Assessment of Commercial Development in Laramie, Wyoming

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Assessment of Commercial Development Opportunities in Laramie, Wyoming

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Senior Honors Project

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*All Figures in this presentation were created by Mark T. Christensen using ArcGIS and Microsoft Excel*
I. Introduction

Laramie, Wyoming is no stranger to development difficulties and limitations. These difficulties manifest themselves in several ways throughout the planning process, whether it be from a simple development application or complete revision of the comprehensive plan. Difficulties and limitations are integral factor of the planning process as they lay the foundation for future plans and community endeavors. In Laramie this has resulted in the Laramie Economic Initiative. The Initiative has several components to bring about economic prosperity in Laramie. One key component of this Initiative is a parcel survey in high development zones.

This study is a complete survey of parcel information in Laramie’s B1 (Limited Business), B2 (Business), and C2 (Commercial Business) zones (these zones are defined in section I. e.). Before the study itself is discussed in depth, it is necessary to provide some background on the planning profession as a whole. First a definition of community planning will be discussed along with its importance. This section will investigate the need for a comprehensive plan, the components of planning documents, the importance of zoning, and what information is utilized to establish a future land use map. Next it will be necessary to discuss the importance of economics within the planning process. This will be done with reference to Stephen Wheeler’s three E’s of sustainable planning with a special interest in economics (the other E’s being Environment and Equity). The parcel survey is an economical issue, but environmental and equitable components are still acknowledged. After the Three E’s are established, the Laramie Economic Initiative will be further discussed. This will be followed by defining the surveyed zones.

After all background information is established, the paper will move on to the methodology for the project. The methodology will describe the process of identifying parcels in
each category of development. This will culminate in the data and the establishment of several GIS (Geographic Information Systems) maps. The data and maps are the crux of this study and represent the most time consuming and tedious component of the study. The maps and subsequent data will support the discussion for what may be possible in these zoning districts. Ultimately the data will be utilized as a preliminary component of the entire Economic Initiative. The last steps of the study will discuss acknowledged deficiencies of the study and will bring about final remarks. A parcel study is an important component to the planning process and this specific study will support the discussion for the future of commercial development in Laramie, Wyoming.

a. Importance of Municipal Planning

In the City of Laramie planning takings to distinct facets. These are development review and long range planning. The City of Laramie website defines development review as, “[T]he development review function entails reviewing and processing subdivision and zoning applications, planned unit developments (PUDs), conditional use permits, variances, and zone changes.”¹ The applications, permits, and variances are reviewed by the planning department to ensure they meet Wyoming state statutes and development codes.² The second function of the City of Laramie planning department is long range planning described as, “[T]he long-range planning function entails writing and updating documents pertaining to the physical development of the City, including zoning ordinances, subdivision and development standards, special

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² City of Laramie, “Planning”, April 25, 2016.
corridor plans, and the Comprehensive Plan.” Long range planning is done in collaboration with various stakeholders and other groups. These plans are taken to the Planning Commission and City Council for approval. Figure 1 (page 6) displays a zoning map, which is a document the City publishes to show which developments can take place in specific areas throughout the City. City planning is for the health, safety and welfare of citizens.

The importance of planning is elaborated upon throughout Community Planning: An Introduction to the Comprehensive Plan (2010) by Eric Kelly. Chapter 2, “Introduction to Planning” explains the planning process and also sheds light on why a parcel study survey of this magnitude is important for a city. Kelly states, “Planning is a rational way of preparing for the future. It typically involves gathering and analyzing data, examining possible future trends, considering alternative scenarios, analyzing costs and benefits of those scenarios, choosing a preferred scenario, and planning for implementation.” The parcel study survey is a preliminary component of planning as it falls within gathering and analyzing data. This is not to say that the City is in a preliminary stage of planning, but to say the planning process is a constant cycle that involves gathering and cycling through data for various different projects. Kelly’s chapter essentially lays out the framework for planning as a whole and explains why good planning is important for a city. Kelly states that planning can be goal driven, trend driven, opportunity driven, issue driven, or vision driven and these drivers have distinct benefits to the City. It is

3 City of Laramie, “Planning”, April 25, 2016.
4 City of Laramie, “Planning”, April 25, 2016.
6 Kelly, Community Planning, p 32.
also explained the planning can be summed up to be systems driven as the entire city is a vast integrated system and planning makes sure all parts are working together. The chapter also hints at the importance of GIS in planning documents, which is notable as it was the primary source of data in the parcel study survey. Kelly’s framework shows that planning is used to logically plan

