

Contents

- 1. Summary Background 2
- CEDS Development Process 2
- Demographics 3
 - Gender and Age 4
 - Education 5
 - Households 5
 - Race and Ethnicity..... 7
 - Economy..... 8
- 2. SWOT Analysis..... 10
- 3. Resiliency: 15
 - Climate Change and Natural Disaster Resiliency 15
 - Energy Resiliency 16
 - Pandemic Resiliency..... 17
- 4. Strategic Initiatives..... 18
- Goal 1: URBAN REVITALIZATION 18
 - Objective 1: Community Safety 19
 - Objective 2: Beautification/Downtown Revitalization 19
 - Objective 3: Recreation Hub/Visitor Expansion..... 20
- Goal 2: INFRASTRUCTURE AND HOUSING 20
 - Objective 1: Transportation 21
 - Objective 2: Telecommunications 22
 - Objective 3: Utilities..... 22
 - Objective 4: Housing 22
- Goal 3: INDUSTRY DIVERSIFICATION..... 23
 - Objective 1: Innovation District within University-Medical Area 24
 - Objective 2: Energy Innovation..... 25
 - Objective 3: R&D and Technology Industry 25
 - Objective 4: Medical Industry 26
 - Objective 5: Global Logistics and Trade Hub 26
 - Objective 6: Manufacturing Industry 27
- Goal 4: EDUCATION/WORKFORCE DEVELOPMENT 27

Objective 1: University.....	28
Objective 2: Workforce.....	29
Action Plan for 2018.....	29
APPENDIX.....	30
Definitions.....	30
WORKS CITED.....	31

1. Summary Background

A robust and diverse economy in Anchorage is essential to the well-being and quality of life of our community’s residents. Without a healthy and growing economic base, employment opportunities will diminish. Anchorage’s economic vitality is also essential to the State of Alaska, because Anchorage accounts for more than 40% of the state’s population and employment. The current decline in global oil prices, the state’s fiscal uncertainty, and Alaska’s recession reinforces the importance of strategic planning for economic development at the local level.

The Public Works and Economic Development Act of 1965 requires an approved Comprehensive Economic Development Strategy (CEDS) in order for cities to apply for investment assistance under the U.S. Department of Commerce’s Economic Development Administration’s (EDA) Public Works or Economic Adjustment Assistance Programs. The spirit of a CEDS is one of continuous community involvement and cooperation from the private and public sectors in order to understand and confront economic challenges with a series of feasible, prioritized and accountable projects that will serve as a benchmark for economic and community development in Anchorage over a five-year period. The CEDS also identifies performance measures that will be used to evaluate progress in meeting goals.

The planning process of a CEDS should identify a community’s unique advantages and analyze weaknesses of the local market. Most importantly, a CEDS should identify opportunities that could diversify and strengthen the local economy. Integrated economic development planning provides the flexibility to adapt to changing national and global economic conditions.

CEDS Development Process

The development of this CEDS was a cooperative effort between the Municipality of Anchorage (MOA) and the Anchorage Economic Development Corporation (AEDC). Funding for the project was provided by the Municipality of Anchorage and the Economic Development Administration (EDA).

The fundamental purpose of this strategy is to provide direction for public and private actions to stimulate economic development in the MOA. At a basic level, the goals of the strategy are to create jobs, income and economic stability. The strategy also aims to generate municipal revenue to fund facilities and services that will maintain and enhance our quality of life. A CEDS should establish goals, objectives and strategies that provide the foundation to implement an action plan that can be used to set investment priorities for funding sources and attract private investment that creates jobs.

The mission of this CEDS is to create a vibrant, resilient and inclusive economy in order to build a more self-sufficient future for Anchorage. The stakeholders of this plan include the Municipality of Anchorage,

its citizens, and the business community. This strategy serves as an aligned, achievable, actionable game plan to incite effective economic growth.

Public feedback indicated that Anchorage is overly dependent on government funding for its economic survival and that the pervasive lack of economic diversity would continue to preclude any meaningful economic growth. It was also indicated that educational opportunities were lacking, in part due to the disconnected relationship between UAA and the business community. Public opinion cited the deficiency of workforce and entrepreneur development programs and the dearth of economic diversity as the main causes of Anchorage's economic stagnation.

In order to combat these issues, effective and sustainable leadership in economic development will be a necessary component of this strategy. Integral to the plan's success is also the support of the Anchorage community; CEDS will seek community buy-in for each of the planks to ensure the plan is meeting the needs of its constituents. Business development is at the core of economic growth and therefore, the implantation of business-friendly policies and initiatives will be a priority. The plan will include initiatives geared toward the expansion of workforce and entrepreneur development, as well as a focus on developing more research capabilities. It is imperative to the success and vitality of this strategy that every component is reflective of Anchorage's character and culture. The economic development gained through the CEDS project combined with the community development achieved through Live. Work. Play. initiatives will create overarching environmental, economic, and cultural resiliency.

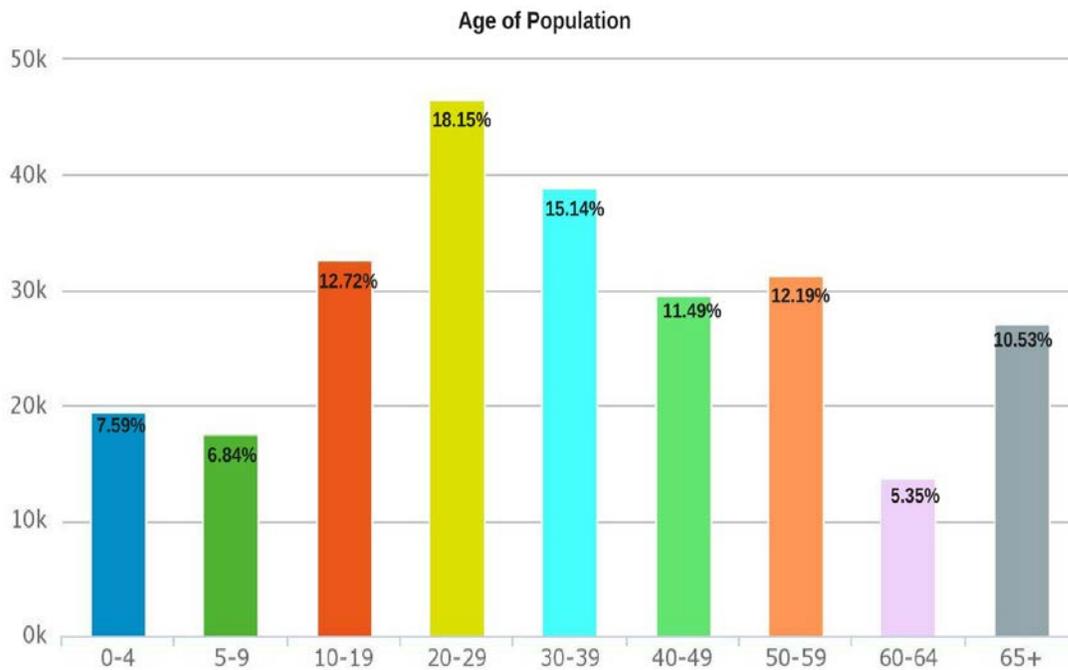
The Anchorage CEDS complements AEDC's Live.Work.Play. initiative, which has the goal to make Anchorage the no. one city to live, work and play in by 2025. The Anchorage CEDS also complements the State's CEDS. The Anchorage CEDS draws upon multiple other long-range plans developed by various state agencies and nonprofit community organizations.

Demographics

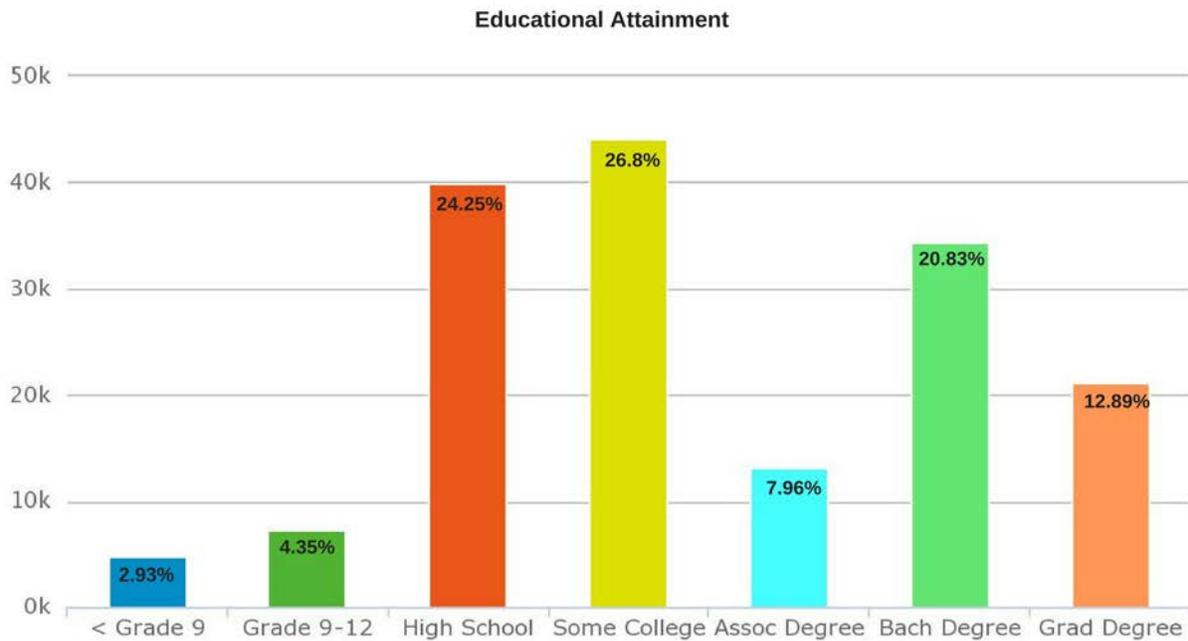
The following demographic data and graphs were accumulated using JobsEQ and Anchorage Prospector software, which sources its data from the State of Alaska, the U.S. Census Bureau, and the U.S. Bureau of Labor Statistics.

