Section 4 Industrial Use Inventory

A primary objective of *Volume II: Industrial Land Inventory* is to classify the current use of industrial lands and other lands in the study area. Section 4 provides basic information about the Anchorage industrial land use economy and geographic patterns in industrial (and non-industrial) use. It accounts for the full range of active uses from the commercial, industrial, and public facility sectors, residential and open space uses, as well as documenting parcels in which there is currently no activity or establishment (i.e., "vacant"). The latter part of Section 4 documents historical and recent trends in industrial development densities, measured as Floor Area Ratio (FAR). The intent is to understand and characterize industrial and non-industrial use of industrial-zoned lands, including how much land is utilized by each economic sector. Understanding the current industrial land use and development patterns specific to Anchorage helps inform the projections in Volume I for future industrial land demand in the Municipality.

The following pages tabulate how much land in the industrial zoning districts and the overall study area is in use by each economic sector. Table 15 provides overall acreage totals by Economic Sector for the entire municipal study area. Tables 16 and 17 break out the Anchorage Bowl and Chugiak-Eagle River individually. The tabulations follow NAICS in categorizing economic sectors.

The reader may further ascertain from these tables how these sectors fall into the major industrial use categories of Distribution, Production and Repair that comprise Anchorage's industrial uses, as defined on pages 15–20. Each Economic Sector in the tables is followed by an acronym, P, D, R, or N. These identify the part of the local industrial economy where each sector belongs:

Main Parts of the Anchorage Industrial Economy

P = Production

D = Distribution

R = Repair

N = Non-industrial

The pages that follow describe the results of the inventory using a series of tables. Tables 15–17 provide the overall results by the Municipality, Anchorage Bowl, and Chugiak-Eagle River. Further elaboration regarding the North, Central, and South industrial subareas of the Anchorage Bowl are provided in Tables 18–20.

Existing use by economic function for each subarea is shown on Maps 8-15 at the end of Section 4.

Overall Results for Anchorage Bowl and Chugiak-Eagle River

Except for the major airport, railroad, and port transportation facilities, the category of industrial PDR sectors using more land than other industrial categories in the Municipality is the Production category, led by *manufacturing* and *natural resource production* sectors. These two sectors utilize approximately 420 acres of industrial-zoned land, and 520 acres total including non-industrial zones. Most of these establishments are a variety of small- to medium-sized uses – metal fabrication, sign fabrication, wood products and furniture building, rubber and foam products, food and beverage products, paper and printing, and others. There are larger manufacturers, including a 100-acre wood construction products manufacturer in the Birchwood Airport industrial park. The remaining area — approximately two-fifths — includes a relative handful of non-metallic mineral product and quarrying establishments on medium to large sites. The Production category also includes the power generation and water *utilities* and construction contracting enterprises, both of which are prevalent in the Municipality. Construction contractors—e.g., heavy construction, special trades, and machinery related – occupy 326 acres, and are the third-largest user of industrially zoned land among all PDR sectors. Contrary to expectations coming into this study, very little construction contractor use area is for materials storage lay-down yards. Most of this space is used for parking, storage, and maintenance of work vehicles and equipment, while the remainder is headquarters offices and assembly/work areas.

Distribution remains the principal category of industrial land use, when including the airport, railroad, and port facilities. The *transportation* sector comprised of the Anchorage International Airport, Merrill Field Airport, Birchwood Airport, Alaska Railroad, and Port of Anchorage occupies more industrial land in use than all other PDR sectors combined. Anchorage's name comes from its place in the regional and world transportation system. Even excluding these major transportation facilities, the *ground transportation services* sector—trucking and freight services, delivery services, towing, taxi, and other transportation services—is the second largest user of local industrial-zoned land among all PDR sectors, occupying 430.9 acres—nearly as much as the total of manufacturing and natural resource production. The *warehousing* sector, while not as prevalent in Anchorage as in some cities, remains among the top 10 PDR sectors for land area in the Municipality. The *wholesale trade* sector occupies 191.6 acres, and rounds out Anchorage's distribution category of PDR uses.

The *vehicle and equipment repair* sector is a relatively major user of industrial land in the Study Area, occupying 115 acres of industrial land and 147 total in the Study Area. (Even more repair uses — mostly auto minor repair — are located in B-3 zoning districts outside of the Study Area.) The greatest land user among the repair category sectors is *services to facilities/waste management services*. This category of uses includes snow removal services, landscaping, snow disposal sites, salvage yards, and, most especially, solid waste disposal facilities. When including non-industrial-zoned lands such as the regional landfill in Eagle River, this sector occupies approximately 640 acres.

Table 15. Total Acres Currently in Use, by Economic Sector Anchorage Bowl and Chugiak-Eagle River Study Areas, 2013-14

Economic Sector	Industrial Districts	All Districts in Study Area
Manufacturing and Natural Resource Production	418.5	520.0
Manufacturing (except non-metal. mineral prod.) – P	292.0	315.3
Non-metallic Mineral Products and Quarrying – P	126.6	203.6
Agriculture, Nurseries, and Tree Production – P	0	1.1
Construction – P	306.2	326.0
Vehicle and Equipment Repair – R	115.1	147.7
Utilities – Power, Water, and Sewage – P/D	151.1	465.5
Airport, Railroad, and Marine Transportation – D	928.0	3,641.0
Warehousing and Ground Transportation	430.9	498.1
Warehousing – D	92.9	100.5
Ground Transportation and Freight Services – D	338.0	397.6
Wholesale Trade – D	191.6	207.9
Retail Trade	378.4	503.9
Retail Trade (except vehicles and heavy goods) – N	122.4	178.6
Vehicle Sales and Heavy Goods Retail – N	256.1	325.4
Communications and Information – N/P	29.6	39.7
Finance, Real Estate, Leasing, and Self-storage	188.0	237.8
Finance, Insurance, and Real Estate Services – N	32.5	52.8
Leasing, Equipment Rental, and Self-storage – N	155.5	185.0
Business, Professional, and Technical Services	295.3	734.2
Professional and Business Services – N	77.7	97.6
Services to Buildings and Facilities – R	49.3	54.8
Waste Management, Salvage, and Snow Disposal – R	168.3	581.8
Education and Health Services – N	79.9	304.1
Leisure and Accommodations – N	89.8	1,419.2
Personal and Other Services (except repair) – N	69.7	108.3
Residences – N	52.3	197.8
Government and Public Safety – N	70.3	210.8

