

1. EXECUTIVE SUMMARY

This report constitutes an effort by the Anchorage Economic Development Corporation (AEDC) and the Municipality of Anchorage (MOA) to measure the quantity and quality of the industrial land supply in the Anchorage Bowl, as compared to the projected demand for this land through 2030. This report includes an in-depth examination as to whether the amount of land designated for industrial use in Anchorage is adequate to accommodate estimated levels of industrial activity over the next 20 years, and also includes a set of recommendations which are intended to inform ongoing consideration of land use policy. This chapter provides a summary of the key findings and recommendations.

Summary of Findings

1. ***Anchorage will continue to have a resource- and logistics-driven economy for the foreseeable future. It is necessary to protect land to facilitate industrial development in the MOA supporting these key industries.***

The provision of local industrial support to vital economic driver (basic) industries is essential to long-term growth of the MOA's local economy. A strong industrial sector is vital to local economic health by providing quality jobs, municipal revenue, and supporting other important local industries. Moving forward, the MOA should ensure that it is able to capture its share of economic activity that occurs in Alaska, and the provision of viable industrial land is a key component of that effort. Moreover, industrial development is critical in the support of non-basic industries such as retail which recycle money originated by basic economic activity through the local economy. Where adequate land exists for such uses with good position in the transportation network, there is strong rationale for preserving industrial land capacity.

2. ***Industrial development in Anchorage is demand inelastic compared to other regions of the United States.***

Weather conditions, limited labor force, distance from end markets, and soil-related development constraints all combine to increase capital and operating costs associated with industrial activity in Anchorage. For these reasons, firms that would otherwise prefer to be located locally often elect to produce in the Lower 48 (e.g., Sea-Tac) and ship product to Anchorage. Moreover, industrial development is sought nearly exclusively by owner-operators developing purpose-built facilities, with very little speculative development, because of the inherent risks referenced above. These dynamics result in a local real estate market in Anchorage that does not respond to economic stimulus as fluidly as it would in other areas.

3. ***While retail uses will adapt and respond to growing population, industrial development is "fickle" and needs to be coaxed to develop locally.***

As land values for retail exceed those of industrial, it is evident that retail uses are more capable of absorbing onerous soil preparation and other predevelopment costs than industrial uses. Over time, it is likely that the most easily-developed land will be consumed first,

leaving more difficult, marginally-feasible parcels. Failure to protect remaining industrial land from retail and other uses will shift certain industrial activities to the Mat-Su Borough, where soil conditions and parcel sizes are less constraining. To avoid this, proposed Title 21 Restrictions on the use of industrial land for retail development would reduce the speculative value of this land and reduce the overall development cost among industrial users, allowing beneficial industrial development to occur.

4. *The region can garner a stronger multiplier effect from major resource projects and reduce the “bust” effect by taking extra steps to accommodate and protect labor intensive, high value industrial uses associated with metals fabrication, value-added operations (pipe coatings, threading, etc.).*

In addition, engineering and other services occupying flex space and needing various industrial facilities are good high value candidates for prioritized future development.

5. *Vacant land located in the Anchorage Bowl is insufficient to meet regional industrial demand through 2030, even assuming moderate growth in employment.*

Historically, Anchorage has developed approximately 30 acres per year for industrial uses. Going forward, as the area grows and diversifies, the annual acreage required is likely to maintain this level and could be pushed higher in the advent of several major resource-based projects proposed in the region and the State. Even assuming a moderate 1.2-percent average annual growth in employment, the MOA is estimated to require 600 acres of developable industrial land by 2030 (see **Table 1**). Beyond this estimated required acreage, it would be advisable to target an overage of 20 percent to ensure long-term efficiency in the industrial land markets, translating to 720 acres under the base scenario.¹

6. *Demand for industrial land is closely tied to employment growth, which has historically been highly variable in Anchorage.*

The completion of several large infrastructure projects will have significant impact on the Alaskan economy, which will have ripple effects in Anchorage and shape the type and magnitude of industrial development in the MOA. To allow for these types of projects, an “upside” development scenario has been used to test the effects of a 0.5-percent annual increase in employment growth. Specific projects and programs that could together contribute to this increase in employment growth may include these:

- The Alaska North Slope (ANS) Natural Gas Line.
- Knik Arm Bridge.
- Pebble and Rock Creek Mines.

