

Appendix D: 2013 West Plains Lands Analysis

2013 West Plains Industrial Lands Analysis

Executive Summary: In conjunction with the 2013 West Plains Subarea planning efforts, the City of Spokane prepared an Industrial Lands Study to evaluate the availability and readiness of industrial and commercial land in the West Plains subarea. The work was funded through a grant received from the Washington State Department of Commerce.

This study has two main purposes:

1. Evaluate the supply of industrial land to determine the quantity of currently marketable land.
2. Determine which areas to prioritize for additional infrastructure improvements to capitalize on existing investments and further market identified lands ripe for development.

This study was modeled after a similar study completed by Spokane County in 2000. A rating system was developed to evaluate the marketability of land designated for industrial use. The rating system utilized Geographic Information System data from the City of Spokane, Spokane County and the City of Airway Heights to determine lot size, environmental limitations and availability of infrastructure, both existing and planned. The lands were classified into six categories or tiers. The criteria used to categorize the tiers are summarized below. Detailed criteria follow the Executive Summary in the Appendix.

Tier 1 properties are considered ready for development, with all necessary infrastructure in place. Tier 1a properties are ready for development, but are smaller than two acres. Tier 2 properties are missing one important piece of infrastructure for development; water, sewer or road access. Tier 3 properties are missing two of the three important elements of infrastructure. Tier 4 properties lack access to all three major elements of infrastructure. Tier 5 properties are unlikely to be (re)developed, as they are already sufficiently utilized or are dedicated to aviation use, contain significant critical areas or are within SIA's or FAFB's crash zones.

Following this process, the industrial and commercial properties in the West Plains Urban Growth Area (see Maps 1.1 and 1.2) sorted into the six tiers in the following way:

Table 1.1: West Plains Lands Analysis Tier Results

<i>Tier</i>	Tier 1	Tier 1a	Tier 2	Tier 3	Tier 4	Tier 5
<i>Acres</i>	3,225	96	2,144	2,047	28	6,128
	Acres	Acres	Acres	Acres	Acres	Acres

West Plains Subarea Employment Potential

This analysis was then used to calculate the employment potential and corresponding transportation infrastructure needs in the West Plains UGA. Relying on assumptions made in the similar Spokane County 2000 *Industrial Land Study*, a value of 16 employees per acre was used when projecting employment potential for existing industrial and commercial properties within the UGA. Properties that fell into Tiers 1-4 were calculated using this value. It was assumed that properties under Tier 5 will not

be (re)developed and therefore not contribute higher employment numbers to the subarea. These calculated figures were totaled for each Transportation Analysis Zone in the West Plains, to allocate prospective trips and determine future needs in the transportation network. The employment potential values are shown in Table 1.2, in the final row under Build Out Potential.

Table 1.2: West Plains Employment Numbers in Existing UGA by TAZ

TAZ	459	460	461	462	463	464	547	548
2010 Employment	359	49	1,878	881	0	1,246	254	1,167
2040 Employment TOTAL	712	2,156	2,523	1,966	1,403	2,086	365	1,342
2070 Employment TOTAL	1,424	4,312	5,046	3,932	2,806	4,172	730	2,684
Build Out Potential *	1,664	18,960	4,904	5,670	2,680	10,876	1,483	500