Non-industrial users compete with the PDR sectors for industrial zoned space. The three largest non-PDR sectors occupying industrial-zoned land include: vehicle sales and heavy goods retail (256 acres); self-storage, leasing, equipment rental (155 acres); and general retail (122 acres). Self-storage alone occupies more than 100 acres, making it a larger user of I-zone land than warehousing. Secondary users include leisure and accommodations (restaurants and hotels), professional and business services (professional office); education and health services; personal and other services; and government and public safety. Minor uses: residences occupy 50 acres, and financial and real estate offices occupy 33 acres. Major non-industrial users are often concentrated in commercial centers or corridors that have evolved in spite of industrial zoning—such as in the Abbott Town Center or Northway Town Center areas. Others, such as fitness clubs, martial arts studios and churches, appear to be distributed more evenly through the industrial districts. Table 15 indicates the greatest non-PDR user of land in the Study Area outside of industrial-zoned land is the leisure and accommodations sector. This sector includes parklands and greenbelts which also happen to run through and around the industrial areas of the community. Also, because the Study Area includes some B-3 and PLI zoned lands, Table 15 shows a significant amount of non-industrial land in office and institutional use.

Anchorage Bowl (Table 16)

Since most industrial activity is located in the Anchorage Bowl, there is relatively little variation between the industrial land use patterns of the Bowl and the Municipality as a whole.

The industrial sectors in the Production category including manufacturing, utilities and construction occupy more than 700 acres of industrial-zoned land, making Production the largest user of lands among local industrial categories (i.e., not including airports, port, and railroad operations). The Distribution category of sectors, including ground transportation, warehousing, and wholesale, occupy nearly 600 acres of industrial-zoned land.

However, ground transportation and freight services occupy more industrial and non-industrial land than any other individual PDR sector in the Bowl (308 acres—again excluding the major airport-port-railroad transportation facilities). The Production sectors of construction and manufacturing each occupy 300 acres of industrial-zoned land, rounding out the top three industrial land use sectors. However, after excluding the production of non-metallic mineral products, the manufacturing sector area drops to 178 acres. The fourth largest industrial sector in terms of land area is wholesale trade, occupying more than 190 acres of industrial-zoned land.

The Repair category sectors of *waste management* and *vehicle and equipment repair* are the fifth and sixth largest users of industrial land. The *waste management* sector including salvage and snow disposal occupies 157 acres of industrial land—and more than 260 acres total including other districts. The *vehicle and equipment repair* sector uses 113 acres of industrial-zoned land, and more than 145 acres total including other districts in the Study Area.

Table 16. Acres Currently in Use, by Economic Sector – Anchorage Bowl Anchorage Bowl Industrial Land Assessment Study Area, 2013-14

Economic Sector	Industrial Districts	All Districts in Study Area
Manufacturing and Natural Resource Production	298.8	320.4
Manufacturing (except non-metal. mineral prod.) – P	178.9	197.8
Non-metallic Mineral Products and Quarrying – P	119.9	121.5
Agriculture, Nurseries, and Tree Production – P	0	1.1
Construction – P	298.9	312.6
Vehicle and Equipment Repair – R	113.3	146.0
Utilities – Power, Water, and Sewage – P/D	105.5	165.1
Airport, Railroad, and Marine Transportation – D	743.3	3,456.3
Warehousing and Ground Transportation	400.6	424.2
Warehousing – D	92.0	99.5
Ground Transportation and Freight Services – D	308.6	324.7
Wholesale Trade – D	191.6	207.9
Retail Trade	378.0	502.3
Retail Trade (except vehicles and heavy goods) – N	122.4	178.2
Vehicle Sales and Heavy Goods Retail – N	255.6	324.1
Communications and Information – N/P	29.6	39.7
Finance, Real Estate, Leasing, and Self-storage	181.2	230.9
Finance, Insurance, and Real Estate Services – N	32.5	52.8
Leasing, Equipment Rental, and Self-storage – N	148.7	178.1
Business, Professional, and Technical Services	282.7	411.5
Professional and Business Services – N	77.7	97.6
Services to Buildings and Facilities – R	47.9	53.4
Waste Management, Salvage, and Snow Disposal – R	157.1	260.5
Education and Health Services – N	76.0	250.1
Leisure and Accommodations – N	242.0	1,277.0
Personal and Other Services (except repair) – N	53.7	90.1
Residences – N	32.2	157.4
Government and Public Safety – N	70.3	133.9

Other significant PDR sectors in the Bowl include *utilities* (105 acres of industrial-zoned land and 165 acres total); and services to buildings and facilities (~50 acres).

Of 3,500 acres of industrial-zoned land currently in use in the Bowl, nearly 37% is estimated to be in non-industrial use. Several commercial sectors appear to use as much or in some cases even more industrial-zoned land in the Bowl than the seven PDR sectors noted above. The non-PDR sectors using the most industrial-zoned land include:

- 1. Vehicle sales and heavy goods retail (255 acres)
- 2. Leisure and accommodations (242 acres including 97 acres of parkland)
- 3. Leasing, equipment rental, and self-storage (148 acres)
- 4. Retail trade (122 acres)
- 5. Professional and business services (77 acres)
- 6. Education and health services (76 acres)
- 7. Government and public safety (70 acres)

Drilling down further, primary individual commercial use types include fitness and athletic clubs (23 acres); eating and drinking establishments (56 acres); professional services (36 acres) lodging (14 acres); educational services (13 acres); administrative services (28 acres); self-storage rental (100 acres); lending institutions (20.6 ac); car dealers (75 acres); large vehicle sales (63 acres); and hardware and home centers (44 acres).

Some individual non-industrial use types are supportive to PDR sectors. Examples include trade schools (23 acres); certain professional or technical services; and leasing of industrial and commercial equipment (22 acres).

Chugiak-Eagle River (Table 17)

Two industrial clusters provide locally-serving industrial facilities in central Eagle River, with some parcels having highway access (see Map 12 at the end of this Chapter). The first consists of a small group of I-1 parcels on the west side of the Glenn Highway at Artillery Road and just north of Eagle River. A second cluster of local-serving industrial uses on the other side of the Highway lines the relatively flat western side of Spring Brook Drive with nearly a dozen small PDR establishments, including repair, manufacturing, transportation, warehousing, construction, and facility maintenance. In Chugiak, local industrial uses and quarries line the Old Glenn Highway in places between Birchwood Loop Road and Loretta French Park (Map 13). New clusters of local industrial uses may soon develop at Chugiak Pit at the north end of that area, and in the Eklutna Power Plant and Birchwood Airport areas further north.