¹ A healthy industrial land market will require a reasonable vacancy rate to allow for efficient transitions as space is absorbed. This analysis incorporates a 20-percent buffer, which is deemed to be adequate for an industrial land market to operate effectively. Although this factor could be higher or lower, 20 percent is considered a reasonable overage for purposes of this analysis.

Table 1
Anchorage Bowl Industrial Land Assessment
Summary of Supply and Demand of Industrial Land: 2010 - 2030

Item	Formula	Base Scenario	High Growth Scenario [1]
Land Demand			
Estimated Demand [2]	a	600	900
Land Demand "Buffer" [3]	$b = a * 20\%$	120	180
Total Land Demand	$c = a + b$	720	1,080
Undeveloped Land Supply			
Anchorage Bowl	d	598	598
Subtotal Surplus/ (Deficit) in Anchorage Bowl	$e = d - c$	(115)	(475)
Eklutna/ Other	f	203	203
Total Undeveloped Supply including Eklutna	$g = f + d$	801	801
Surplus/ (Deficit) including Eklutna	$h = g - c$	81	(279)
Less Acreage with Soil Limitations [4]	i	(370)	(370)
Subtotal Undeveloped Land Supply W/O Soil Limitations	$j = g - i$	431	431
Subtotal Surplus/ (Deficit)	$k = j - c$	(289)	(649)
Underutilized Acres (Potential Additional Supply) [5]	l	662	662
50% of Underutilized Acres	$m = l * 50\%$	331	331
25% of Underutilized Acres	$n = l * 25\%$	166	166
Subtotal Surplus/ (Deficit)	$o = k + l$	373	13
Assuming 50% of Underutilized Acres are Redeveloped	$p = k + m$	42	(318)
Assuming 25% of Underutilized Acres are Redeveloped	$q = k + n$	(124)	(484)

"supply_demand"

- [1] High Growth Scenario is based on 1.7% average annual growth in employment. The Base Scenario is based on 1.2% average annual growth.
- [2] Estimated land demand calculated in **Chapter 4** of this report.
- [3] A 20% overage has been assigned to projected demand in order to simulate an efficient industrial market.
- [4] Includes parcels with soil limitation ratings of 0.26 or higher, which are defined as by the U.S. Dept. of Agriculture's "Soil Survey of Anchorage, Alaska." The soil limitations associated with these parcels are considered "Severe" or "Very Severe." See **Appendix B** for more information.
- [5] See **Chapter 5** and **Appendix B** for a detailed discussion of underutilized acreage.

- Air Cargo and Port Expansion.
- Military Expansion.
- Federal Infrastructure Stimulus applied to projects such as bridge crossings and goods movement facility expansions.

7. *If a higher employment growth rate occurs as a result of fluctuations in oil prices, higher spending on infrastructure and mining projects in Alaska, or some other force, the demand for industrial land is likely to outstrip the supply of vacant industrial land, necessitating both the redevelopment of industrial parcels and the conversion of some publicly-owned lands to industrial uses.*

If a 1.7-percent average employment growth rate is actually achieved in Anchorage over the long term, EPS predicts that 900 acres of additional developable industrial land would be required to accommodate growth. Assuming a 20 percent buffer over this amount, the high growth scenario anticipates the need for 1,080 acres through 2030.

8. *Although the MOA appears “on paper” to have an abundance of industrially zoned land, much of this land is constrained and difficult to develop in an economically feasible manner.*

Although there is an estimated 800 acres of vacant industrial land in the MOA, only 598 acres are in the Anchorage Bowl. This land largely is composed of pockets of industrial land scattered throughout the Central and Northeast (Ship Creek) industrial subareas.

An additional 203 acres of currently undeveloped industrial land exists in Chugiak/Eklutna, and Eagle River subareas, which will be necessary for meeting regional demand. However, there is a need to develop infrastructure and work through ground lease terms for many of these parcels, which can impede their ability to satisfy the industrial land demand.