Gender and Age

Anchorage currently has a population of 299,543, with 51% male and 49% female. Between the years 2005 and 2015, Anchorage's population grew at an average rate of 0.6%, which is 0.3% lower than the state rate and 0.2% lower than the national rate. While Anchorage's overall population change might be increasing yearly, Anchorage's net migration was -2,576 between the years 2015 and 2016. The Alaska Department of Labor & Workforce Development projects Anchorage's population will reach 339,171 by 2014, representing a 13% increase over a 30-year period.



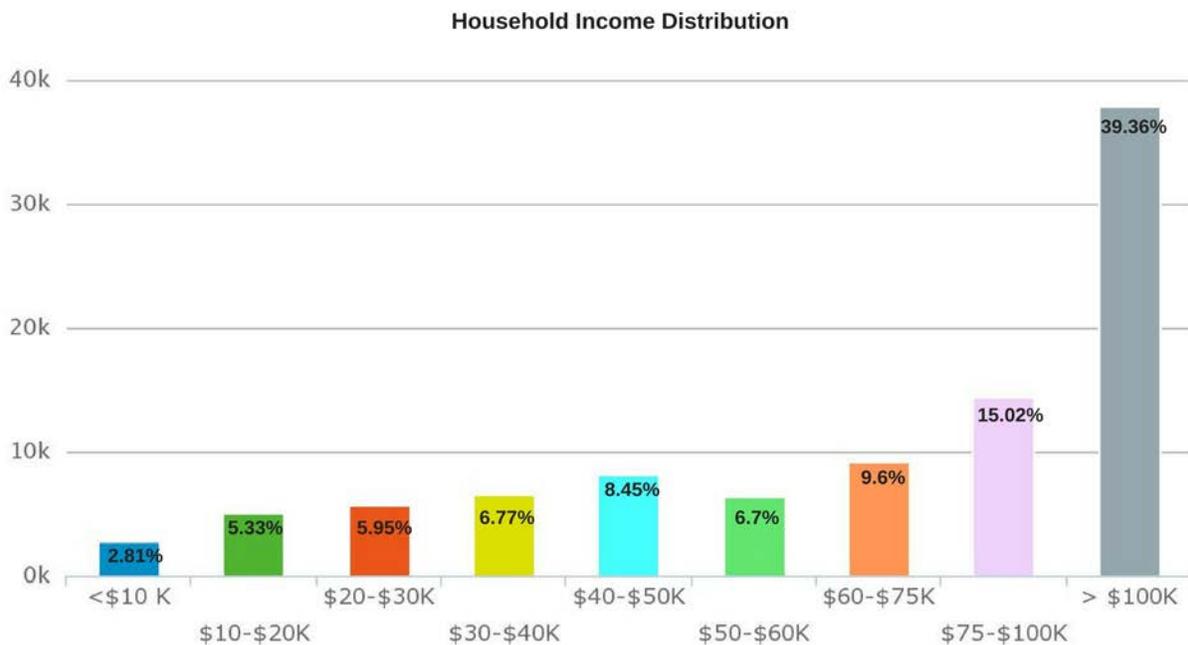
Education



Approximately 93% of the population over the age of 25 has a high school degree. Thirty-three percent of individuals between the ages 25 and 64 have a bachelor's degree or higher.

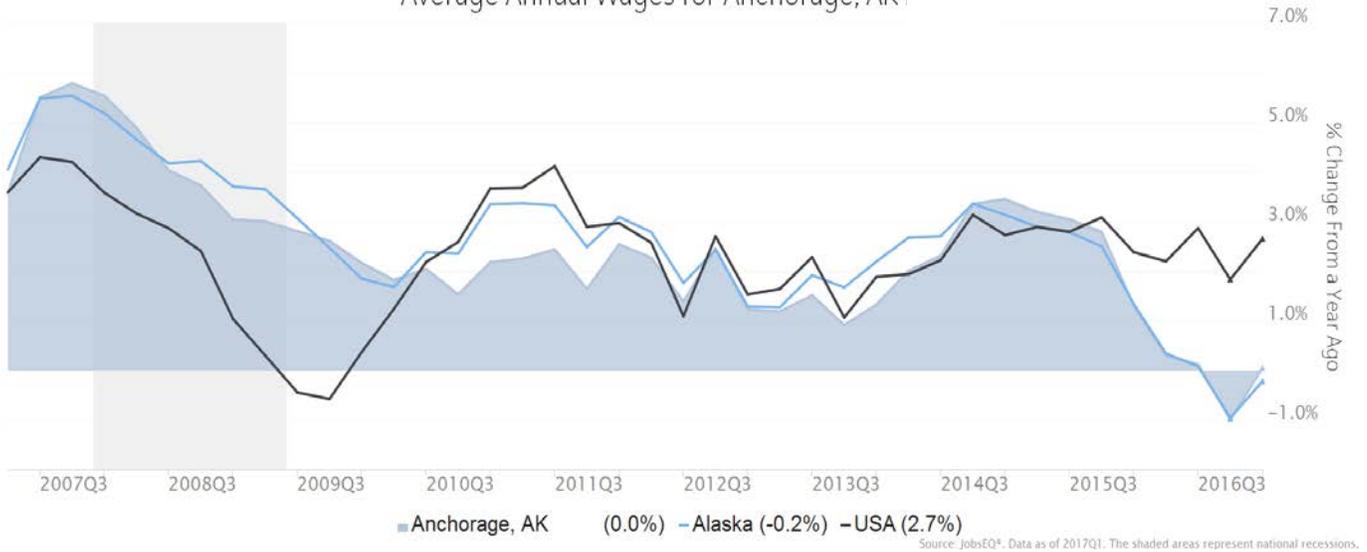
Households

The median household income is \$78,326 and per capita personal income is \$36,920.



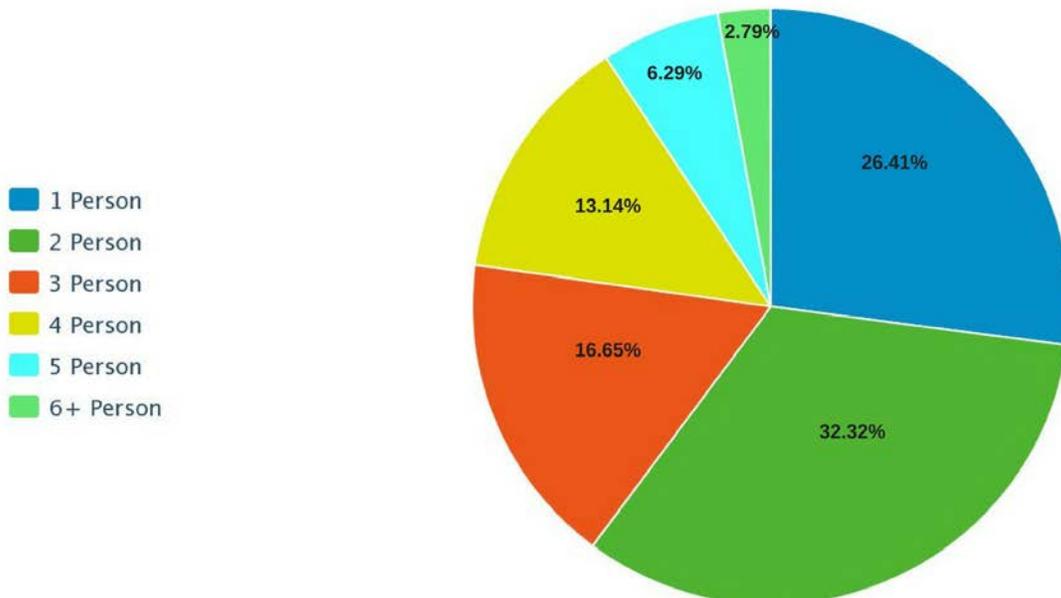
As of 2017, the average worker in Anchorage earns an annual wage of \$56,307, representing a 0% increase over the preceding year. Comparatively, the national average annual wage is \$53,246; however, it is important to note that the cost of living is 31.9% higher in Anchorage than the U.S. average.