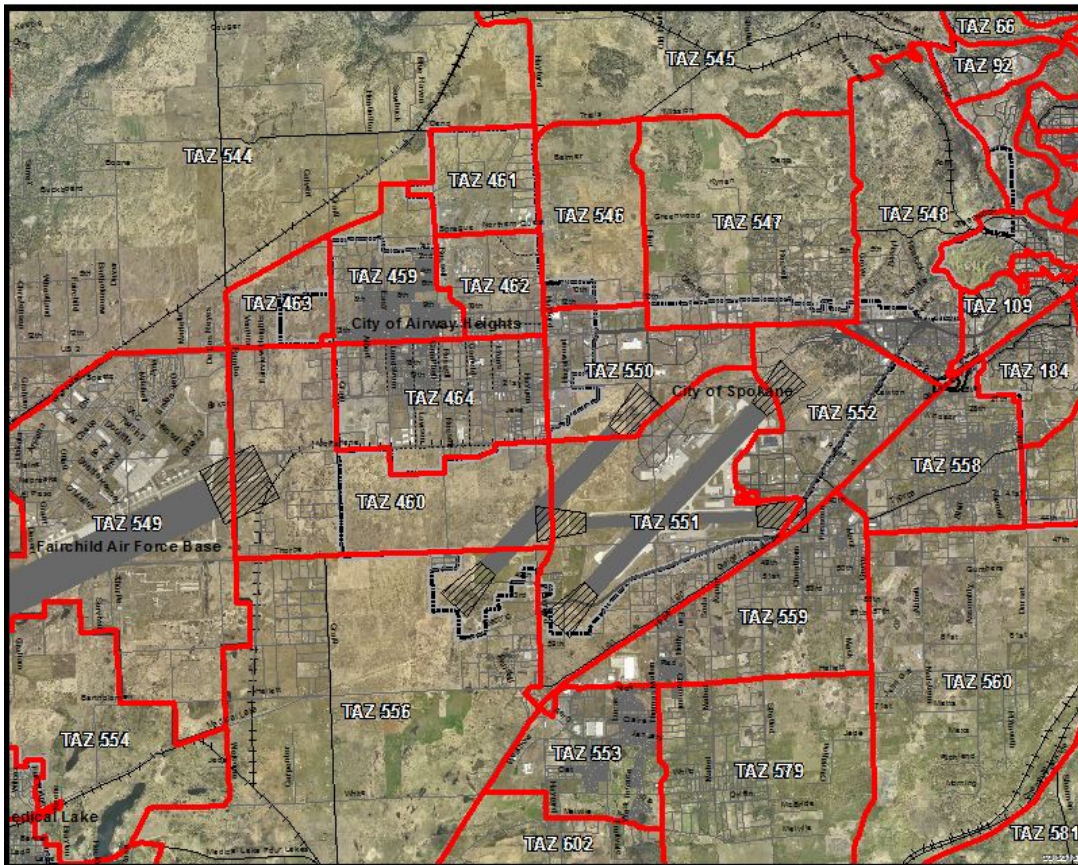
TAZ	550	551	552	553	556	558	559
2010 Employment	1,794	1,444	1,728	1,384	81	150	511
2040 Employment TOTAL	2,356	2,052	2,431	1,926	917	460	1,352
2040 Employment TOTAL	4,712	4,104	4,862	3,852	1,834	920	2,704
Build Out Potential*	6,991	8,806	6,058	3,917	12,692	1,818	6,585

Total Build Out Employment Potential 93,604

*Build Out Potential does not include 2010 Employment figures.

Source: City of Spokane Planning and Development Services and SRTC

Figure 1.1: West Plains Transportation Analysis Zones



Appendix: This appendix includes the detailed criteria used for the industrial lands analysis and the methodology used to generate the values.

The properties within the study area fall within multiple jurisdictions. The greater West Plains area as a whole includes land within the cities of Spokane, Airway Heights, Cheney, Medical Lake, and Spokane County. This analysis, however, is based on the Central West Plains Study Area, which contains properties within Spokane, Airway Heights, and Spokane County. While the three jurisdictions contain similar policies on zoning and land use, there are some differences within each municipal code. Within the cities of Airway Heights, Spokane, and Spokane County, the properties which are considered 'Industrial' or 'Commercial' fall under the following zoning categories:

Table 2.1 West Plains Industrial and Commercial Zoning Categories

Airway Heights	C-1	C-2	I-1	I-2	MZ
City of Spokane	LI	CB-55	GC-70		
Spokane County	RC	LI	RT	MZ	

This is noted simply to indicate that each jurisdiction has slight variations on industrial and commercial property designations. All of these properties were considered in the industrial lands analysis. See Map 2.1 for reference to zoning designations in the area.