9. *The EPS Team has identified approximately 370 acres of vacant industrial supply which have known soil conditions, which could impede the ability for this land to be feasibly developed. Other vacant land may have other development constraints, such as a lack of adequate infrastructure, poor adjacencies, or small parcel sizes.*

If this land is excluded from the vacant industrial land supply, a significant deficit (approximately 290 to 650 acres) is projected relative to demand over the next 20 years. As time progresses, industrial development will be forced further into areas plagued by peat soils, poor parcel configuration, and other marginal conditions. Industrial development, of all commercial land uses, is least able to absorb these costs although it provides important support to the local, regional, and state economies.

10. *The EPS Team has identified approximately 660 acres of underutilized industrial land in Anchorage. Although this is not considered “vacant,” these lands present considerable redevelopment opportunities that may partially accommodate future industrial growth.*

Redevelopment of underutilized land plays a critical role in accommodating industrial future demand in the Anchorage Bowl. The redevelopment of this acreage, however, is likely to be a relatively slow and arduous process, requiring parcel assemblage to make a significant contribution to meeting demand. In all probability, it may be difficult to rely on the redevelopment of more than a third to a half of this acreage in response to industrial

demand. There may be a role for the public sector to facilitate this redevelopment through strategic investment in infrastructure, parcel assembly, entitlement streamlining, and land use policy adjustments.

11. In addition, there are several Public or Quasi-Public landowners, which are not included in either the vacant or “underutilized” industrial land supply. These sites may be viable candidates to accommodate specialized industrial growth.

Public agencies stand to play a significant role in the future development of industrial land in the bowl. These include the State of Alaska, the Railroad, Port, Airport, and MOA. A formal, coordinated effort between these agencies is required to maximize the efficiency of their respective efforts to plan for facilities and related land expansion.

Key Policy Recommendations

Based on the supply and demand conditions described in this report, an implementation program has been devised, which recommends strategies to enhance the efficiency of industrial land at strategic locations through redevelopment and other policy options. A viable industrial sector is vital to local economic wellbeing by providing jobs, municipal revenue, and supporting other important local industries. To encourage this dynamic, the EPS Team recommends a robust, comprehensive, and coordinated approach to improving the industrial land supply Anchorage. The MOA and other pertinent agencies and bodies should employ all available tools, and our Team’s recommended strategies are explained in more detail below.

Title 21

Based on the results of this study, ample evidence suggests that proposed Title 21 modifications intended to protect industrial land from retail and other commercial encroachment is justified. Specific rationale for these recommendations is as follows:

1. Industrial development supports driving industries such as logistics and resource-based projects, in addition to providing valuable and necessary services to the general population for support to automotive industries, construction, and equipment sales/service.
2. Owner-operators involved in key local industries have elected to produce goods and ship from afar. A subset of these users has indicated interest in developing local facilities, but is turned away because of onerous costs of development.
3. Chief among the costs of development are parcel acquisition and assemblage. At the present time, speculative interest in industrial land has made it prohibitively expensive to acquire land. Protection from speculative interest for retail will bring down front-end costs and reduce risk.
4. Dwindling viable land supply drives costs up in two ways: (1) reduced supply in the face of sustained demand increases prices for land, all other things being equal; and (2) competition from other uses forces industrial projects to areas with marginal soils and other problems, increasing the cost of development.

5. Alaska is on the advent of a new era of major construction projects. Historical analysis shows major upswings in demand, as measured by development volume, during such projects. The Anchorage MOA stands to lose significant economic benefit if users “on the margin” choose to produce support components remotely, either in the Lower 48 or in the Mat-Su Borough.

Industrial Zoning

The distribution of I-1 and I-2 lands should be relatively balanced between the two categories. Historical analysis indicates that during periods of major construction projects, the emphasis on more intensive I-2 activities tends to increase. In intervening periods, I-1 seems to be more prevalent. Over the past 40 years, the I-1 uses have comprised approximately 55 percent of total share between the two categories. It is recommended that the MOA strike a balance between the two, and identify areas of I-1 that can be converted to I-2 as needed, based on market conditions, where appropriate buffers from sensitive receptors can be put in place.