Table 17. Acres Currently in Use, by Economic Sector – Chugiak-Eagle River Chugiak-Eagle River Industrial Land Assessment Study Area, 2013-14

Economic Sector	Industrial Districts	All Districts in Study Area
Manufacturing and Natural Resource Production	119.7	199.6
Manufacturing (except non-metal. mineral prod.) – P	113.1	117.5
Non-metallic Mineral Products and Quarrying – P	6.6	82.1
Agriculture, Nurseries, and Tree Production – P	0	0
Construction – P	7.4	13.3
Vehicle and Equipment Repair – R	1.7	1.7
Utilities – Power, Water, and Sewage – P/D	45.6	300.3
Airport, Railroad, and Marine Transportation – D	184.7	184.7
Warehousing and Ground Transportation	30.3	74.0
Warehousing – D	1.0	1.0
Ground Transportation and Freight Services – D	29.3	73.0
Wholesale Trade – D	0	0
Retail Trade	0.4	1.0
Retail Trade (except vehicles and heavy goods) – N	0	0
Vehicle Sales and Heavy Goods Retail – N	0.4	1.0
Communications and Information – N/P	0	0
Finance, Real Estate, Leasing, and Self-storage	6.8	6.9
Finance, Insurance, and Real Estate Services – N	0	0
Leasing, Equipment Rental, and Self-storage – N	6.8	6.9
Business, Professional, and Technical Services	12.6	322.7
Professional and Business Services – N	0	0
Services to Buildings and Facilities $-R$	1.4	1.4
Waste Management, Salvage, and Snow Disposal – R	11.2	321.3
Education and Health Services – N	3.9	54.1
Leisure and Accommodations – N	0	141.5
Personal and Other Services (except repair) – N	16.0	18.2
Residences – N	20.1	40.3
Government and Public Safety – N	0	83.0

Primary local scale industrial uses include *ground transportation and freight* services (73 acres), *quarrying and non-metallic mineral products* (82 acres), *waste management* uses comprise salvage yards and solid waste collection (11 acres); *manufacturing* uses (>10 acres); and *construction contractors* (13 acres). Warehousing, vehicle and equipment repair, and services to buildings occupy 1-2 acres each.

However, local scale users occupy only a small proportion of industrial land in use in Chugiak-Eagle River. Most of the industrial acreage currently in use is concentrated into the following larger-scale facilities:

- Power and water utilities (300 acres total), including: the new Eklutna Power Generation Plant (45 acres), the AWWU water treatment plan (44 acres), the AWWU wastewater treatment plant, and natural gas and fossil fuel power plants around the regional landfill (208 acres);
- Birchwood Airport and adjacent Railroad facilities (184 acres);
- Anchorage Regional Landfill (178 acres);
- A wood construction materials manufacturing plant near Birchwood Airport (103 acres); and
- A 132-acre site in the Powder Reserve used for snow storage.

Industrially zoned lands in Chugiak-Eagle River have not experienced as much competition for space from non-PDR uses as have lands in the Anchorage Bowl. Retail uses occupy less than one acre of industrially zoned lands in Chugiak-Eagle River. Commercial offices occupy zero acres. The most common non-PDR users of industrial land are churches (16 acres), residences, and rental and self-storage uses.

North Anchorage Subarea (Table 18)

The pattern of industrial use in the North Anchorage subarea differs markedly from the Central and South Bowl areas, when comparing Maps 8, 9, and 10 (provided at the end of this chapter). North Anchorage, especially in and around the city's port, railroad, and general aviation airport facilities, has a much greater share of transportation, warehousing and distribution, which are color-shaded light grey on the maps. Ground transportation services and warehousing enterprises are especially common in the Ship Creek basin.

Table 18 tabulates this pattern: the largest industrially zoned acreage by economic sector in the North Anchorage subarea includes 686 acres of airport, railroad and marine transportation facilities (745 acres including other districts). The second largest acreage by economic sector encompasses warehousing and ground transportation with *ground transportation and freight services* being the most noteworthy usage (179 acres of industrial-zoned land, and 184 acres total).

Table 18. Acres Currently in Use, by Economic Sector – North Anchorage Subarea 2013-14

Economic Sector	Industrial Districts	All Districts in Subarea
Manufacturing and Natural Resource Production	43.8	61.2
Manufacturing (except non-metal. mineral prod.) – P	40.8	58.2
Non-metallic Mineral Products and Quarrying – P	3.0	3.0
Agriculture, Nurseries, and Tree Production – P	0	0
Construction – P	31.7	35.6
Vehicle and Equipment Repair – R	36.3	41.2
Utilities – Power, Water, and Sewage – P/D	20.3	72.1
Airport, Railroad, and Marine Transportation – D	686.0	745.1
Warehousing and Ground Transportation	205.8	216.5
Warehousing – D	26.2	31.7
Ground Transportation and Freight Services – D	179.6	184.8
Wholesale Trade – D	20.4	22.6
Retail Trade	97.3	142.8
Retail Trade (except vehicles and heavy goods) – N	33.7	56.2
Vehicle Sales and Heavy Goods Retail – N	63.6	86.6
Communications and Information – N/P	5.0	14.1
Finance, Real Estate, Leasing, and Self-storage	25.2	38.8
Finance, Insurance, and Real Estate Services – N	0.0	4.7
Leasing, Equipment Rental, and Self-storage – N	25.2	34.1
Business, Professional, and Technical Services	47.2	52.0
Professional and Business Services – N	4.5	7.5
Services to Buildings and Facilities – R	5.1	5.1
Waste Management, Salvage, and Snow Disposal – R	37.6	39.4
Education and Health Services – N	19.2	55.0
Leisure and Accommodations – N	85.4	143.6
Personal and Other Services (except repair) – N	11.9	18.7
Residences – N	4.8	89.8
Government and Public Safety – N	30.3	68.8

The third largest amount of industrial zoned acreage by economic sector falls under non-industrial uses: the retail trade category with vehicle sales and heavy goods retail is the largest component (97 acres total). While the leisure and accommodations category of uses also comprises a large number of acres, most of that is actually located in park and open space along Ship Creek.

In contrast to the Distribution uses, *manufacturing* and particularly *construction* contracting occupy less land proportionally in North Anchorage than in the other Bowl subareas. *Waste management and salvage* uses, including salvage yards and other enterprises that collocate near the railroad and port facilities, occupy nearly as much acreage as manufacturing, and more acreage than construction contractors. Power and water *utilities* occupy more acreage in North Anchorage than any other industrial sector except the transportation and distribution uses, because of the concentration of ML&P facilities in Ship Creek and east of Centennial Park near Muldoon.