Average Annual Wages for Anchorage, AK



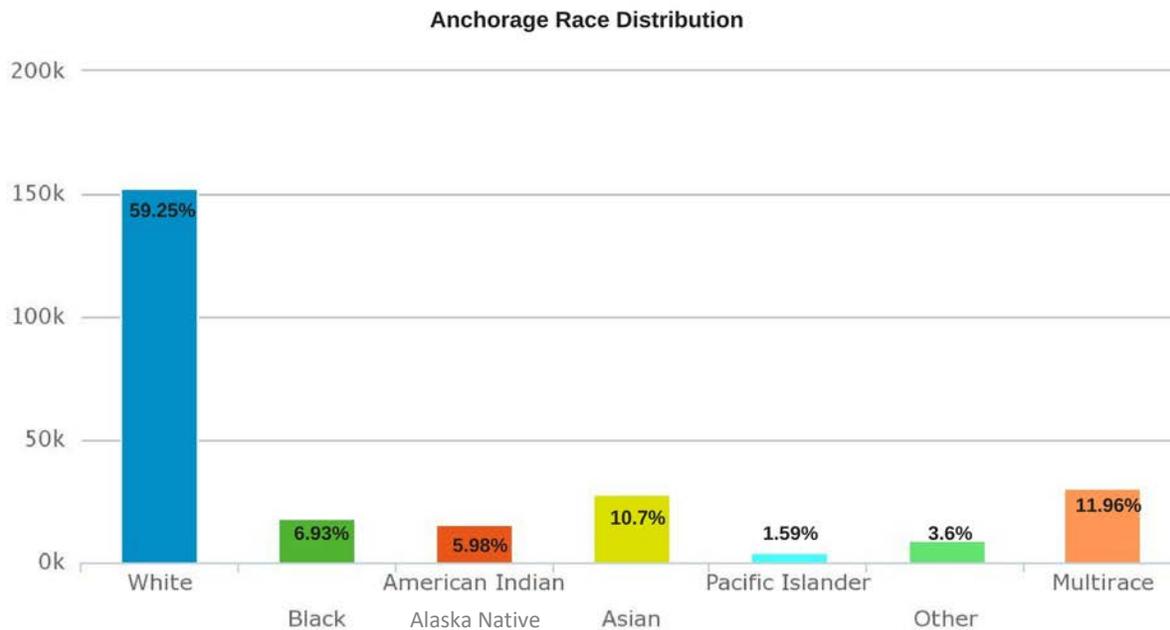
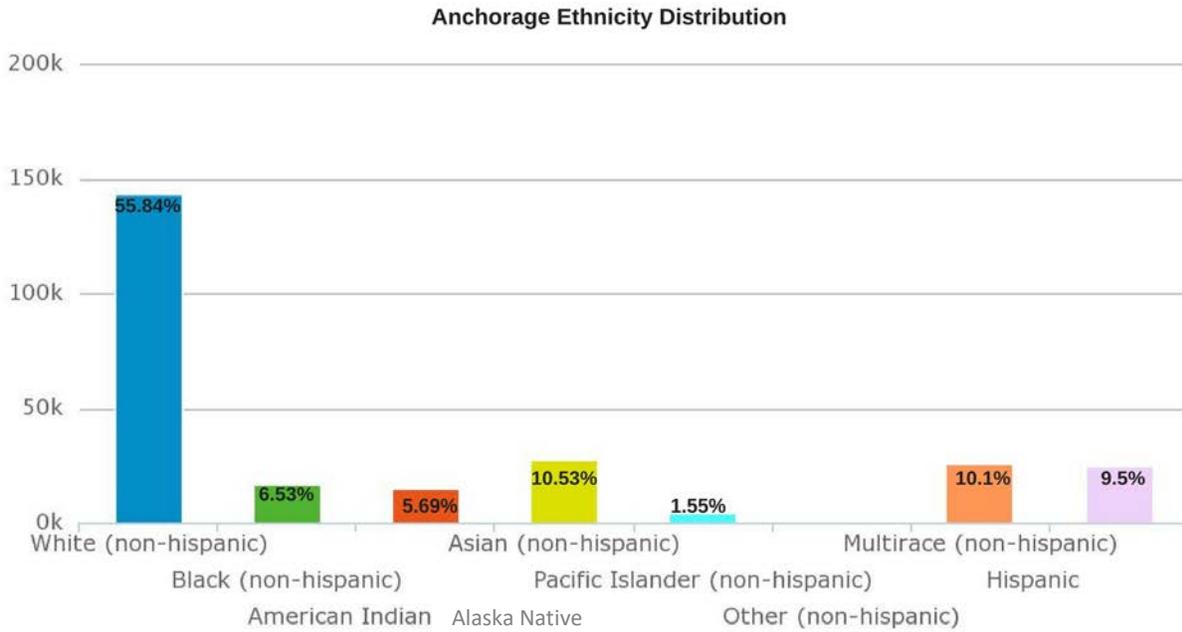
Seventy-five percent of Anchorage households have two people or more and 65.5% are considered families. An increasing percentage of households with two people or more are married couples with no children still living at home and nearly one-quarter of Anchorage households have just one person.

Size of Household

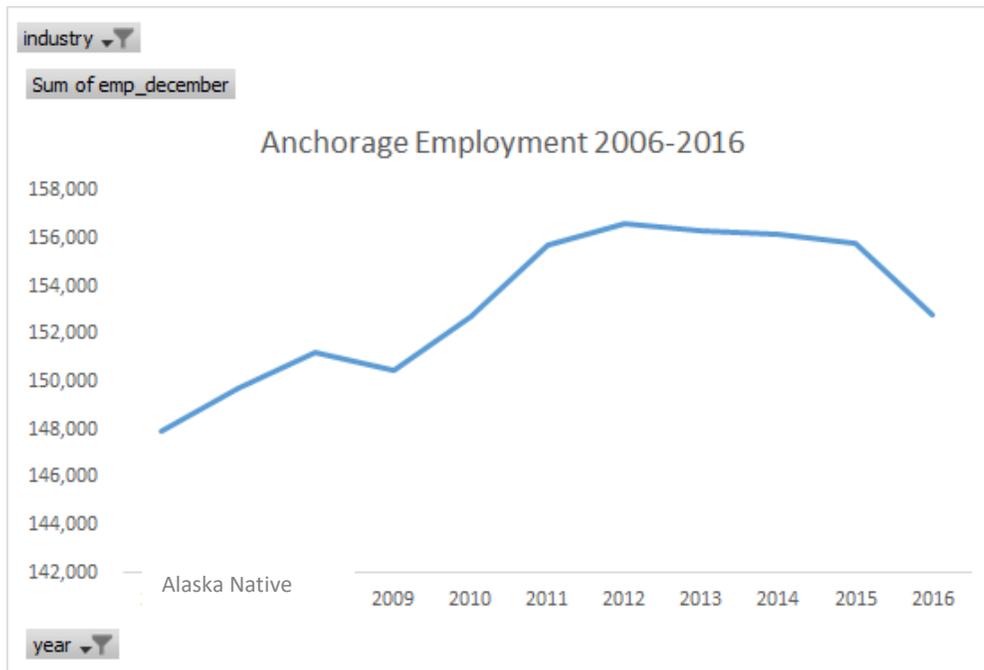


Race and Ethnicity

As defined by the federal Office of Management and Budget, an ethnic group is a population whose members identify with each other on the basis of common nationality or shared cultural traits, whereas race refers to the categorization of people based on physical characteristics and genetic ancestry.



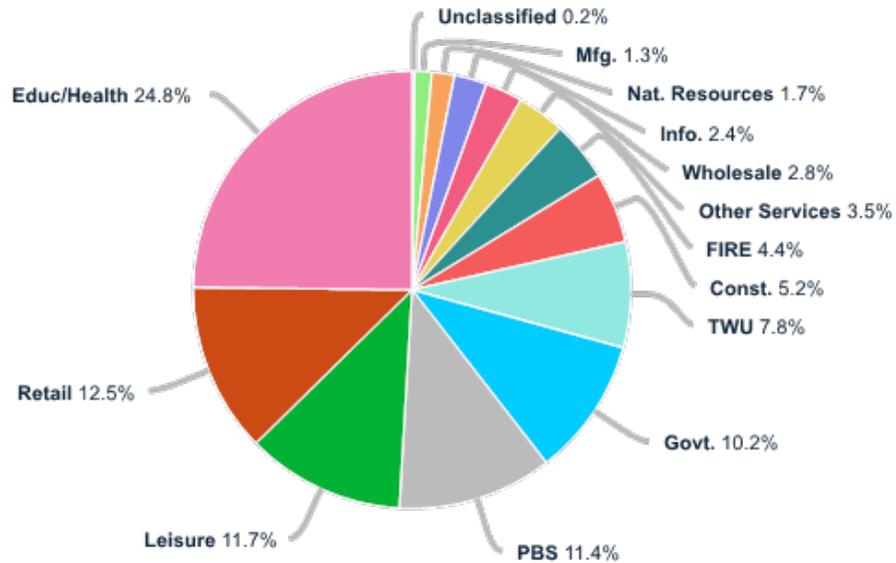
Economy



There is a civilian labor force of 151,270, representing an 89.94% employment rate. Unemployment is at 5.6% and military employment comprises 5.14% of the population. The labor force has been on the decline, going from a high of 156,600 in 2012 to 152,800 in 2016.

The largest employment sector in Anchorage is Health Care and Social Assistance, which employs over 25,000 workers. The next-largest sectors are Retail Trade, employing 18,500 workers, and Public Administration, employing 15,500 workers. Sectors with the highest average wages per worker are Resource Extraction (Mining, Quarrying, Oil, and Gas,) with wages of \$176,988, and Management, with wages of \$88,425. Regional sectors with the best opportunities for job growth – or the most moderate job losses – over the next five years are Health Care and Social Assistance, Management, and Accommodation and Food Services.

Labor Inventory, Covered Employment, for Anchorage, AK



Percentage Change in Employment by Industry from 2010-2016

<i>Industry/Sector</i>	<i>% Change in Employment from 2010-2016</i>
<i>Health Care</i>	20%
<i>Educational and Health Services</i>	17%
<i>Food Services and Drinking Places</i>	13%
<i>Leisure and Hospitality</i>	9%
<i>Wholesale Trade</i>	2%
<i>Retail Trade</i>	2%
<i>Service-Providing</i>	1%
<i>Trade/Transportation/Utilities</i>	1%
<i>Total Nonfarm</i>	0%
<i>Manufacturing</i>	0%
<i>Oil and Gas</i>	0%
<i>Professional and Business Services</i>	0%
<i>Trans/Warehouse/Utilities</i>	-1%
<i>Other Services</i>	-2%
<i>Accommodation</i>	-3%
<i>Mining (inc. Oil and Gas)</i>	-4%
<i>Local Government</i>	-5%
<i>State Government</i>	-6%
<i>Government</i>	-7%
<i>Information</i>	-7%
<i>Local Education</i>	-7%
<i>State Education</i>	-7%
<i>Federal Government</i>	-9%
<i>Goods Producing</i>	-12%

Financial Activities	-17%
Construction	-17%

Between 2010 and 2016, the industries with the largest employment losses were: Construction, Financial Activities, Goods Production, and the Federal Government. Health Care, Health Services, Food Services, and Leisure and Hospitality saw the largest increases in employment during that period.

GDP in Millions by Industry



2. SWOT Analysis

AEDC conducted a SWOT analysis throughout the first quarter of 2017. In an online survey that collected over 1,200 individual responses, we asked a series of five open-ended questions covering the public perception of Anchorage's economic strengths, weaknesses, opportunities and threats. The survey responses were then aggregated into several major categories. The number of individual responses per category was displayed as a percentage of the total number of respondents to demonstrate the strength of public opinion. Several participants' responses fell into multiple categories, so the summed category percentage exceeds 100%. The questions and the aggregated results are shown below:

In your opinion, what makes Anchorage's economy strong?