Redevelopment Feasibility and Financing Strategy

Effective approaches to redevelopment hold the key to supporting and enhancing the MOA’s industrial base beyond the policy, funding, and research initiatives discussed in this chapter. There is a need to find more economical means to deliver needed infrastructure as an effort to retrofit older industrial areas and reduce overall cost incidence to industrial development while improving operational efficiency. It is recommended that the MOA conduct a formal evaluation of potential development and funding strategies, including these:

- **Identification of target redevelopment areas.** Select areas in the Central Subarea and the Northeast Subarea which have significant underutilized parcels and provide near term redevelopment opportunities. Both of these areas are located in major established industrial clusters and directly adjacent to goods movement centers. An analysis of potential redevelopment areas should be conducted to further define these opportunities.
- **Evaluate potential for master-planned industrial retrofit area.** There may be suitable areas in the MOA which already have suitable infrastructure and amenities to accommodate a significant amount of industrial activity, but lack the scale, critical mass, or leadership to develop as a viable industrial area. A master-planned industrial development approach in such areas may be a suitable method to leverage existing assets and create vibrant industrial centers.
- **Public/private development and tax allocation bond financing.** For high profile, targeted users, evaluate the potential for Owner Participation Agreements with the MOA or other entities to infuse property tax allocation bonds secured by property tax increment. For promising projects, provide funding in exchange for upside participation in proceeds exceeding negotiated profit threshold. Case by case analysis should be conducted to maximize probability of timely payback to the MOA.
- **Land-secured tax-exempt bond financing.** Evaluate potential for special taxes and assessments secured by industrial land value to fund clean-up of contamination, soil replacement, as well as on- and off-site infrastructure.

- **State funding assistance.** Direct available stimulus funds or Permanent Fund to help secure critical Port and other funding necessary to improve cargo handling, goods movement, and logistics capacity. This may involve selecting subareas for systematic improvement of soils, parcel sized, and infrastructure on a case by case basis.

Local Economic Development Initiatives

Several local initiatives should be considered as an effort to garner additional information beyond that feasibly developed under this study. Efforts might include these:

- **Resource Industry Economic Impact and Supplier Development Strategy.** Today, Alaska is facing one of the world's largest construction projects if the ANS Natural Gas Pipeline is to be built in the near future. This massive project is just one of many proposed resource extraction projects on the horizon which could have significant positive impacts the Alaskan economy. In addition to new resource extraction projects, much of the existing support infrastructure in Alaska will need to be updated to endure long-term activity, including roads, bridges, ports, airports, rail extensions, pipelines and other support and transportation-related infrastructure.

The MOA would be well-served in gaining an understanding of the economic impact and the corresponding land use planning ramifications of these major proposed infrastructure and natural resource extraction. To avoid the boom/bust cycle of the past, an Economic Impact and Supplier Development Strategy could identify "opportunity gaps" associated with planned major construction projects, and evaluate their critical labor force, land, and other capital needs. It would also identify strategies (land use, economic, and political) to minimize the acuteness of boom-bust cycles by evaluating uses that have a continuing life after the construction phase of major projects is complete.

- **Detailed Land Characterization Study.** As discussed in the body of this report, additional analysis of semi-vacant lands should be conducted, particularly where "anomalies" between database and visual observation are evident. This study made an effort to correct such anomalies for parcels sized over 0.5 acres.

Public Stakeholder Collaboration

The following stakeholders are critical to ensuring long-term support and opening land to key basic industries:

- **Airport**—discuss and pursue development of airparks dedicated to supporting the air logistics industry.
- **Port**—facilitate continued conveyance of land from Elmendorf to Port dedicated to Port operational support.
- **Railroad**—encourage consolidation of uses to open up additional acreage for users requiring multi-modal proximity.
- **University of Alaska**—open up discussions regarding incubator/tech transfer and research park development. Focus on renewable energy or other areas of direct benefit to local economy.