Central Anchorage Subarea (Table 19)

As provided in Map 9, the Central Subarea includes a number of industrial clusters stretching from Minnesota Drive east to Lake Otis Parkway, and from 40th to south past 76th Avenue along the Old Seward Highway. The pattern of development in the Central subarea takes advantage of the major arterials of International Airport Road, C Street, Dowling Road, and the Old Seward Highway, and to some extent also the rail corridor and proximity to the International Airport.

Exhibiting a wide variety of industrial and non-industrial uses throughout the I-1 zone, the area includes warehousing transportation and freight services, fabrication, and other light industrial uses mixed with uses including office, retail, religious, and parkland. While there are some medium to large sites, there are a large number of single parcel developments on lots as small as 7,500 square feet. The clusters straddling C Street in the vicinity of Potter Drive south to 64th Avenue, in the corridor between Old and New Seward Highways south of Dowling, and south of East Dowling Road to Lake Otis together comprise the largest and most diverse array of small to medium sized industrial PDR establishments found anywhere in the Municipality. The I-2 district in Central Anchorage comprises relatively few large sites, including significant fabrication, quarrying, power generation, and distribution warehouse establishments.



Office-warehouse with residence



Small mining company building

Table 19. Acres Currently in Use, by Economic Sector – Central Anchorage Subarea 2013-14

Economic Sector	Industrial Districts	All Districts in Subarea
Manufacturing and Natural Resource Production	103.7	105.0
Manufacturing (except non-metal. mineral prod.) – P	69.2	70.3
Non-metallic Mineral Products and Quarrying – P	34.5	34.5
Agriculture, Nurseries, and Tree Production – P	0	0.2
Construction – P	116.8	123.6
Vehicle and Equipment Repair – R	59.5	80.1
Utilities – Power, Water, and Sewage – P/D	64.5	64.5
Airport, Railroad, and Marine Transportation – D	5.3	5.3
Warehousing and Ground Transportation	151.8	162.6
Warehousing – D	60.3	62.4
Ground Transportation and Freight Services – D	91.5	100.2
Wholesale Trade – D	84.5	94.6
Retail Trade	92.2	136.3
Retail Trade (except vehicles and heavy goods) – N	12.0	18.9
Vehicle Sales and Heavy Goods Retail – N	80.2	117.4
Communications and Information – N/P	17.3	17.5
Finance, Real Estate, Leasing, and Self-storage	73.7	86.7
Finance, Insurance, and Real Estate Services – N	21.7	24.7
Leasing, Equipment Rental, and Self-storage – N	52.0	62.0
Business, Professional, and Technical Services	100.7	107.4
Professional and Business Services – N	41.5	45.5
Services to Buildings and Facilities – R	14.0	16.4
Waste Management, Salvage, and Snow Disposal – R	45.2	45.5
Education and Health Services – N	30.1	62.4
Leisure and Accommodations – N	89.9	156.6
Personal and Other Services (except repair) – N	25.9	31.9
Residences – N	19.0	35.5
Government and Public Safety – N	12.4	14.8

The largest industrially zoned acreage by economic sector in the Central Anchorage subarea includes 152 acres of *warehousing and ground transportation*, with ground transportation and freight services (91 acres) being the predominant use. A related distribution sector, *wholesale trade*, also has significant acreage (84 acres).

The second largest amount of acreage by economic sector comprises *construction* (116 acres of industrial-zoned land). The third largest acreage by economic sector is *manufacturing* and *natural resources production* (103 acres) with manufacturing being the predominant land use. Combined with the power generation utilities acreage of CEA's Electron Drive campus, manufacturing and construction make Production the largest PDR category of industrial uses in the Central Bowl.

Vehicle and equipment repair occupy a relatively large amount of space – 59 acres of industrial-zoned land and 80 acres total, or more than half of all acreage in this use in the Bowl.

The largest non-industrial user of I-1 and I-2 zoned land in Central Anchorage are vehicle sales and heavy goods retail establishments, occupying more than 80 acres of industrial land primarily along the Old Seward Highway, C Street, and International Airport Road corridors. Leasing, rentals, and self-storage occupy 52 acres, and professional and business services offices occupy 41 acres, particularly in office parks along C Street between 40th and International Airport Road. Food and lodging uses occupy 46 acres, primarily along C Street.

South Anchorage Subarea (Table 20)

South Anchorage subarea is primarily a linear concentration of industrial land that straddles the railroad corridor north to south from the north end of King Street at East 76th Avenue, and south past O'Malley to Klatt Road. The corridor extends east to west from C Street to the Old Seward Highway. The area contains much of the Anchorage Bowl's most recent, and largest parcel industrial development, as well as many of the remaining undeveloped large parcels. Numerous large industrial users have developed the area with both building and yard intensive operations. The northern King Street end of this corridor is an industrial park subdivision of smaller I-1 parcels exhibiting well-established light industrial use. The south end of this major corridor also comprises smaller parcels and an industrial park, Huffman Business Park, which includes a greater mix of non-industrial uses that transitions into the Huffman Town Center designated commercial center at Huffman Road.

A secondary cluster of industrial uses exists east of the Seward Highway, with approximate boundaries being E. 76th Avenue in the north, Abbott Road in the south, Seward Highway in the west, and Lake Otis Parkway in the east. Some of this area has developed as a retail center. The highest utilization area for industrial uses is centered at the Cinnabar Loop, and a combination of construction supply, auto salvage, and other uses along East 79th Avenue. This area includes numerous small parcels that are used in combination with larger adjacent parcels and individually developed ones.