Tourism Industry	23%
Oil and Gas Industry	23%
Local businesses	23%
Population Diversity	14%
Transportation Industry	11%
Robust work force and job market	10%
Government services/funding/jobs	10%
Military base jobs and activity	9%
Attitude and resiliency of population	9%

Health care Industry	8%
Geographic factors and resources	8%
Education	6%
<i>Did not respond to question</i>	5%
Tax structure	3%
Fishing Industry	2%

In your opinion, what makes Anchorage's economy weak?

Lack of a diverse economy/overreliance on few key industries	40%
Government fiscal uncertainty	18%
High costs of living	10%
Lack of local businesses	9%
Prevalence of crime/drugs/homelessness	9%
Lack of jobs and high employee turnover	8%
Negative attitude of population	56%
Lack of infrastructure and transportation	5%
Poor education system	5%
Lack of taxes	4%
Lack of attractive downtown/city center	3%
Geographic factors	3%
<i>Did not respond to question</i>	3%
Too many taxes/disproportionate tax burden	3%
Lack of tax incentives for business	1%

In your opinion, what are opportunities for Anchorage's economy?

Increase business and industry diversity	29%
Increase year-round tourism opportunities	22%
Increase R&D and energy diversity	17%
Become a global logistics and trade hub	13%
Promote arts and culture and beautify city	13%
Become a recreation hub	11%
Improve infrastructure	11%
Improve education and university system	10%
Expand technology Industry	9%
Retain and encourage new talent	8%
Expand health care industry	6%
Institute new taxes	5%
<i>Did not respond to question</i>	5%
Fiscal clarity	5%
Improve attitude of population	5%

Improve safety and decrease crime/drugs/homelessness	2%
Decrease taxes	1%
Improve tax incentives for businesses	1%

In your opinion, what are threats to Anchorage's economy?

Government fiscal uncertainty	29%
Lack of an innovative and diverse economy	26%
High crime/drugs/homelessness	22%
Lack of talent retention and attraction	11%
Lack of local businesses	11%
High cost of living	9%
Cuts to education	9%
Negative attitudes and lack of community engagement	8%
Lack of taxes	8%
Job loss and wage decrease	8%
Poor infrastructure	8%
Too many taxes	7%
Environmental degradation/global climate change	4%
<i>Did not respond to question</i>	2%

The final question asked participants what initiatives or actions they would recommend to increase Anchorage's economic resiliency. The initiatives suggested have been incorporated into the planks of this document.

AEDC also conducted a series of community and business-oriented roundtable meetings across Anchorage, Eagle River and Girdwood. The purpose of these meetings was to foster a dialogue amongst a diverse group of individuals to obtain granular feedback regarding the state of Anchorage's economy. Those present at the roundtables were asked the same five questions as in the online survey. The results from these meetings were added to the online survey responses and separated into major areas of focus.

Strengths:

- Alaska's economic center
- Largest state university
- Multitude of K-12 school options: public, lottery, charter, immersion etc.
- Globally centered airport with direct routes
- Port of Anchorage
- Railroad headquarters
- Transportation and logistics center for state

- Diverse, livable neighborhoods
- Surrounded by natural beauty
- Recreation opportunities
- Arts and culture hub
- Unique Alaska brand
- Oil and gas headquarters
- Local businesses and an entrepreneur-friendly climate
- Native corporation headquarters
- Diverse workforce
- Medical industry center for the state
- Diverse population
- Resilient population
- Military bases
- Center of government services

Weaknesses:

- Lack of diverse and affordable educational opportunities
- Lack of university programs and graduate offerings
- Lack of vocational skill trainings
- Low venture capital investment in Anchorage
- Transient student population/brain drain
- Lack of infrastructure development and existing infrastructure is aging and corroding
- High costs for shipping, transportation, and travel
- Geographically far from other places
- Lack of communications and internet infrastructure due to high costs
- Lack of efficient public transit system
- Lack of buildable land as Anchorage is landlocked by ocean and mountains
- Difficult permitting process and excess regulations around rebuilding
- Lack of affordable, available housing
- Cost-prohibitive housing options
- Lack of an attractive city center
- Unwalkable city – no building connectivity or winter amenities
- Overly reliant on a few key industries
- Lack of a diverse economy
- Lack of local businesses
- Consumer society with no manufacturing industry
- High costs of capital and labor
- Seasonal tourism industry only
- Unrealistic expectations and negative attitudes toward development
- Widespread increase in crime
- Pervasive and persistent homelessness
- Ongoing drug epidemic
- Lack of community engagement

Opportunities:

- Improve the university and education system. Integrate the university more fully with the community
- Retain and attract new talent with internship and mentorship programs
- Increase job training for adults
- Increase Arctic education and research opportunities
- Capitalize on the airport by further developing aviation industry and increasing direct connections and air cargo opportunities
- Connect railroad to lower 48
- Capitalize on proximity to Asia to become a global logistics and trade hub
- Expand telecommunications infrastructure
- Develop utilities infrastructure
- Ease up municipal permitting process
- Increase affordable housing
- Increase high-density housing
- Improve walkability and bike accessibility
- Beautify city
- Increase industry diversity: agriculture, tech, manufacturing, renewable energy
- Increase R&D and energy diversity
- Increase winter tourism
- Expand health care industry and transparency – lower costs
- Capitalize on diverse cultures
- Improve safety with community policing, more police resources, and community education on drugs
- Create a task force to combat homelessness

Threats:

- Future budget cuts to education
- Further decline of the oil and gas industry
- State fiscal crisis and budget uncertainty
- Lack of skilled labor
- Lack of competition in higher education
- Anti-development attitude
- Lack of funding for port/infrastructure
- Climate change impact on several industries
- Potential loss of its health care workforce
- Potential loss of military base or personnel
- Outflow of university students to out-of-state schools
- Narrow tax base
- Polarization of political parties

These results depict trends and clarify the major concerns and needs of Anchorage's citizens. These needs are reflected in the next section of this document through the proposed strategic initiatives.

2. Resiliency:

“Many of the most important events which have changed Alaska’s economy have been almost completely unexpected. Examples include World War II, the 1964 earthquake, the discovery of the giant Prudhoe Bay oil field, the Exxon Valdez oil spill, the dramatic rise in oil prices in 1979 and in the mid 2000s, and the recent world economic crisis. There are probably more surprises in Alaska’s future, which may have similarly unanticipated and dramatic effects.” (2012 ISER – Introduction to Economy of Alaska, Gunnar Knapp) ¹

Improved economic stability for all citizens can make a significant difference in how well cities recover from a disaster.

“Incorporating resilience planning and principles not only prepares cities for disasters and long-term threats, but also improves everyday living standards for all members of an urban community.” - Judith Rodin, president of The Rockefeller Foundation²

Located at the gateway to the Arctic, Anchorage is experiencing rapid environmental, economic and cultural changes. Environmentally, climate changes are occurring at twice the rate in Alaska as they are in other regions of the world, resulting in dramatic changes to our freeze/thaw cycles, increased wildfire risk, and flooding. Economically, as Alaska looks toward a future with declining oil revenues, we are faced with the need to redefine our fiscal future. Socially, Anchorage is among the most rapidly diversifying cities in the U.S. which creates tremendous equity challenges and a need to ensure that all residents have access to critical services. These shifts are creating chronic stresses (such as unemployment, homelessness and economic inequities,) leaving Anchorage more vulnerable to acute shocks (such as floods, earthquakes and fires).

Resilience strategies are needed to ensure that Anchorage neighborhoods are capable of absorbing and responding to chronic stresses and acute shocks caused by these shifting economic, equity, and environmental drivers. This strategy should prioritize community engagement, infrastructure improvement, job training, and the diversification of food and energy sources in ways that develop the skills, institutions, and infrastructure necessary to overcome both chronic stresses and acute shocks.

Climate Change and Natural Disaster Resiliency

Climate change has the potential to significantly harm the sustainability of several key industries, as well as threaten the survival of the surrounding wildlife and natural environment. According to the EPA and the National Climate Association, Alaska is warming twice as fast as the rest of the nation and, in the past 60 years, Alaska has warmed six degrees. This has caused Arctic sea ice to retreat, shores to erode, glaciers to shrink, permafrost to thaw, and wildfire occurrences to increase. Sea ice not only provides a habitat for wildlife and hunting grounds for subsistence communities, but it also acts as a buffer against storm damage. The thawing of permafrost damages pipelines, buildings, transportation infrastructure, water supplies, and sewer system.³ The cost of maintaining public infrastructure is estimated to increase by 10-20% in the next 20 years. Energy production depends heavily on frozen tundra and ice roadways

¹ Knapp, G. (2016, March 30). Observations on Alaska’s Economy and Economic Implications of Alaska’s Fiscal Choices.

² Katz, B., & Wagner, J. (2016, September 28). The Rise of Innovation Districts.