The criteria for Tier 1 designation of properties are as follows:

1. The property is industrially zoned or allows industrial use, i.e.; is zoned Light Industrial, Heavy Industrial, General Commercial, Light Commercial, Mining, Community Business, Community Commercial or Regional Commercial.
2. The property is located within the Urban Growth Area, as of June 2013.
3. The property is vacant.
4. The property is underutilized. In this case, land is considered underutilized when the building value to land value ratio is less than 1 to 3; this information was obtained from the Spokane County Assessor's Office. Ortho maps were used for confirmation and if market improvement values did not accurately reflect a property's recent redevelopment, this was taken into account and attributed appropriately. This is illustrated in the new Caterpillar plant development located near the Medical Lake Interchange. As of 2013, this was a new development and assessor's information was out of date. This information was taken into account during this process.
5. The parcel size is larger than two acres.
6. The property has access to a designated arterial or viable road; dirt and residential roads were excluded.
7. The property is within 1,000 feet of a water main.
8. The property is within 1,000 feet of a sewer main, including privately-owned mains.
9. The property is located in a fire district.
10. If the property contains critical areas, as defined by the City of Spokane's Critical Area

Ordinance, it is large enough to mitigate the critical areas and still retain viable industrial use.

11. The property is not dedicated to current or planned aviation use for the Spokane International Airport.
12. The property is not within the City's designated Airport Compatibility Zone 1 (ACZ-1) or Fairchild Air Force Base's designated Clear Zone.

Tier 1a has the same criteria as Tier 1, but parcels are smaller than 2 acres. This tier was added to showcase properties which may be suitable for smaller commercial or industrial development and contain all necessary infrastructure.

Tier 2 industrial land has the same criteria as Tier 1, except one of the three primary infrastructure components (water, sewer, access to an arterial/road) are not available. If the one missing element was completed, these properties would be considered ripe for development.

Tier 3 industrial properties have similar criteria to Tier 1, with the exception that two of the three primary infrastructure components are not available. In this tier, arterial and road access also included jurisdictions' planned arterial networks, and not just existing roadways. Additionally, lands which are currently underutilized both monetarily and in terms of physical usage were included. It was assumed that a physically underutilized property could be redeveloped overtime and eventually deliver additional industrial acreage for use in the West Plains.

Tier 4 includes all industrial properties which do not currently have any access to infrastructure necessary for development.

Tier 5 industrial land is land that is considered unlikely to be developed or redeveloped. This includes all properties constrained by critical areas, within the ACZ-1 or the Clear Zone, dedicated to aviation use, smaller than 2 acres (and not in Tier 1a), residentially zoned or utilized at a 1:1 ratio. It should be noted that utilization was determined in the other tiers at a ratio of 1 to 3. This tier was calculated differently due to the assumption that properties which are fully utilized monetarily would not prompt redevelopment in the near term.

There are several large airport parcels owned by the Spokane International Airport which are largely undeveloped or underdeveloped, but are located in the ACZ-1, where no structures are permitted. These parcels were clipped to remove the undevelopable portions and analyzed based on the remaining developable land. A similar process was done for parcels within the Fairchild Air Force Base Clear Zone. Because these parcels are so large, and essentially drawn on the city section lines, some leeway was taken in identifying developable areas within these properties

The detailed criteria for the six tiers are outlined here in color-coded boxes, which correspond to how the tiers are identified on Maps 1.1 and 1.2:

Tier 1	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	Yes
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Tier 1a	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	No
Water, Sewer, Road	Yes
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Tier 2	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	2 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Tier 3	
Underutilized - \$ and Use	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	1 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Tier 4	
Vacant	Yes
Underutilized - \$ and Use	Yes
Industrial Use Permitted	Yes
In UGA	Yes
2 acres +	Yes
Water, Sewer, Road	0 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Tier 5	
Vacant	No
Underutilized - \$ and Use	No
Industrial Use Permitted	Yes
In UGA	Yes
2 acres +	No
Water, Sewer, Road	Not Considered
Critical Area	Yes
Outside ACZ-1 & Clear Zone	No
Dedicated to Aviation Use	Yes