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Figure 1: Laramie Zoning Map

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7 Kelly, *Community Planning*, p 33.
the future growth and function of a municipality by using the most up to date and accurate data along with stakeholders to achieve the most desirable result.

b. Three E’s of Sustainable Planning

An important aspect of realizing the need for surveying economic development in Laramie is to review literature in relation to the Three E’s of sustainable planning. The Three E’s are economy, equity, and environment. These terms are widely used in popular sustainability literature and are also called the triple bottom line or the three pillars of sustainability. For the purposes of this synopsis, the Three E’s of sustainable planning will be used in relation to Stephen Wheeler’s *Planning for Sustainability: Creating livable, equitable, and ecological communities* (2013). He notes that all sustainable plans strive to reach equilibrium between the Three E’s to achieve a desired level of sustainability. This chapter provides a great context to review Laramie’s sustainability efforts and problems with economic development. Stephen Wheeler first describes environment, then follows with economy, and then lastly with equity which can all be applied to Laramie’s Economic condition.

The environmental aspect of sustainable planning gained momentum during the environmental crisis of the late 1960’s and early 1970’s various issues were seen to adversely affect the environment during this time period and led to human issues. Environmental legislation, such as NEPA (National Environmental Policy Act), the Clean Water Act and the Clean Air Act, were passed in the early 1970’s to mitigate environmental disasters. The legislation and movement put environmental issues at the forefront of many people’s minds and

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9 Wheeler, *Sustainability*, p 64.
led environment to be the first recognizable aspect of the Three E’s. Popular ideas stemming from this time period are the notion of limits and ecocentric points of view. The idea of limits manifest itself in environmental planning through knowing the city or ecosystem’s carrying capacity and realizing a system cannot experience infinite growth.\textsuperscript{10} The ecocentric point of view is that of realizing the environment has intrinsic value and is not in place to only be subdued by humans. The environmental aspect of sustainability has become evident in sustainable planning through open space designations, compact urban form, environmental justice, pollution prevention, and restoration efforts.\textsuperscript{11} Environment is a very notable characteristic of the Three E’s.

The second aspect of the Three E’s Wheeler discusses is that of economy. Economic initiatives often seem to be at odds with environmental issues (a primary source of Laramie’s Economic Development Initiative). To discuss the pillar of economics in sustainability, Wheeler lists several pros and cons of traditional American capitalism and their subsequent effects on sustainability.\textsuperscript{12} Primary benefits of capitalism on the environment are that capitalism strives for efficiency, capitalism is flexible, and capitalism is highly analytical.\textsuperscript{13} Problems with capitalism are that it is difficult to assign value to non-market goods such as the environment, capitalism leads to inequalities with concentrated wealth, and continuous growth is at odds with compact development in sustainability.\textsuperscript{14} Various forms of economics have been employed to combat

\textsuperscript{10} Wheeler, \textit{Sustainability}, p 65.

\textsuperscript{11} Wheeler, \textit{Sustainability}, p 65.

\textsuperscript{12} Wheeler, \textit{Sustainability}, p 66.

\textsuperscript{13} Wheeler, \textit{Sustainability}, p 67.

\textsuperscript{14} Wheeler, \textit{Sustainability}, p 67.
these difficulties such as environmental economics and restorative economics, which both try to utilize the power of the free market to encourage environmental protection. Bringing the idea down to local scales is most evident through growth, inequity, and conflicting uses which will be discussed in the next section. Economic issues are an important facet to sustainability.

The final E that Wheeler discusses is equity. Equity is described by Wheeler to be a large international issue that has distinct local roots. In reference to the local plan, equity begins with public participation.\textsuperscript{15} Many municipalities first strive for equity through public participation. Various workshops for planning are held at the city and neighborhood level to allow citizens to decide what they want to happen and where they want it to happen. Another important aspect of equity identified by Wheeler is that of equal housing. Different levels of socioeconomic status must be accounted for in a housing plan and the city is required to provide such housing opportunities under federal law.\textsuperscript{16} Various other aspects of equity are described by Wheeler in the text, but the primary issues that related to City level planning are public participation, equal housing opportunities, and environmental justice issues.