³ Environmental Protection Agency . (2016, June). ADAPTING TO CLIMATE CHANGE .

to support oil and gas exploration, especially in areas without conventional roadways. Climate change has also shifted the travel season from 200 days in 1970 to only 100 days in 2002. Ocean acidity threatens fishing, which is Alaska's third largest industry and decreases Alaska's animal biodiversity. Anchorage needs to implement a plan to not only combat the symptoms of climate change, but to also prevent it from progressing further in the future.⁴

Anchorage does not currently have cargo import capacity or infrastructure that could substitute for the Port of Anchorage in the event of a natural disaster. Trucking goods to Anchorage from the lower 48 is up to three times more expensive per pound than shipping to the port and air transport can cost up to four times as much. The Port of Anchorage docks represent the largest threat to Alaska's import supply chain as they are currently unable to survive another major earthquake. In order to safeguard the state's import capacity, the existing docks need to be replaced with facilities that can withstand a significant seismic event. The redesigned facilities need to include contingency plans to be operational and able to support recovery services within days of an anticipated earthquake during any time of year.⁵

A natural disaster would threaten the survival and efficacy of information systems as well. Hindered access to data can alter emergency crew response times as well as impair the return to normalcy post-disaster. The process of disseminating critical information must be reinforced and protected by backup and support systems that are connected to different power sources. An open-data portal in the Cloud would ensure that vital information is unaffected by damage to physical infrastructure.⁶

Adapting to climate change requires participation from the business community as well as the government. Commitments from key industry players to implement environmentally conscious business decisions should be secured through public-private partnerships. There must be a concerted effort to optimize energy efficiency and minimize resource depletion and pollution⁷. Policy should encourage the use of pollution control equipment, energy-efficient building designs, waste reduction systems, and environmental remediation measures. These actions will help reverse the impacts of climate change as well as attract investment from outside companies focused on sustainability and corporate social responsibility.⁸

Energy Resiliency

Sustainability should become an intrinsic element of all future investment and development. Alaska's geographically isolated position makes it susceptible to slow-onset disasters. Anchorage needs to invest in solar, water, wind and geothermal energy to serve as backup sources of power. Additionally, the city needs to upgrade and reinforce all existing utility infrastructure so it can withstand a natural disaster. Centralized energy systems can leave entire cities without electricity in the aftermath of a natural disaster. Anchorage's Comprehensive Emergency Operations Plan estimates that a communications or

⁴ Chapin, F.S., S.F.Trainor, P. Cochran, H. Huntington, C. Markon, M. McCammon, A.D. McGuire, and M. Serreze. (2014)

⁵ CH2M Engineers . (2016, October 17). Anchorage Port Modernization Program Test Pile Program Report of Findings

⁶ Links, J., M.D. (2017, August 7). Predicting community resilience and recovery after a disaster.

⁷ World Economic Forum . (2016, January). Global Agenda Council on Risk & Resilience Insights .

⁸ Markon, C.J., Trainor, S.F., and Chapin, F.S., III, eds. (2012)The United States National Climate Assessment - Alaska Technical Regional Report: U.S. Geological Survey Circular 1379

power failure could close critical facilities for up to 30 days and instigate property damage on 25-50% of the city's buildings.⁹ Renewable energy can increase the reliability of emergency power generation while decreasing reliance on oil and gas systems. The most critical, yet overlooked, component of natural disaster resiliency is prevention and mitigation.¹⁰ Early-warning and detection systems must be improved and strategically placed to ensure advanced notice in the event of a major earthquake or other disaster.

Pandemic Resiliency

Epidemics and pandemics not only threaten the lives of thousands of people, but they also wreak havoc on the economy. Public health officials with the Center for Disease Control estimate that a major pandemic could cripple 60% of a workforce, shutting down basic services and threatening the supply of necessary goods. A new strain of the influenza virus surfaces every 1 to 2 years and historically a pandemic has occurred every 10-50 years.¹¹ According to epidemiologists, a new pandemic is inevitable and the interconnected nature of global transportation will make managing it a challenge. Not only would a pandemic spread more quickly now than it would have in the past, but the process of identifying the virus or bacteria and developing a treatment would be infinitely more complicated. The Municipality's Comprehensive Emergency Operations Plan predicts that a pandemic, infectious disease, or contamination of food or water would cause the closure of critical facilities for more than 30 days.¹² Recognizing that Anchorage's population is susceptible to outbreaks and epidemics occurring across the globe due to its location and use as a global logistics hub, the city must be prepared with action plans and mitigation measures in the event of a global pandemic crisis. Access to clean water, food and medical supplies must be a paramount component of the pandemic resiliency strategy. There must be coordination between local law enforcement, hospitals and the CDC for contingency plans regarding a potential quarantine situation.

Economic Resiliency

Economic resiliency is the ability to prevent, withstand, and quickly recover from acute shocks, such as downturns or other significant events in the national or international economy; downturns in particular industries that constitute a critical component of the region's economic activity; and/or other external shocks (a natural or man-made disaster, closure of a military base, exit of a major employer, the impacts of climate change, etc.) Over the past century, Anchorage experienced acute shocks from events such as the 1964 Good Friday earthquake or the precipitous drop in oil prices that led to the recession of the 1980s.

Economic resilience, however, should go beyond simply recovering from shocks; economic resilience for Anchorage will empower our community to recover, withstand and altogether avoid acute shocks. Anchorage must develop the capacity to anticipate risk, evaluate the economic impact of that risk, and build responsive capacity that draws upon public and private resources.

⁹ Municipality of Anchorage . (2015). Comprehensive Emergency Operations Plan.

¹⁰ World Economic Forum . (2016, January). Global Agenda Council on Risk & Resilience Insights .

¹¹ World Bank. (2017, July 18). Pandemic Preparedness and Health Systems Strengthening.

¹² Municipality of Anchorage . (2015). Comprehensive Emergency Operations Plan

Community Partners: Aiding Women in Abuse and Rape Emergencies, Anchorage Economic Development Corporation, Federal Emergency Management Agency, Municipality of Anchorage, Centers for Disease Control and Prevention, Port of Anchorage, Joint Base Elmendorf-Richardson, Ted Stevens International Anchorage Airport

4. Strategic Initiatives

Goal 1: URBAN REVITALIZATION

Urban revitalization is a goal Anchorage has been chasing for decades; Anchorage 2020, Vision Anchorage, previous CEDS, and AEDC's Live.Work.Play initiative have all attempted to catalyze the revitalization of Anchorage. Urbanization and modernization are essential to the future of Anchorage as reports have proven that industry chases talent and talent chases place¹³. Without affordable housing in safe communities, effective public transportation, pedestrian friendly streets, modern shopping and grocery outlets, and a vibrant arts scene, Anchorage will be unable to attract or retain the workforce needed to be economically sustainable. Based on the information collected from the SWOT Analysis, a revitalized downtown is viewed as an essential factor in Anchorage's continual development as a world-class northern destination. A revitalized downtown will attract workforce, inspire new industry development, and foster community connections.

Urban centers attract and retain workforce, encourage creativity, and ultimately contribute to the overall brand of a city. Anchorage is still figuring out how to brand itself, but with access to the mountains, a world-class trail system, fishing, biking and other recreation, Anchorage is an obvious stop for the avid outdoor enthusiast. However, Anchorage does not appeal to the person who wants to be able to live in a neighborhood where they can walk to a grocery store without crossing a major highway, take the bus to a concert downtown, or bike commute throughout the year. The Wall Street Journal reported that millennials overwhelmingly favor urban settings and workplaces that are close to where they socialize¹⁴. Anchorage needs to combine its recreational opportunities with the cultural amenities of an urban center to improve the overall quality of life of its citizens.

The Municipality of Anchorage is increasing awareness and developing initiatives to improve safety at the community level. Anchorage has faced increasing crime rates for a handful of reasons over the past several years; drug and alcohol epidemics have led to an increase in homeless populations, increased theft and property damage, and an increase in violent crimes. State and municipal budget constraints have caused reduced police and safety forces, which has ultimately contributed to a culture of fear and intolerance¹⁵. Based on AEDC's SWOT Analysis, community safety is a huge concern for citizens and business owners alike and needs to be a key focus for the city moving forward. Anchorage has already made great efforts to reduce assaults and property crimes by increasing police patrols both on foot and in vehicles. The city's Parks and Recreation Department is working to track and remove homeless camps in greenbelts as soon as they pop up and to improve visibility and lighting on the trails.

¹³ Development Counsellors International . (2017). Talent Wars.

¹⁴ Kusisto, L. (2017, May 22). Why Millennials Are (Partly) to Blame for the Housing Shortage.

¹⁵ City Data . (2015). Crime rate in Anchorage, Alaska (AK).

Objective 1: Community Safety

Action Plan:

- Increase communication between community partners (see list of partners below) to eradicate redundancies and inefficacies.
- Foster a sense of community activism and create a community policing initiative.
- Expand homeless, addiction, and emergency service agencies throughout all Anchorage neighborhoods to ensure maximum efficiency and effectiveness.
- Increase housing options for the chronically homeless and increase treatment options for those who suffer from chronic addiction.

Community Partners: Anchorage Police Department, Anchorage School District, Federation of Community Councils, Anchorage Parks Foundation, Municipality of Anchorage, Anchorage Downtown Partnership

Performance Measures:

- Decrease the number of chronically homeless individuals
- Reduce property crime rates
- Reduce crime rates downtown and on the trails
- Reduce homeless or drug-related crime rates
- Increase number of detox beds
- Reduce number of 911 calls related to drugs or alcohol

Objective 2: Beautification/Downtown Revitalization

Action Plan:

- Develop a robust toolbox (e.g. incentives, grants, etc.) to encourage development and redevelopment in downtown.
- Increase collaboration among Community Partners to support and promote downtown as a major employment hub and the premier location for corporate headquarters.
- Increase public art and placemaking initiatives downtown and throughout neighborhood centers (e.g. Muldoon, Spenard, Fairview).
- Improve the winter walkability of downtown through sidewalk maintenance and heating, covered walkways, and other northern climate best practices.
- Ensure that sidewalk treatments and the ground floors of all buildings engage pedestrians and create an active, inviting, urban experience with a comfortable, safe, and vibrant pedestrian environment year-round.
- Implement the traffic and circulation recommendations of the Downtown Anchorage Comprehensive Plan to convert one-way streets into two-way streets. Develop more pedestrian-focused street designs and transform underutilized streets into pedestrian areas. Develop downtown bike networks and designated pedestrian areas to encourage walking and visiting local businesses.
- Encourage redevelopment of surrounding neighborhoods in a way that supports the goals of those neighborhoods and provides additional housing options for downtown employees.

Community Partners: Anchorage Downtown Partnership, Anchorage Economic Development Corporation, Anchorage Chamber of Commerce, Municipality of Anchorage, Federation of Community Councils, Private Developers, Visit Anchorage, Downtown Community Council, Anchorage Community Land Trust, Anchorage Community Development Authority, private-sector real estate developers

Performance Measures:

- Increase pedestrian traffic downtown
- Increase permit values for downtown construction projects
- Increase the number of downtown residents
- Increase revenues for downtown businesses
- Increase downtown property values
- Increase the number of community events downtown year-round.

