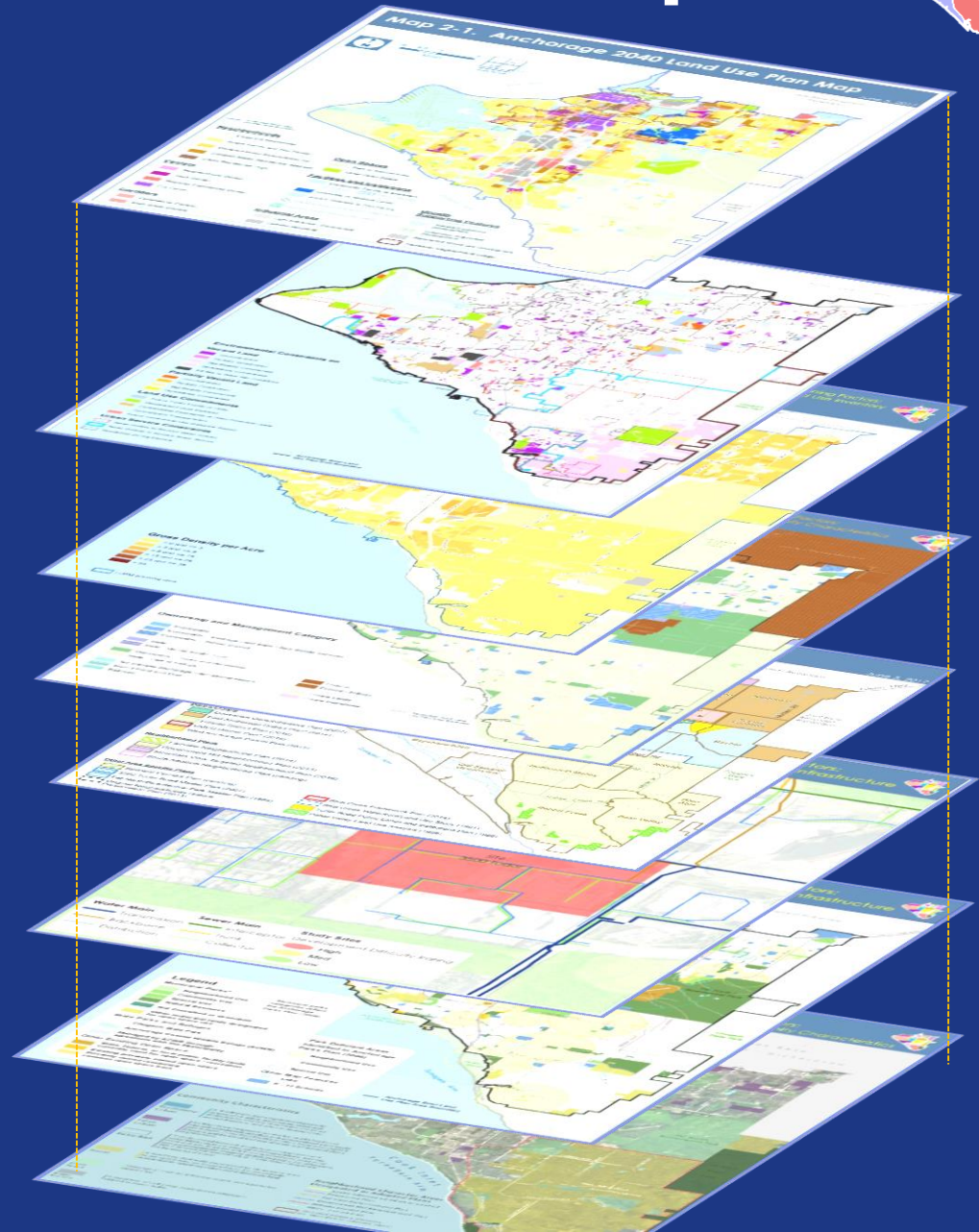


# Enrollment Forecast Next Steps

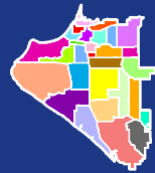


## Need to Improve/Update:

- Improve ISER Model
- Update Housing Capacity
- Update Population and Housing Needs Forecasts
- Forecast Student Participation Rates
- Involve Advisory Groups and Neighborhoods



# Panelists and References



**Tom Fenoseff**, PMP, is the Senior Director of the Capital Planning & Construction Department for the Anchorage School District (ASD). He holds a M.S. degree in Engineering Management from the Missouri University of Science & Technology and B.S. in Environmental Engineering from the United States Military Academy. He is a certified Project Management Professional (PMP) and an active member of the PMI Alaska Chapter. Tom is a past president and current Director of the Society of American Military Engineers and on the Board of Trustees for the Benjamin B. Talley Scholarship Fund. Prior to his position with the Anchorage School District, he served 22 years as an engineer officer in the U.S. Army Corps of Engineers.

**Jennifer Schmidt**, PhD., is Assistant Professor of Natural Resources Management at the University of Alaska Anchorage Institute of Social and Economic Research (ISER). Her responsibilities include teaching classes that cover environmental sciences, geographic information systems, and field methods. Her research interests vary, but all are interdisciplinary, require working with people within and outside her discipline, and are related to how society and the environment interact.

Although she could not attend today's session due to a prior commitment, Dr. Schmidt was the principal researcher and author of the study "Predicting School Enrollment in 2040 in the Anchorage Area," which was commissioned by the ASD in 2018 and a primary information source for this session.



# Panelists and References



**Marcus Hartley** is President and Principal Economist of Northern Economics, Inc. His primary professional focus is on fisheries and fisheries infrastructure, though his work also includes projects in community development, oil and gas, transportation, and other areas. He leads many of Northern Economics' NEPA, EIS, and modeling efforts.

His community development projects include an assessment of the impacts to the Municipality of Anchorage from a potential force reduction at JBER, and an assessment of impacts on the Fairbanks North Star Borough of a force increase at Eielson Airforce Base. He has also provided economic analysis of proposed port infrastructure and fishing industry-related projects for a number of rural Alaska communities, some in support of successful grant applications.

His most recent high-profile project is the *Assessment of Options to Reshape the Alaska Marine Highway System*, conducted for the Alaska Department of Transportation and Public Facilities.

Prior to joining Northern Economics, Mr. Hartley was the Senior Economist for the North Pacific Fishery Management Council, and he has been active in the regulatory regime of the North Pacific fisheries through projects for the Council since 1989.



# Discussion/Q & A