The Three E’s of sustainable planning are not only important to the Economic Initiative, but also the parcel study as a whole. Realizing the three E’s will be beneficial in deciphering why some parcels remain undeveloped or underdeveloped. This may include a parcel being set aside for park enjoyment by citizens, an equitable component, or low development being seen in the floodplain, an environmental component.

\textsuperscript{15} Wheeler, \textit{Sustainability}, p 73.

\textsuperscript{16} Wheeler, \textit{Sustainability}, p 72.
c. The Laramie Economic Initiative

The primary driver of the parcel study is the Laramie Economic Initiative. The Economic Initiative is the result of collaboration between the City Community Development Department and the City Manager’s Office. The project stems from the various perceptions about new development codes including parking requirements, landscaping standards, and developmental fees. To combat these perceptions, the Community Development Department has implemented the City of Laramie Economic Initiative. The first three components of the Initiative have been to change fee requirements, changing landscaping requirements, and changing parking standards. To address perception that high fees may stifle development, the City is implementing a no increase/reduced fee schedule. These changes will make it easier for developers to come in to the City and develop the properties identified in the study, with fees being only a minor component to an overall budget. Fees have also been altered for conditional use applications, which are developments that are allowed in specific zones but must be approved by the Planning Department. Changing landscaping requirements is another focal point of the first phase of the City of Laramie Economic Initiative. The City has addressed this through, “a reduction in total landscaped area requirements, the addition of a xeriscape option for commercial properties (water savings), modifications/reductions to bufferyards based upon adjacent zoning districts, a reduction in overall buffer widths, a reduction in points per linear footage, and a general reduction for all landscaping associated with large lot development.” Again, this relates to the parcel study as the


18 Community Development Department, “Economic Initiative,” Memo.

19 Community Development Department, “Economic Initiative,” Memo.
identified parcels will be more suitable for development with less stringent landscaping requirements. To be clear however, standards will remain high in terms of requiring landscaping, which was a community desire. The last component the Initiative will address is parking. New developments will now require fewer parking spots\(^{20}\), which will also encourage development on the parcels identified by providing additional buildable area and reducing the need for large storm water management systems because of the required parking lot. The City of Laramie Economic Initiative is an important concept for the future of Laramie. The Planning Department will identify several components for the Initiative every year to address. After years of implementation, the City of Laramie will hope to become more economically prosperous as a result of the City of Laramie Economic Initiative.

\(d.\) **Parcel Survey Study**

The concept for the parcel survey study was initiated by the Laramie Planning Department in November of 2015. The study is a preliminary component of a larger development limitations study. The essence of the development limitations study is “why does ‘this’ not become developed?” “This” in the previous statement can refer to any number of developments. It can refer to a gas station on a corner in need of redevelopment due to its age or condition. It may refer to an empty lot next to a grocery store that may have some economic or development potential. It may also refer to a lot by the Territorial Prison with vast square footage. No matter the property, there may be a reason behind the lack of development for the property. The parcel survey study is the beginning of answering all of these questions as it will identify the parcels in question. Because of the time restraint of a semester, this project will focus on the undeveloped, under utilized, and housing in commercial areas of the B1, B2, and C2 zoning districts. The survey will address these zones first as they are seen to be the largest

\(^{20}\) Community Development Department, “Economic Initiative,” Memo.
drivers of economic prosperity to the City of Laramie. Once the data and properties have been identified in these zoning districts, the Planning Department will utilize the information to make adjustments for economic prosperity. The data will be analyzed for development constraints, development possibilities, and will aide the department in deciding on what actions may be necessary in order to spur future development or accommodate more land for the targeted zoning districts. This research paper will suggest a few opportunities for development in its conclusions, but most of this work will be completed by the Planning Department in the future. The parcel survey study will prove to be an integral component of the larger development limitations study and the Laramie Economic Initiative.

*e. Definition for Surveyed Zones*

Because of time constraints, the zones for the surveyed parcels in the City are the zones of B1, B2, and C2. These zones were identified to be utilized because they tend to be the large drivers of economic development. All of the specified districts are what are known as “Non-residential Districts.” Non-residential districts are the primary economic drivers and are meant to provide services for the City. The goals of Non-residential Districts are defined in the Unified Development Code (UDC) as follows:

1. Provide appropriately located areas for retail, service, office, and industrial uses consistent with the comprehensive plan;
2. Strengthen the city’s economic base and provide employment opportunities close to home for residents of the city and surrounding communities; and
3. Minimize any negative impact of non-residential development on adjacent residential

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Each zone in the study maintains these objectives at their core. The definition of the goals for these districts is important as it identifies that these zones seek to minimize the negative impact on residential zones. This explains the need to identify residential units in these high use zones.