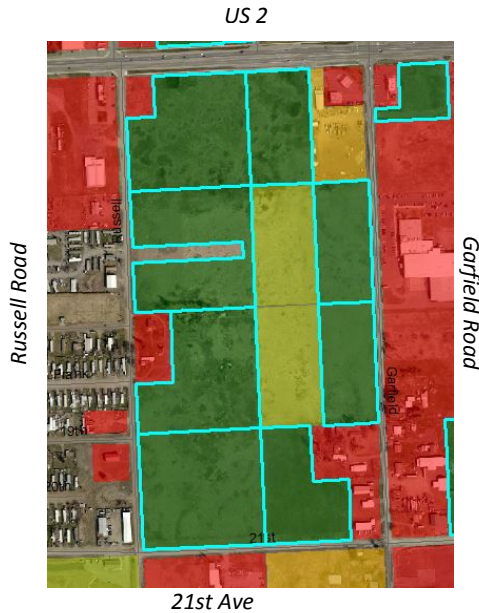
Applying these criteria, the industrial and commercial properties within the subarea were attributed to each tier accordingly:

Table 2.2 Industrial and Commercial Land in West Plains Subarea by Tier

Tier	Tier 1	Tier 1a	Tier 2	Tier 3	Tier 4	Tier 5
Acres	3,225 Acres	96 Acres	2,144 Acres	2,047 Acres	28 Acres	6,128 Acres

Source: City of Spokane Planning and Development Services

A large sample of Tier 1 properties, shown in Figure 2.1, and signified in green, is located between Russell Avenue and Garfield Avenue and between US 2 and 21st Avenue in Airway Heights. These properties all have access to necessary infrastructure, are larger than two acres, are vacant and do not have any of the restrictive criteria; making them ripe for immediate development.



Tier 1	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	Yes
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

Figure 2.1: Tier 1 Property

Similarly, several parcels on airport property have Tier 1 status, specifically parcels between Craig Road and Hayford Road and between McFarlane Road and Thorpe Road, shown in Figure 2.2. Two of these larger parcels are examples of clipped parcels. The original properties, totaling over 1,000 acres, were parceled into smaller properties. One of the larger parcels was within the ACZ-1 for Spokane International Airport and therefore development was prohibited. The Airfield Overlay Zone and proposed runway were both clipped from the parcel in order to determine developable land.

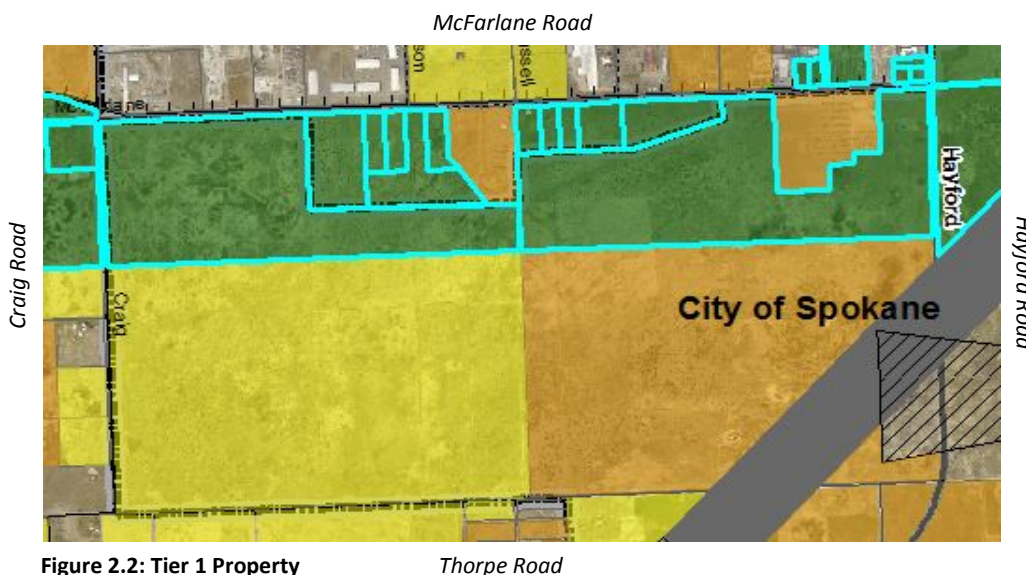


Figure 2.2: Tier 1 Property

Additionally, while both large parcels technically have access to water and sewer, utility lines currently only exist in the northern portions of the parcels. The decision was made to further clip these large parcels into two smaller parcels each, to signify portions that were 'more ripe' for industrial development, while the more southern portions would need utilities extended to them over time.