Objective 3: Recreation Hub/Visitor Expansion

Action Plan:

- Expand year-round tourism with targeted marketing efforts and additional winter city amenities. Promote Anchorage as an adventure and niche tourism hub with year-round recreation opportunities.
- Utilize greenbelts and urban trail (e.g. Chester Creek and Campbell Creek) access points as mini recreational areas, tourist, and commerce hubs by offering amenities such as lodging, food and housing options.
- Create bike sharing stations throughout the city to attract tourists and locals alike to all neighborhoods.
- Improve lighting and provide heated areas along trails and within parks and public spaces to encourage more winter activities, fairs, festivals and markets.

Community Partners: Anchorage Parks Foundation, Parks and Recreation, Visit Anchorage, Municipality of Anchorage, Federation of Community Councils, Anchorage Economic Development Council, Private Businesses and Developers, Anchorage Downtown Partnership, Anchorage Community Land Trust, Private Developers

Performance Measures:

- Increase the number of businesses located near major Anchorage greenbelts
- Increase community events along the trail system
- Increase pedestrian, bike, and other non-motorized traffic along Anchorage greenbelts
- Increase revenue to local businesses on the greenbelt
- Increase winter tourism

Goal 2: INFRASTRUCTURE AND HOUSING

Expanded transportation options will improve connectivity throughout the city, the state, and the lower 48. Physical infrastructure also contributes to the span of digital infrastructure and technological capabilities. The pervasive lack of competition within the telecommunications industry allows consumer prices to stay artificially high while simultaneously restricting the breadth of service. In the

interconnected world, the sustainability of the Alaska economy depends on the stable access to data and goods from outside the state. Modernizing Anchorage's infrastructure is key to gaining a competitive economic advantage on the global stage.

Numerous engineering studies have documented that the Port of Anchorage has a severe corrosion problem and that its wharf piles are in extremely poor condition. Anchorage currently spends millions of dollars each year to maintain the port's operational capacity but this fails to address the facility's ability to survive an earthquake or other natural disaster. The aging port infrastructure represents the largest risk to Anchorage's – and thus Alaska's – supply chain operations. Alaska's small and widely spread population – nearly 85% of which relies on the Port of Anchorage – cannot economically support redundant cargo-handling facilities that could replace the port in an emergency situation¹⁶.

Anchorage also suffers from a persistent lack of affordable and available housing, specifically in downtown neighborhoods. Diverse housing options for rental and ownership are imperative for a well-rounded, vibrant city¹⁷. Affordable housing not only attracts millennials and young professionals to Anchorage, but it also spurs the economic activity that incentivizes outside investment.¹⁸

Objective 1: Transportation

Action Plan:

- Perform an inventory on existing infrastructure to get a complete sense of all gaps and deficiencies. Inventory current planning efforts and increase communication between entities in order to remove information silos. Work with community partners and developers to increase investment in new and existing road infrastructure.
- Support planned improvements to the Port of Anchorage and actively expand the role of the Port as an economic engine for Anchorage. Replace all aging port infrastructure with materials that can sustain all likely natural disasters.
- Increase public transportation options: develop People Mover routes which meet the needs of citizens; implement a frequency of service which promotes ridership; maintain clean and weather-suitable bus shelters and pedestrian access to bus stops.
- Implement safe road sharing and sidewalk infrastructure for pedestrians.

Community Partners: Port of Anchorage, Municipality of Anchorage, Anchorage Economic Development Corporation, Department of Transportation and Public Facilities, Federal Highways Administration, People Mover, Alaska Movement, State of Alaska

Performance Measures:

- Increase ridership of the People Mover system
- Decrease accidents due to faulty transportation infrastructure
- Increase investment spent on pedestrian and public transportation infrastructure
- Upgrade all priority Port of Anchorage infrastructure needs
- Maintain existing road infrastructure

¹⁶ American Society of Civil Engineers . (2017). Alaska Infrastructure Report Card

¹⁷ Kelly , D. (2016, July 8). Anchorage doesn't have enough homes to meet demand.

¹⁸ Kusisto, L. (2017, May 22). Why Millennials Are (Partly) to Blame for the Housing Shortage

Objective 2: Telecommunications

Action Plan:

- Expand digital infrastructure and secure redundancy in operations to protect against potential failures.
- Increase bandwidth capacity to increase security and reliability in order to grow a technology industry in Alaska.
- Incentivize competition within the communications industry to broaden consumer options and lower costs for consumers.

Community Partners: Telecommunications companies, Municipality of Anchorage

Performance Measures:

- Increase bandwidth capacity and access
- Decrease average costs of telecommunication services

Objective 3: Utilities

Action Plan:

- Evaluate water, sewer, storm water, natural gas and electrical infrastructure to determine emergency preparedness and resiliency of existing infrastructure.
- Invest in improved water, electrical, and natural gas infrastructure to increase efficiency and improve emergency preparedness and resiliency.
- Continue to develop and utilize renewable solar, water and wind energy sources with storage technologies to power backup utility infrastructure, reduce consumer costs, and reduce reliance on fossil fuels.
- Expand the use of microgrids in neighborhoods to increase redundancy, improve efficiency and to overall boost resiliency where cost effective.

Community Partners: Municipality of Anchorage, Anchorage Waste and Wastewater Utility, Anchorage Soil and Water, Fire Island Wind LLC, Anchorage Municipal Light, Enstar, Chugach Electric Association, Inc.

Performance Measures:

- Increase electric generation from renewable energy sources
- Increased rate stability
- Increase residential and commercial heating efficiency and resiliency
- Increase the number of buildings that have backup power sources that can be safely separated from the grid

Objective 4: Housing

Action Plan:

- Encourage the development of diverse housing options and mixed-use spaces with amenities that will boost commerce, attract more traffic, and foster a vibrant community in walkable neighborhoods.

- Increase the amount of affordable housing which is defined as housing for people on lower incomes in which rent or mortgage costs do not exceed 30 percent of the gross annual household income, as well as mixed use housing construction. Expand home rental and ownership opportunities, particularly for low to moderate income households.
- Provide an effective mix of programs and services that address the housing and housing-related needs of residents.
- Encourage higher density housing along transit corridors.
- Increase housing opportunities (affordable and market rate) in walkable locations near important amenities (e.g. grocery store, pharmacy, health care, public transit, etc.)

Community Partners: Cook Inlet Housing Authority, Anchorage Community Land Trust, Alaska Housing Finance Corporation, Private Developers, Municipality of Anchorage

Performance Measures:

- Increase the number of downtown residents
- Increase the number of multi-family housing development
- Increase the number of mixed-use developments
- Increase construction of affordable housing units
- Increase employment in constructions
- Decrease average mortgage and rent rates for low-income families

Goal 3: INDUSTRY DIVERSIFICATION

Alaska’s abundant natural resources have dictated its economic development path since the state’s inception. As the main economic hub for the state, Anchorage plays a vital role in the process of resource extraction. Alaska’s remoteness from global markets combined with the climate and topography make the state a comparatively expensive place to extract resources. Yet, the resource extraction industry plays a disproportionately large role in Anchorage’s economy, subjecting the city’s resiliency to the volatile nature of international and domestic oil markets¹⁹.

The city’s strategic location has contributed to military strategy as well as the international air cargo industry. Anchorage is only nine hours by air from 90% of the industrialized world, providing an ideal vantage point for the majority of the world's markets. The Ted Stevens Anchorage International Airport is the fifth largest airport in the world in terms of cargo throughput. The strategic location combined with Alaska's liberalized air cargo transfer rights provide unique cost and operational efficiencies.

Anchorage relies heavily on state and federal funding to support military and civilian operations, as well as industries such as construction and health care. According to the Institute for Social and Economic Research, state support to local government budgets has increased from 12% in 2004 to nearly 30% in 2015. In 2015, the Municipality of Anchorage received \$74.3 million in state money, which was more than double what any other Alaskan borough received. While that amounts to only 4% of the Municipality's budget, private sector dependence on state and federal government spending presents a threat to Anchorage's economic stability. Private sector dependence on the state government is caused by government contracts and purchases made from private Alaska companies as well as spending by

¹⁹ Knapp, G. (2016, March 30). Observations on Alaska’s Economy and Economic Implications of Alaska’s Fiscal Choices.

state government employees. In 2016, around 30% of state budget came from the oil industry and 19% came from the federal government. In 2016, the state received \$8 billion through contracts, grants, loans, and other forms of financial assistance²⁰. Anchorage's multilayered dependence on the state and federal government subjects the city's economic strength to unpredictable legislative decisions.

Anchorage's economy can grow in two ways: by growing basic industries or by increasing the multiplier so that support industries grow. Over the past four decades, much of Anchorage's growth has been in support industries. Since the onset of the recession this growth has proven unsustainable and has stalled²¹. The Institute for Social and Economic Research and the Department of Labor projects employment losses in 2017 to expand to support industries and industries dependent on household spending²². Anchorage must invest in sustainable methods of economic growth by diversifying and expanding its basic industries.

Objective 1: Innovation District within University-Medical Area

Action Plan:

- Build upon the Municipality's current "UMed Village" plan to revitalize the area and support the development of an innovation district that connects businesses and institutions and that serves as a hub of economic activity.
- Ensure that a variety of business types, sizes, ethnicities and cultures, industries, and institutions are represented within the innovation district by embracing entrepreneurship.
- Capitalize on existing intellectual clusters by encouraging networking among anchor institutions and other businesses, as well as proximity of both human and physical capital.
- Build the innovation district with connectivity in mind: provide pedestrian walkways between buildings, welcoming public spaces, and easy access to and from the campus for all modes of transportation.
- Avidly market the district as a place for companies to cohabitate and collaborate to attract more industries to both the area and the city at large.
- Expand tech-transfer capabilities through the university and leverage them as a competitive advantage for local industries.
- Foster information sharing between local companies, start-ups, institutions, and corporations by creating a centralized data portal.
- Abide by a leading tenant of innovation districts, according to the Brookings Institute: "After-work activity cannot be an afterthought."²³ Promote networking opportunities through the creation of collaborative workshops, trainings, symposiums, and after-work activities. Foster a retail/service industry on the campus that attracts economic activity to the area, integrates the local residents and university students, and provides common meeting spaces for business networking.