The first zone to be surveyed is the B1 zoning district. This district is formally named, “Limited Business (B1) District.” Figure 2 (page 14) depicts a map of the B1 zoning district. The idea behind this zoning district is to provide retail and other economic opportunities on a smaller scale than the larger B2 district. Office and retail spaces are permitted in this zone as they provide basic needs for the neighborhood and community as a whole. An excellent example of a B1 zoning area in Laramie is the UW Plaza with businesses such as McAlisters, Jimmy John’s, Blue Federal Credit Union, and Coal Creek Coffee Shop. Permitted uses in this district include:

- Dwelling, commercial
- Coffee shops
- Community centers
- Medical and dental clinics and offices
- Community playfields and parks
- Antique shops
- Clothing stores

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22 Laramie, *Unified Development Code*, Community Development Department.


- Department stores
- Drug stores

Figure 2: Map of Limited Business (B1) Zoning District

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25 Laramie, Unified Development Code, Community Development Department.
The second zone being surveyed is the B2 zoning district which is shown in Figure 3 (page 15). The formal name of this zone is the, “Business (B2) District.”²⁶ The purpose as

²⁶ Laramie, Unified Development Code, Community Development Department.
defined in the UDC is, “The B2 district is intended for retail and office uses. The district includes retail centers that provide shopping service to surrounding neighborhoods and the community.”²⁷ The B2 zoning district is meant to accommodate larger business than the B1 zoning district. A nice way to think about the differences between these two districts are that B1 businesses generally serve a neighborhood scale while B2 business serve a larger scale. Examples of businesses within B2 zones are Ridley’s, Walmart, and automobile dealerships. Much of the surrounding area around downtown is zoned B2 as these are areas where large business developments are possible. Permitted uses in the B2 district include:

- Convenience store, with fuel
- Department stores
- Drug stores
- Electrical supply stores
- Florists
- Furniture stores
- Gift shops
- Grocery stores
- Hardware stores²⁸

It is important to note that permitted uses in B2 are extremely similar to those of B1, but the uses in B2 are generally on a much larger scale than that of B1.

²⁷ Laramie, *Unified Development Code*, Community Development Department.

The last district included in the study is the C2 zoning district. The district is outlined in Figure 4 (page 18). This district is formally named the, “General Commercial (C2) District.”

The C2 district is a very high use district. The UDC specifically states that the district needs to be located upon arterial streets to ensure the ability of larger commercial vehicles to make deliveries and stops. The essence of the district is, “for the conduct of personal and business services and the general retail business of the community.”

The location of C2 districts throughout the city are primarily off of 3rd Street and into West Laramie. Permitted uses in the C2 district include:

- Sporting and athletic goods stores
- Toy stores
- Wholesale business
- Automobile repair shop
- Automobile sales and rental
- Trailer, truck sales and service
- Bed and breakfast inns
- Truck stops, travel centers
- Builders supply yards

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29 Laramie, Unified Development Code, Community Development Department.
30 Laramie, Unified Development Code, Community Development Department.
31 Laramie, Unified Development Code, Community Development Department.
32 Laramie, Unified Development Code, Community Development Department.
Figure 4: Map of General Commercial (C2) Zoning District
II. Methodology

a. Undeveloped Parcels

The first segment of the parcel survey study was an inventory of underdeveloped properties in the B1, B2, and C2 zoning districts. To complete this process, it was first necessary to gather all the parcels contained within each district. This is data retrieved by a simple intersect feature on the City GIS. The feature selects all parcels intersected by the zones in the parcel layer. This is retrieved for each zone in order to inventory all parcels in each zone. Once these parcels are selected, a layer, which is a feature in GIS that allows one to identify areas and features on a map, is compiled for all the parcels in each zoning district. The subsequent layers are B1 Parcels Surveyed, B2 Parcels Surveyed, and C2 Parcels Surveyed. The layers are then reviewed one at a time by a visual survey to identify any undeveloped parcels. One must turn on the layer for total City parcels and the parcels surveyed. Then it is necessary to turn the transparency for the surveyed parcels layer down in order to determine if there is any development on the parcel. Determining whether a parcel is developed from this point is a simple visual survey for the imagery. Once the maps are created, the data is retrieved by selecting the entire layer to compile all undeveloped parcels. Figure 5 (page 19) depicts a typical undeveloped parcel. The lump some of undeveloped parcel information is gathered in this manner.