TIER 1A: Tier 1a properties meet the same criteria as Tier 1, expect that they are smaller than two acres. These properties were identified to indicate parcels which are ripe for smaller-scale industrial or commercial development. An example of Tier 1a properties is showcased here below in Figure 2.3, highlighted and in light green.

Tier 1a	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	No
Water, Sewer, Road	Yes
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

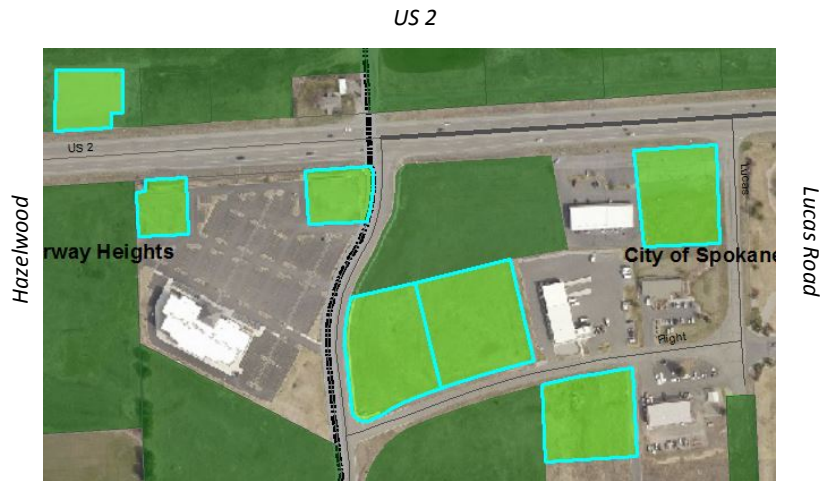


Figure 2.3: Tier 2 Property

TIER 2: Tier 2 properties are similar to Tier 1, with the exception that one of the primary infrastructure components (water, sewer or road access) is missing. If the missing infrastructure is installed, these properties will be more favorable for industrial or commercial development.

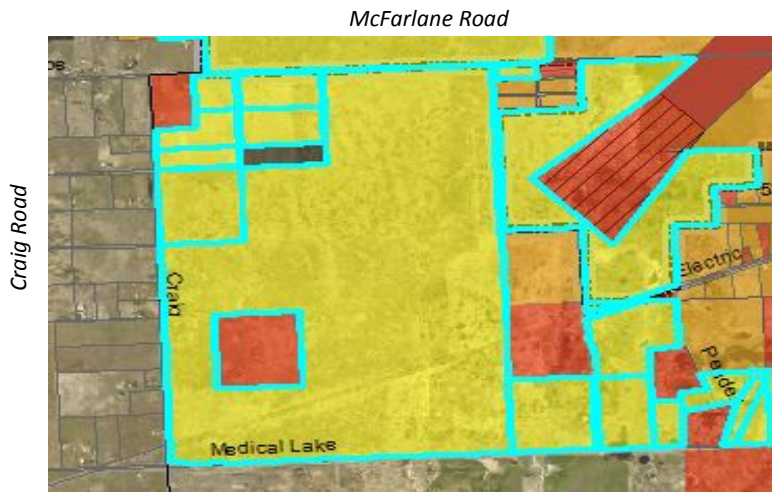


Figure 2.4: Tier 2 Property SR-902

Tier 2	
Vacant	Yes
Underutilized \$	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	2 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

This large cluster of Tier 2 properties, shown in Figure 2.4 and signified in yellow, exists

southwest of the Spokane International Airport. All of these parcels contain all necessary elements for development, except for sewer access. Investment in the extension of sewer would move these properties to Tier 1 status for development.