²⁰ Guettabi, M. (2016, November). What's Happened to the Alaska Economy Since Oil Prices Dropped?

²¹ Guettabi, M. (2016, May 11). An Assessment of Alaska's Economy.

²² Guettabi, M. (2017, January 18). What do we know about the Alaska economy and where is it heading?

²³ Brookings Institute. (2017, June 26). Advancing a new wave of urban competitiveness: The role of mayors in the rise of innovation districts

- Become a hub for arctic and cold climate research.

Community Partners: University of Alaska Anchorage, Alaska Pacific University, Providence, Alaska Regional Hospital, Private Developers, Municipality of Anchorage, Launch Alaska, The 49th State Angel Fund, The Boardroom, Alaska Native Tribal Health Consortium, Welcome Anchorage

Performance Measures:

- Increase the number of building permits
- Increase employment in construction industry
- Increase the number of businesses and industries in U-Med district
- Increase the number of residents in U-Med district, especially students
- Increase investment dollars from outside companies
- Increase revenue for existing businesses
- Increase the number of patents and licensing agreements with commercial entities coming from the university
- Increase the number of minority-owned businesses.

Objective 2: Energy Innovation

Action Plan:

- Support incentives to new and existing renewable energy companies to encourage industry growth and expansion.
- Commit to making the renewable energy industry a key economic contributor and job provider and secure commitments from existing companies to use renewable energy as much as possible.
- Utilize renewable energy battery capabilities as a means of emergency preparedness and disaster mitigation. Promote the economic and environmental resiliency of renewable energy storage and usage.
- Identify the barriers that exist for renewable energy to be used efficiently in Anchorage.

Community Partners: REAP, Municipality of Anchorage, Launch Alaska, Private utility companies, Anchorage Assembly, ASEP

Performance Measures:

- Reduce usage of fossil fuels by government entities and private companies
- Increase renewable energy infrastructure
- Increase portion of city GDP derived from renewable energy industry
- Increase job creation from renewable energy industry
- Decrease or stabilize electricity rates

Objective 3: R&D and Technology Industry

Action Plan:

- Increase investment in R&D as an economic engine as well as a way to more fully integrate university research resources and capabilities into the economy.
- Further leverage proximity to the Arctic to become a cold-weather research and technology hub, one that connects university resources to practical, global applications.
- Advocate for environmental resiliency through the development of green technology.

- Create public-private partnerships to monetize disruptive technology (e.g. automation, building, construction, energy, and medical technology,) and connect workers in affected industries to training programs and other employment opportunities.
- Develop proof-of-concept incubators to test technologies with commercialization potential.

Community Partners: Municipality of Anchorage, University of Alaska, Alaska Pacific University, Alaska Native Tribal Health Consortium, Southcentral Foundation, Launch Alaska, ASEP, Institute of Social and Economic Research, Arctic Domain Awareness Center (UAA)

Performance Measures:

- Increase local employment in the technology industry
- Increase the number of technology companies based or operating in Anchorage
- Increase portion of city GDP derived from technology industry

Objective 4: Medical Industry

Action Plan:

- Offer more varied medical training options and expanded education programs that translate into internships and practical learning applications to increase employment numbers within the health care field.
- Increase competition within the medical industry by creating incentives to retain personnel and attract new talent from outside the state to grow our service base and reduce costs.
- Increase access to specialized medicine and technology.

Community Partners: Providence, Alaska Regional Hospital, University of Alaska, Alaska Pacific University, Alaska Native Tribal Health Consortium, AVTECH, Charter College

Performance Measures:

- Increase medical training programs and internships
- Increase local hires for medical jobs
- Increase specialized medical practices

Objective 5: Global Logistics and Trade Hub

Action Plan:

- Leverage proximity to Asia to become a global trade and cargo hub. Capitalize on airport cargo capabilities and the exemption of Alaska from the Jones Act²⁴ and expand cargo transfer services for international carriers. Continue to support Anchorage International Airport's Aeronexus program.
- Build a logistics park to attract new tenants and companies to Anchorage. Increase Anchorage's capacity to become a distribution center with an international clientele.
- Expand utilization of empty backhaul containers with Alaska based business.
- Identify barriers for international exports via ocean freight.

²⁴ Maritime Law Center . (n.d.). The Jones Act .

Community Partners: Municipality of Anchorage, Ted Stevens International Airport, Port of Anchorage

Performance Measures:

- Increase cargo transfer services for international carriers
- Increase the number of logistics companies operating or based in Anchorage
- Increase quantity and value of international exports

Objective 6: Manufacturing Industry

Action Plan:

- Create public-private partnerships to kick-start manufacturing initiatives. Develop an incubator or accelerator program specifically for manufacturing-oriented businesses to consolidate the resource and knowledge-base.
- Provide funding/incentives to encourage manufacturing start-ups and further develop the industry. Incentivize the creation of rapid prototyping centers.
- Implement LEAN Manufacturing practices to reduce conversion cost per unit and therefore production cost.
- Encourage import substitution to promote the manufacturing and purchase of local products.

Community Partners: Municipality of Anchorage, Southwest Alaska Municipal Conference's Manufacture Alaska Extension Partnership

Performance Measures:

- Increase the number of manufacturing businesses
- Increase employment from manufacturing industry
- Increase the portion of city GDP from manufacturing industry
- Decrease imports of manufactured commodities

Goal 4: EDUCATION/WORKFORCE DEVELOPMENT

Anchorage is home the University of Alaska's largest campus as well as several job and technical training programs that focus on trade and certificate programs. Despite this, Anchorage has historically suffered and continues to suffer from what is called a "brain drain." Students leave the state to pursue higher education and a more traditional college experience and often do not return to Alaska once they've earned degrees. In 2014, the most recent year data was analyzed, 33% of graduating high school students in Alaska planning on attending college were enrolled in an out-of-state postsecondary institution. In comparison, according to the National Center for Education Statistics, nationally, 75% of students remain in their home state for college. Alaska has one of the lowest graduation rates in the country. Nationally, 59% of students finish their bachelor's degree within 6 years compared to 30.6% of students in Alaska. Only 10% of Alaskan college students graduate within the traditional 4 years²⁵. This is in large part to a non-traditional student base, and a lack of preparation from the K-12 system.

Alaska hosts nearly 20,000 active duty military personnel and their families; with that comes a large number of annual discharged personnel who either stay or leave the state. Many of these individuals are highly skilled but are unable to connect with potential employers within the Anchorage business

²⁵ Institute of Education Sciences . (n.d.). National Center for Education Statistics Data Lab.

community²⁶. Conversely, many companies have reported difficulty with finding qualified local employees. This is indicative of a pervasive problem with Anchorage's workforce development and job-matching opportunities. The universities are a fundamental mechanism for retaining exiting military personnel. The UAA military program offers numerous vocational and technical classes on JBER, earning the university Victory Media's Military Friendly School distinction eight years in a row.

Alaska's unique climate and community structure and its remote proximity to the rest of the United States also make it challenging to attract outside workforce. Anchorage has the potential to develop both K-12 and higher education resources and programs that will ultimately increase workforce retention and attraction efforts. By working with major industry employers to create targeted training and internship programs, local universities will be able to expand their educational offerings and practical learning opportunities.

One point of focus that reoccurred throughout the SWOT and public feedback process was the lack of quality education in the Anchorage School District coupled with a high turnover of teachers within the Anchorage School District. This not only impacts the students within the Anchorage School district, but also the economy as the city loses its educated workforce. Additionally, the SWOT stressed the lack of access to alternative education opportunities, vocational training, and English-as-a-second-language courses, especially for lower-income populations. Anchorage hosts several charter and technical schools but they are often too expensive to accommodate the demographics most in need of their services.

Objective 1: University

Action Plan:

- Increase opportunities for university students to interact with industries by pursuing internship, mentorship and post-graduation job opportunities through UAA/APU.
- Capitalize on university research capabilities to increase the number of data-sharing links between universities, industries and government. Create an open path of communication and data sharing between the Municipality of Anchorage and APU/UAA that will ultimately boost Anchorage's Open Data initiative and make data more readily available to businesses, students, and citizens.
- Build connections with large employers in all industries by offering joint training options in conjunction with the universities.
- Refine existing K-12 pathways leading to technology certifications for absorption into the local job market.

Community Partners: University of Anchorage, Alaska Pacific University, Anchorage School District

Performance Measures:

- Increase share of Alaskans attending college in-state
- Increase retention rates of recent university graduates in Anchorage
- Increase university enrollment rates
- Increase graduation rates
- Decrease average length of time for graduation
- Increase job-match rates for recent university graduates

²⁶ Governing . (2016, May 31). Military Active-Duty Personnel, Civilians by State.

Objective 2: Workforce

Action Plan:

- Foster current and create new mentorship programs between exiting military personnel, the university and local businesses to forge relationships and increase skilled military workforce retention.
- Offer tailored training programs based on neighborhood needs. Perform ongoing surveys and observations of people, schools and businesses in underserved neighborhoods to gain a complete understanding of workforce gaps. Create training programs that would fill the workforce gaps in the service, tech, and retail industries and increase marketing to key demographics, neighborhoods and high schools.
- Continually assess unmet workforce needs through surveys and outreach to local businesses and utilize that information to improve training programs.
- Integrate skilled immigrants and refugees more fully into our economy to avoid the underutilization of skills and economic resources.
- Build opportunities for increasing entrepreneurial training and resources for low-income neighborhoods to promote targeted workforce development and address chronic community stressed caused by poverty and under/unemployment.