Table 20. Acres Currently in Use, by Economic Sector – South Anchorage Subarea 2013-14

Economic Sector	Industrial Districts	All Districts in Subarea
Manufacturing and Natural Resource Production	151.4	154.1
Manufacturing (except non-metal. mineral prod.) – P	68.9	69.2
Non-metallic Mineral Products and Quarrying – P	82.5	84.0
Agriculture, Nurseries, and Tree Production – P	0	0.9
Construction – P	150.7	153.4
Vehicle and Equipment Repair – R	17.6	24.7
Utilities – Power, Water, and Sewage – P/D	20.7	28.3
Airport, Railroad, and Marine Transportation – D	0.3	0.3
Warehousing and Ground Transportation	43.1	45.1
Warehousing – D	5.5	5.5
Ground Transportation and Freight Services – D	37.6	39.6
Wholesale Trade – D	86.7	90.7
Retail Trade	188.5	223.0
Retail Trade (except vehicles and heavy goods) – N	76.7	103.0
Vehicle Sales and Heavy Goods Retail – N	111.8	120.0
Communications and Information – N/P	7.2	8.1
Finance, Real Estate, Leasing, and Self-storage	82.4	105.4
Finance, Insurance, and Real Estate Services – N	10.8	23.4
Leasing, Equipment Rental, and Self-storage – N	71.6	82.0
Business, Professional, and Technical Services	117.0	133.5
Professional and Business Services – N	13.9	26.7
Services to Buildings and Facilities – R	28.9	32.0
Waste Management, Salvage, and Snow Disposal – R	74.2	74.8
Education and Health Services – N	26.7	41.7
Leisure and Accommodations – N	39.7	102.1
Personal and Other Services (except repair) – N	15.9	39.5
Residences – N	8.4	32.1
Government and Public Safety – N	9.7	10.5

Retail uses comprise the largest industrially zoned acreage by economic sector in the South Anchorage sub area. Vehicle sales and heavy goods retail is the predominant retail use; however, there are significant concentrations of general retail around Dimond Boulevard, South C Street, and Abbott Town Center.

The Production category of PDR uses—including manufacturing, non-metallic mineral products, and construction contractors—is far more prevalent in South Anchorage than are transportation and distribution uses. The largest amount of acreage by sector is essentially a draw between *manufacturing* (including non-metallic mineral production and quarrying) and *construction*. Construction contractors form the single largest sector using land, occupying 153 acres including all zoning districts.



AS&G non-metallic mineral products



Office/warehouse/production space



STG Wind Turbine contractor



Millwork plant

The third largest amount of acreage in South Anchorage is services to buildings and facilities combined with waste management, salvage, and snow disposal. *Wholesale trade* is the most prevalent sector in the PDR Distribution category, occupying 90 acres, compared to 45 acres of warehousing and ground transportation combined.



Food wholesale warehouse

Determining Patterns in Land Development Densities

Tables 21, 22, and 23 show trends in development density in the I-1 and I-2 districts, measured as Floor Area Ratio (FAR). FAR is calculated as the amount of building floor area divided by the area of the lot. This data may be compared with the FAR assumptions in the industrial demand forecasts.

Table 21 shows average FAR of existing development by economic sector. Tables 22 and 23 track historic and recent trends in development density. Table 22 includes developments without buildings, and so implies a lower FAR. Table 23 includes only those sites that have building floor area. Both Tables 22 and 23 indicate that development densities were higher in the 1970s and early 1980s than in the 1990s and 2000s. Table 23 suggests that recent development with buildings may be trending back toward the higher development densities experienced prior to the 1990s.

To further explore these recent trends, staff investigated the FAR of several recently constructed industrial buildings:

1. A small multi-tenant warehouse building located on West 68th Avenue was recently constructed with an FAR of .31 on its triangle-shaped lot. Individual businesses occupy the spaces (pictured below).



2. A condominiumized set of four warehouse style buildings, each with two tenant spaces, were constructed on East 100th Avenue with a FAR of .32 on the lot for the four buildings. Individual small businesses occupy the spaces (pictured below).



3. A new warehouse purpose-built on a small lot for a local brochure company is 2,800 sf and has an FAR of .33 on its lot.



4. A recent three-story office-warehouse building near Commercial Drive housing an environmental consulting firm with warehouse and office space for itself, and tenant office space, comes in at 0.56 FAR (pictured below).



Anchorage's Title 21 parking requirements for industrial uses were substantially reduced at the beginning of 2014. Historically, the parking requirements increased after the 1970s. The new, lower parking requirements may allow for higher densities than has been permitted in recent decades.

Table 21. Average FAR of Existing Development, by Economic Sector I-1 and I-2 Districts in Anchorage Bowl, 2013

Economic Sector	Number of Sites ¹¹	Average FAR
Construction	199	0.17
Manufacturing	116	0.32
Wholesale Trade	103	0.42
Retail Trade	58	0.30
Warehousing	31	0.48
Transportation	83	0.11
Utilities	13	0.06
Information	10	0.41
Financial and Real Estate	11	0.23
Leasing, Rental, and Self-storage	54	0.08
Business, Professional, and Technical Services	77	0.23
Waste Management and Salvage	34	0.07
Education and Health Services	22	0.26
Leisure and Accommodations	12	0.22
Other Services	58	0.32
Government and Public Safety	10	0.24

¹¹ For Tables 21, 22, and 23, establishments which crossed lot lines were calculated as a single unified site. The sample in Table 21 includes existing developed sites with no building floor area (FAR=0). The following were not included:

^{1.} Properties not located in I-1, I-1 SL, I-2, and I-2 SL districts;

^{2.} Alaska Railroad Lease Lots in the Ship Creek Terminal Reserve;

^{3.} Properties in Merrill Field Airport and Anchorage International Airport;

^{4.} Sites with more than three (3) different types of Economic Functions (i.e., many different types of businesses (FAR for lots with two or three types of establishments is reported by primary (largest) use type; and

^{5.} Sites in which the primary building is non-industrial, such as commercial retail and office buildings, housing, and civic/institutional structures.

Table 22. Average FAR of Existing Developed Sites¹², by Historic Era I-1 and I-2 Districts in Anchorage Bowl, 2013

Historic Era	Number of Sites	Average FAR
1969 and earlier	46	0.29
1970 - 1979	218	0.34
1980 - 1989	292	0.32
1990 - 1999	67	0.21
2000 - 2009	73	0.16
2010 - present	10	0.14