TIER 3: Tier 3 properties have similar criteria to Tier 1 and Tier 2, but properties have access to only one of the three necessary pieces of infrastructure (water, sewer or road access). Planned arterials and planned road networks from each jurisdiction were taken into consideration when considering “road access”.

Additionally, a property’s physical utilization was considered for the first time, in addition to the monetary utilization considered in the previous two tiers. In this tier, properties considered monetarily utilized, but physically underutilized were noted. An assumption was made that, over time the use of the property could change and provide more acreage to contribute to the industrial/commercial landscape of the West Plains.

Tier 3	
Underutilized - \$ and Use	Yes
Industrial Use Permitted	Yes
2 acres +	Yes
Water, Sewer, Road	1 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

McFarlane Road



Russell Avenue

Figure 2.5: Tier 3 Property, Underutilized US 2

An example of this is showcased to the left, in Figure 2.5. This property, located directly along the north side of US 2 and west of Russell Avenue, has all necessary infrastructure for development, is industrially zoned, and is over 45 acres but, according to assessors information, has a utilization value of 0.8. An assumption was made that, over time, this property could be utilized more intensely and eventually provide more industrial/commercial acreage to the West Plains landscape.

An example of Tier 3 properties lacking road and/or arterial access, both existing and planned, is shown here in Figure 2.6. This cluster of parcels is located just west of Craig Road and south of US 2, in the recent proposed UGA expansion of Spokane County. These properties also lack either water or sewer access.

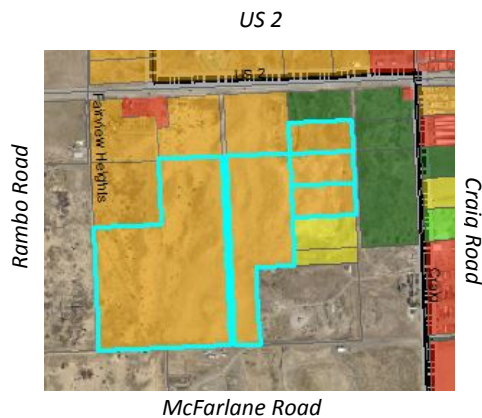


Figure 2.6: Tier 3 Property

TIER 4: Tier 4 properties are those that lack all three elements of infrastructure – water, sewer, and road access, both existing and planned. A large cluster of these properties is shown here, in Figure 2.7, highlighted and in black. These properties are located west of Craig Road, around Thorpe Road, in between Spokane International Airport and Fairchild Air Force Base. These properties would need plans for investment in water, sewer and roads before industrial development could take place.

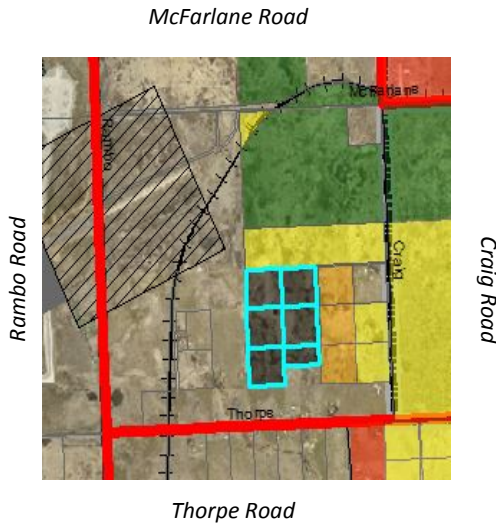


Figure 2.7: Tier 4 Property

Tier 4	
Vacant	Yes
Underutilized - \$ and Use	Yes
Industrial Use Permitted	Yes
In UGA	Yes
2 acres +	Yes
Water, Sewer, Road	0 of 3
Critical Area	No
Outside ACZ-1 & Clear Zone	Yes
Dedicated to Aviation Use	No

TIER 5: Tier 5 includes many types of properties, but can generally be referred to as those in the study area unlikely to be (re)developed for industrial or commercial purposes. These include properties that are significantly obstructed by critical areas, are dedicated to current or planned aviation use, reside within the ACZ-1 or Clear Zone of the Airfield Overlay Zones or are utilized at a 1:1 ratio. Again, the ratio was calculated by dividing the improvement value of the parcel by its market value, both assessed through the Spokane County Assessor’s Office.