Community Partners: Joint Base Elmendorf-Richardson, University of Alaska, Alaska Pacific University, Anchorage Community Land Trust, King Career Center, Corrections facilities, Alaska Process Industry Careers Consortium, Small Business Development Center, Municipality of Anchorage, Anchorage Economic Development Center

Performance Measures:

- Increase retention and job-match rates of exiting military personnel
- Decrease unemployment rates in low-income neighborhoods
- Increase average wages in low-income neighborhoods

Action Plan for 2018

The goals listed in the section above are long term goals meant to shift the core of Anchorage to a vibrant, modernized, and economically independent city. The objectives listed under each goal are intended to guide Anchorage in a strategic direction by focusing on specific projects that will have a meaningful impact and ultimately lead us in the direction we want to move as a city. Many of the steps we need to take moving forward will take longer than five years to complete and thus this comprehensive strategy will be amended each year as the project scoping progresses and details like timeline, estimated costs and economic impacts become apparent. Therefore, we would like to lay out what will be the focus for 2018 and what we hope to accomplish in the next calendar year.

These are the steps AEDC will take throughout 2018 execute the goals of the CEDS:

- Build networks and establish relationships with community partners relevant to each objective; these partners will be project champions
- Work with project champions to narrow project focus to establish concrete metrics

- Work with project champions to create timelines to complete project milestones
- Work with project champions to source funding to conduct projects
- Assist project champions with ongoing coordination of meetings and committee formation as needed
- Check in with project champions regularly to ensure projects are progressing

By the end of 2018, AEDC will update the CEDS document to reflect our confirmed community partners and project champions, cost estimates, timelines, and success metrics.

APPENDIX

Definitions:

Race: A race is a group of people with a common *physical* feature or features. Genetic differences within any designated racial group are often greater than differences between racial groups. (*Cosmides, 2003*)

Ethnicity: Ethnicity denotes groups, such as Irish, Fijian, or Sioux, etc. that share a common identity-based ancestry, language, or culture. It is often based on religion, beliefs, and customs as well as memories of migration or colonization. Ethnicity is a state of belonging to a social group that has a common national or cultural tradition. (*Cornell and Hartmann, 2007*)

Tech-transfer: Technology transfer is the process by which technology or knowledge developed in one place or for one purpose is applied and exploited in another place for some other purpose. (*Universal Technical Resource*)

Innovation District: Dense enclaves that merge the innovation and employment potential of research-oriented anchor institutions, high-growth firms, and tech and creative start-ups in well-designed, amenity-rich residential and commercial environments. Innovation districts facilitate the creation and commercialization of new ideas and support metropolitan economies by growing jobs in ways that leverage their distinct economic attributes. These districts build on and revalue the intrinsic qualities of cities: proximity, density, authenticity, and vibrant places. Given the proximity of many districts to low-income neighborhoods and the large number of sub-baccalaureate jobs many provide, their intentional development can be a tool to help connect disadvantaged populations to employment and educational opportunities. (*Brookings Institute*)

Basic industry: Industrial sector which exports all or nearly all of its production. Basic industries, as a result of their foreign exchange earnings, create new incomes and additional spending power in their country's economy. Therefore any drastic or inordinate change in a basic industry's output or earnings will produce correspondingly widespread and deep effect on the entire local economy. (*Business Dictionary*)

Support/non-basic industry: Industrial sector that provides support services to a basic industry. The non-basic sector is composed of firms that largely depend upon local business conditions. Changes in the non-basic or support industries will only require a readjustment of incomes and spending patterns, and the country's overall economic condition will remain largely unaffected. (*Business Dictionary*)

Public-private partnership: The PPP Knowledge Lab defines a PPP as "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance". (*World Bank*)

Open-data: Data that can be freely used, re-used and redistributed by anyone. The data must be available at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form. The data must be provided under terms that permit re-use and redistribution including the intermixing with other datasets. There must be universal participation with no discrimination against any persons or groups. (*Open Knowledge International*)

Jones Act: The act that controls coastwise trade within the United States and determines which ships may lawfully engage in that trade and the rules under which they must operate. Generally, the Jones Act prohibits any foreign built or foreign flagged vessel from engaging in coastwise trade within the United States. (*Maritime Law Center*)

WORKS CITED

American Society of Civil Engineers . (2017). Alaska Infrastructure Report Card. Retrieved from <http://www.infrastructurereportcard.org/state-item/alaska/>

Brookings Institute. (2017, June 26). Advancing a new wave of urban competitiveness: The role of mayors in the rise of innovation districts. Retrieved from <https://www.brookings.edu/research/advancing-a-new-wave-of-urban-competitiveness/>

Business Dictionary (n.d.) What is basic industry? definition and meaning. Retrieved August 14, 2017, from <http://www.businessdictionary.com/definition/basic-industry.html>

CH2M Engineers . (2016, October 17). Anchorage Port Modernization Program Test Pile Program Report of Findings . Retrieved from https://www.portofanc.com/wp-content/uploads/APMP-TPP_CH2M-Report-of-Findings.pdf

Chapin, F.S., S.F.Trainor, P. Cochran, H. Huntington, C. Markon, M. McCammon, A.D. McGuire, and M. Serreze. (2014). [Ch. 22: Alaska. Climate Change Impacts in the United States: The Third National Climate Assessment](#). Retrieved from <http://nca2014.globalchange.gov/report/regions/alaska#intro-section>

Chmura Economics and Analytics. (2017). [Anchorage Demographics]. Unpublished raw data.

City Data . (2015). Crime rate in Anchorage, Alaska (AK). Retrieved from <http://www.city-data.com/crime/crime-Anchorage-Alaska.html>

Cornell, S., & Hartmann, D. (2007). *Ethnicity and Race: Making Identities in a Changing World*. Thousand Oaks: Pine Forge Press.

- Cosmides, L., Tooby, J., & Kurzban, R. (2003). Perceptions of Race. *TRENDS in Cognitive Science*, 4 (7), 173-179.
- Development Counsellors International . (2017). Talent Wars. Retrieved from <http://aboutdci.com/talent-attraction-research-2017/>
- Environmental Protection Agency . (2016, June). ADAPTING TO CLIMATE CHANGE . Retrieved from https://www.epa.gov/sites/production/files/2016-07/documents/alaska_fact_sheet.pdf
- Governing . (2016, May 31). Military Active-Duty Personnel, Civilians by State. Retrieved from <http://www.governing.com/gov-data/military-civilian-active-duty-employee-workforce-numbers-by-state.html>
- Guettabi, M. (2016, May 11). An Assessment of Alaska's Economy. Retrieved from http://www.iser.uaa.alaska.edu/Publications/presentations/2016_05_11-AKEconomyAssessmentWhatWeKnow.pdf
- Guettabi, M. (2016, November). What's Happened to the Alaska Economy Since Oil Prices Dropped? . Retrieved from http://www.iser.uaa.alaska.edu/Publications/2016_11-WhatHappenedtotheAKEconomySinceOilPricesDropped.pdf
- Guettabi, M. (2017, January 18). What do we know about the Alaska economy and where is it heading? Retrieved from http://www.iser.uaa.alaska.edu/Publications/presentations/2017_01_18-WhatDoWeKnowAKEconomy.pdf
- Institute of Education Sciences . (n.d.). National Center for Education Statistics Data Lab. Retrieved from <https://nces.ed.gov/datalab/>
- Katz, B., & Wagner, J. (2016, September 28). The Rise of Innovation Districts. Retrieved from <https://www.brookings.edu/essay/rise-of-innovation-districts/>
- Kelly , D. (2016, July 8). Anchorage doesn't have enough homes to meet demand. Retrieved from <https://www.adn.com/economy/article/anchorage-doesnt-have-enough-homes-meet-demand/2014/03/09/>
- Knapp, G. (2016, March 30). Observations on Alaska's Economy and Economic Implications of Alaska's Fiscal Choices. Retrieved from http://www.iser.uaa.alaska.edu/Publications/presentations/2016_03_30-ObservationsOnAlaskasEconomy.pdf
- Kusisto, L. (2017, May 22). Why Millennials Are (Partly) to Blame for the Housing Shortage. Retrieved from <https://www.wsj.com/articles/why-millennials-are-partly-to-blame-for-the-housing-shortage-1495445403>
- Links, J., M.D. (2017, August 7). Predicting community resilience and recovery after a disaster. Retrieved from <https://blogs.cdc.gov/publichealthmatters/2017/08/predicting-community-resilience-and-recovery-after-a-disaster/>

Maritime Law Center . (n.d.). The Jones Act . Retrieved from http://www.maritimelawcenter.com/html/the_jones_act.html

Markon, C.J., Trainor, S.F., and Chapin, F.S., III, eds. (2012)[The United States National Climate Assessment - Alaska Technical Regional Report: U.S. Geological Survey Circular 1379](https://pubs.usgs.gov/circ/1379/pdf/circ1379.pdf). Retrieved from <https://pubs.usgs.gov/circ/1379/pdf/circ1379.pdf>

Municipality of Anchorage . (2015). Comprehensive Emergency Operations Plan. Retrieved from http://www.muni.org/Departments/OEM/Plans/Documents/2015_CEOP%20protected.pdf

Open Knowledge International. (n.d.). What is Open Data . Retrieved from <http://opendatahandbook.org/guide/en/what-is-open-data/>

Universal Technical Resource Services, Inc. (n.d.). Retrieved from https://www.utrs.com/technology_transfer.html

World Bank . (2015, October 3). What are Public Private Partnerships? Retrieved from <http://ppp.worldbank.org/public-private-partnership/overview/what-are-public-private-partnerships>

World Bank. (2017, July 18). Pandemic Preparedness and Health Systems Strengthening. Retrieved from <http://www.worldbank.org/en/topic/pandemics>

World Economic Forum . (2016, January). Global Agenda Council on Risk & Resilience Insights . Retrieved from http://www3.weforum.org/docs/GRR/WEF_GAC16_Risk_Resilience_Insights.pdf