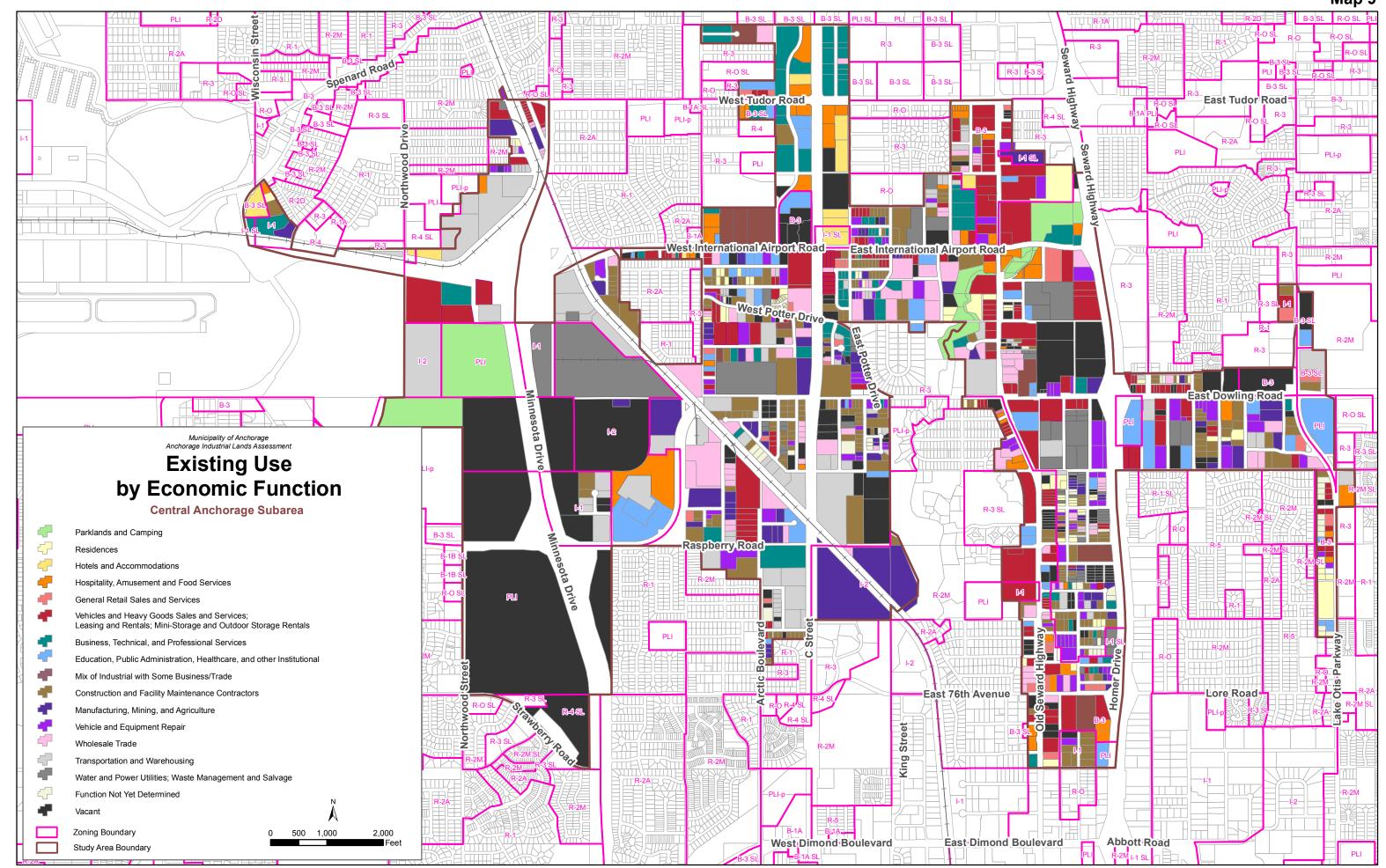
Table 23. Average FAR of Existing Developed Sites with Buildings, by Historic Era I-1 and I-2 Districts in Anchorage Bowl, 2013

Historic Era	Number of Sites	Average FAR
1969 and earlier	42	0.32
1970 - 1979	207	0.36
1980 - 1989	281	0.33
1990 - 1999	65	0.21
2000 - 2009	58	0.20
2010 - present	5	0.29

 $^{^{12}}$ Table 22 includes developed sites without building floor area. Table 23 includes only sites with building floor area.