Tier 5	
Vacant	No
Underutilized - \$ and Use	No
Industrial Use Permitted	Yes
In UGA	Yes
2 acres +	No
Water, Sewer, Road	Not Considered
Critical Area	Yes
Outside ACZ-1 & Clear Zone	No
Dedicated to Aviation Use	Yes

West Plains Acreage by Transportation Analysis Zone:

The next portion of this process included tying these parcels and their acreage to their specific Transportation Analysis Zones (TAZ), identified by the Spokane Regional Transportation Council. The Central West Plains study area contains 17,036 acres of land and 4,652 individual parcels, including both residential and industrially zoned parcels. Table 2.3 displays all acreage within the study area, with parcels tied to their corresponding TAZ.

Table 2.3 Total Acreage by TAZ in West Plains Study Area

TAZ	184	185	459	460	461	462	463	464	546	547
Acres	50 acres	5 acres	793 acres	1,631 acres	635 acres	549 acres	167 acres	1,321 acres	70 acres	249 acres
TAZ	548	550	551	552	553	556	558	559	579	
Acres	231 acres	1,217 acres	2,433 acres	1,125 acres	963 acres	1,965 acres	675 acres	1,014 acres	86 acres	

Source: City of Spokane, Planning and Development Services Department

Table 2.4 displays the just the Industrial and Commercial acreage in the Central West Plains Study Area with parcels tied to their corresponding TAZ.

Table 2.4 Total Industrial and Commercial Acreage by TAZ in West Plains Study Area

TAZ	184	185	459	460	461	462	463	464	546	547
Acres	0 acres	0 acres	346 acres	1,631 acres	635 acres	547 acres	167 acres	1,280 acres	0 acres	249 acres
TAZ	548	550	551	552	553	556	558	559	579	
Acres	106 acres	1,217 acres	2,433 acres	983 acres	419 acres	1,965 acres	324 acres	868 acres	0 acres	

Source: City of Spokane, Planning and Development Services Department

Central West Plains Study Area Employment Potential

The final step in the process sought to project future employment potential and corresponding transportation needs in the area. Land that currently is zoned for industrial or commercial use was analyzed in this calculation.

Relying on assumptions made in the similar Spokane County *2000 Industrial Land Study*, a value of 16 employees per acre was used when projecting employment potential for the industrial and commercial land. The County’s formula to determine this value is located here:

$$43,560\text{-sf} \times 30\% \text{ building coverage} / 1000\text{-sf} \times 1.23\text{employees per } 1000\text{-sf} = 16 \text{ employees/acre}$$

This value of 16 units per acre was used to calculate build out employment potential for existing industrial and commercial properties within the UGA. Properties that fell into Tiers 1-4 were calculated using this figure. It was assumed that properties under Tier 5 will not be redeveloped and therefore not contribute higher employment numbers to the region. These calculated figures were totaled by existing TAZ's in the West Plains, to allocate prospective trips and determine future needs in the transportation network. The values are shown in Table 2.5, in the final row under Build Out Potential. The other numbers show values calculated by SRTC using their own model. The 2010 and 2040 numbers were calculated by SRTC; the 2070 numbers indicate a simple doubling of SRTC's 2040 employment projections. These figures are not based on any other calculations and indicate, in many cases, that the full build out potential of the West Plains is not likely in the near-term or even long-term future.

Table 2.5 Total Industrial and Commercial Acreage by TAZ in West Plains Study Area

TAZ	459	460	461	462	463	464	547	548
2010 Employment	359	49	1,878	881	0	1,246	254	1,167
2040 Employment TOTAL	712	2,156	2,523	1,966	1,403	2,086	365	1,342
2070 Employment TOTAL	1,424	4,312	5,046	3,932	2,806	4,172	730	2,684
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*Build Out Potential does not include 2010 Employment figures.

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