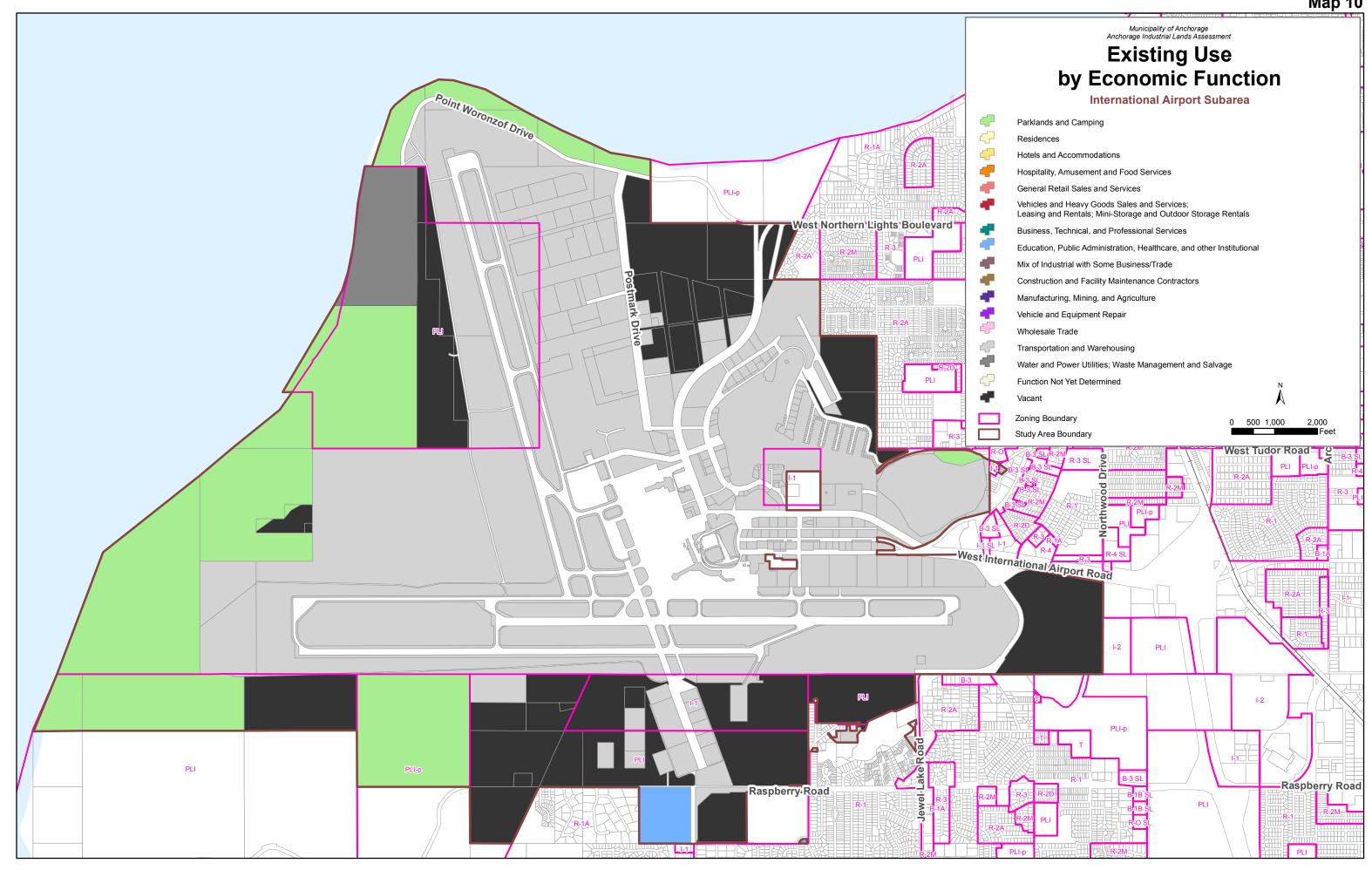
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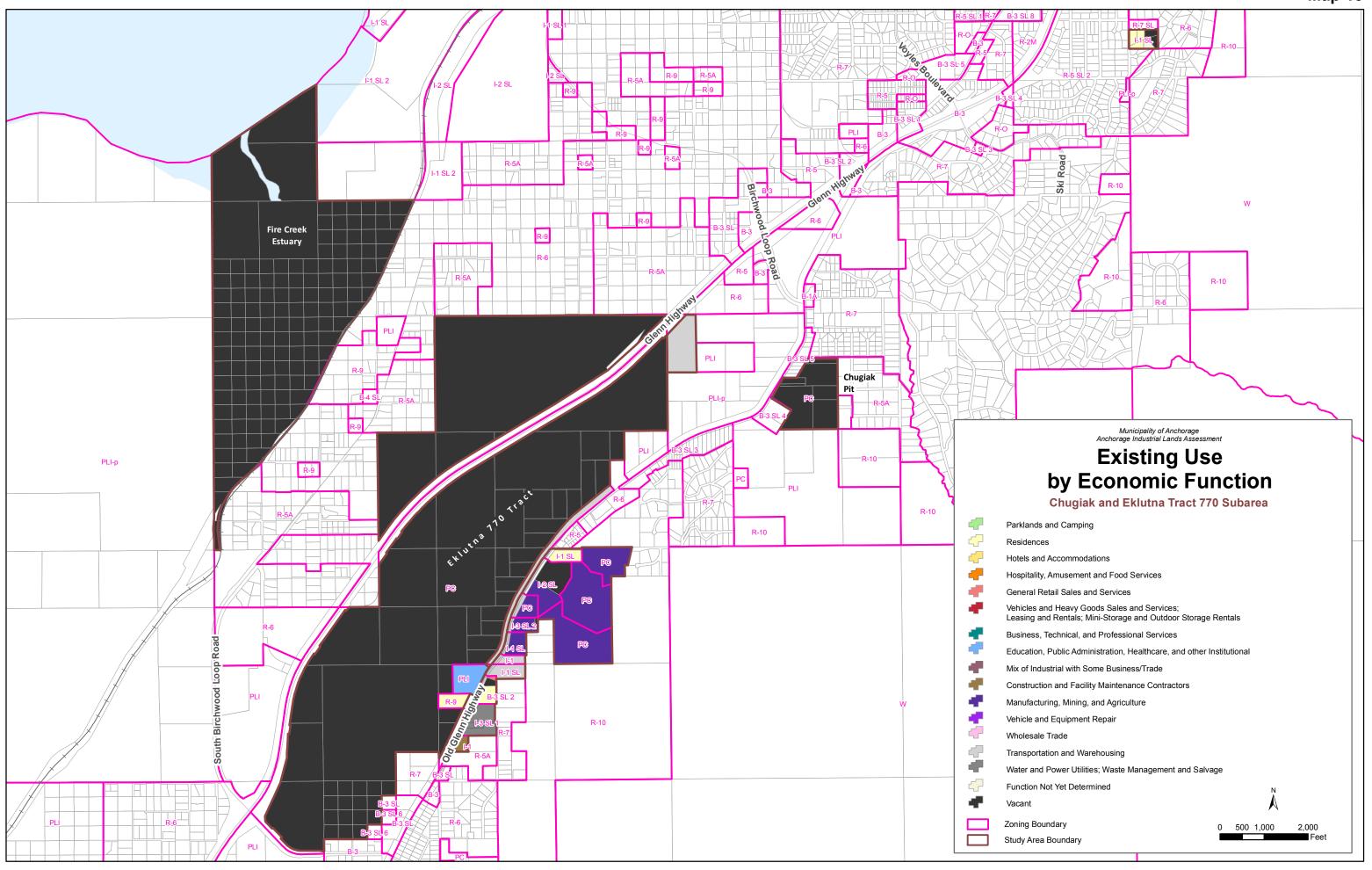
Map 12



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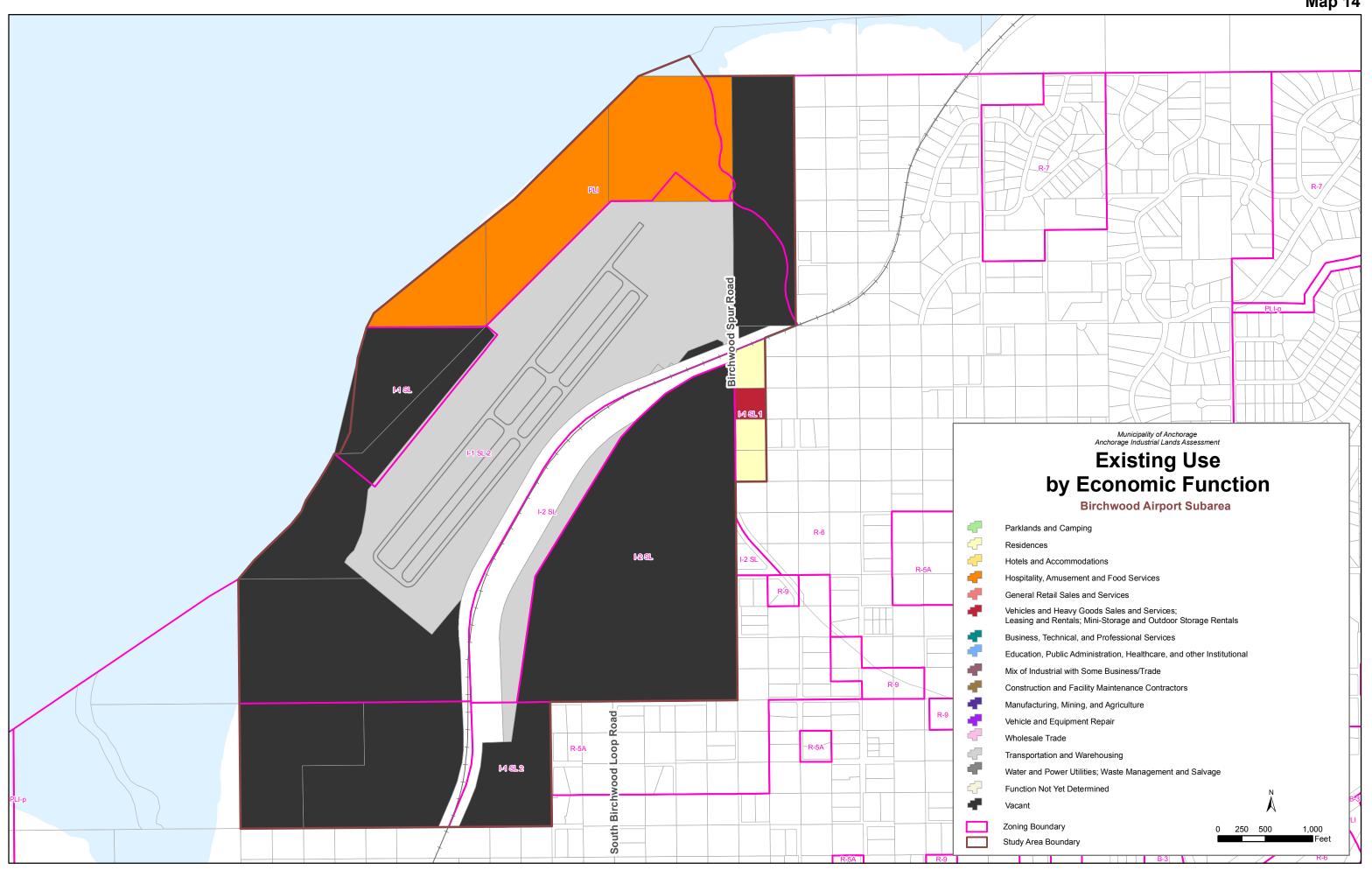
Map 13



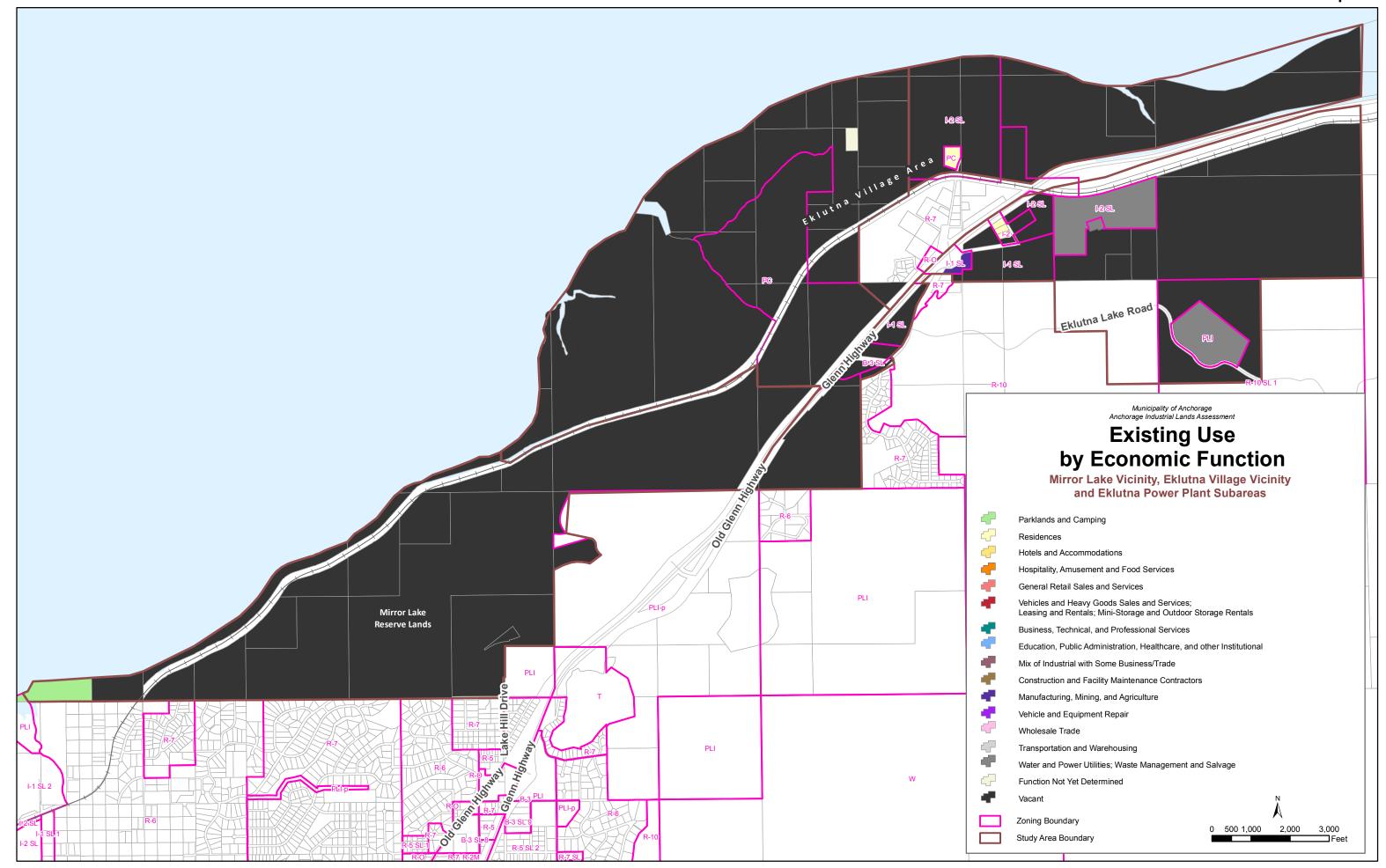
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Map 14



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