Figure 5: Undeveloped Parcel- Example 1
After the visual survey is completed for each zone of parcels surveyed, it is necessary to identify whether development has occurred on the property since the satellite imagery for the City GIS has last been updated. This can be completed in two different ways. First, is to check the parcel against City records. Second, is to cross reference the property with Google Earth. Google Earth imagery is more recent than the City GIS as Google Earth imagery is from Summer 2015 and the City GIS is from 2009. **Figure 6** (page 20) is a property that has been developed but is shown in City imagery as being undeveloped. Using Google Earth to cross reference properties is generally a more efficient way to determine if the property has been developed, but City records allow for the most up to date records through development applications, site plans, etc.

![Figure 6: Undeveloped Parcel- Example 2](image)

**b. Under Utilized Parcels**

Under utilized parcels are first identified with a visual survey. A 75% threshold of development was determined for the survey with the aide of City of Laramie planning staff to determine whether a property was under utilized. Property size was also taken into account as 75% of a small property being completely built out leaves a lot less development potential than
75% of a large property being completely built out. After numerous tests on various properties, planning staff and I decided on a 10,000 square foot limit, in which properties smaller than 10,000 square feet were not taken into account for under utilized properties. This designation is slightly more difficult to assess than an undeveloped designation. This is because the surveyor is determining whether the property has less than a 75% build out on the property. In order to combat this uncertainty, it was necessary to eye test the properties at 80% development. Properties that looked like they had at least 20% of their total area developable were taken into the total inventory. Figure 7 (page 21) depicts an example of an under utilized property. As one can see in the image it looks as if there is less than a 75% build out, with the potential for additional development on the property. Originally, the study considered the building footprint to total parcel size, but shifted towards total development, which includes parking lots, accessory buildings, or other possible build outs.

Figure 7: Under Utilized Property- Example 1

After the parcels with an 80% build out were identified, it was necessary to use GIS tools to measure the total square footage of the undeveloped properties. This feature makes polygons
with user-identified vertices in order to encompass the entire area the user intends to capture. The area of the undeveloped areas is subtracted from the total parcel square footage. This number is then divided by the parcel square footage and multiplied by 100 to receive a percentage. If a property at or under the 75% threshold it is included within the underdeveloped category. If not the parcel is cut from the layer to ensure it is not included in the total. This task completed for each zoning district in order to get the total number of under utilized parcels for the study.

c. Housing in High Development Districts

Identifying housing in high use development areas was somewhat difficult with the time constraints due to the number of units. The process follows the same method of selecting methods through the transparent parcels surveyed layers. The units are selected based on their size relative to other commercial parcels. Residential units tend to be on much smaller parcels than the surrounding commercial parcels. Figure 8 (page 22) below depicts the density in which residential parcels are typically found.

Figure 8: Housing in High Development District- Example 1

The parcels were selected in bulk based on this basic visual and logical test. These parcels were
necessary to survey to in order to identify possible future development trends. This method has easily discernable shortcomings which will be addressed in the deficiencies section. That being said, the method provides a good baseline for the residential parcels in the commercial zones.

III. Data and Maps

a. Overview

![Figure 9: Data for Total Parcels Surveyed](image)

The data for total parcels in each zone shows the vastness of the study shown in Figure 10 (page 23). C2 has 169 total parcels with 20,246,463 square feet of total parcel space. B1 has 215 total parcels with 20,487,746 square feet and B2 has 651 parcels with 28,411,932 square feet of total space. The parcels were selected by an intersect method on GIS that includes all the parcels that are intersected by the zone in the layer. The following page depicts the parcels in
Figure 10 (page 24). The map essentially shows the three zoning districts depicted in the earlier maps, but instead with the parcels in each zone. It is important to note that a parcel may be included in two zones because of the intersecting method used on GIS.

Figure 10: Map of Total Parcels Surveyed
b. Undeveloped Parcels

The number of undeveloped parcels in each zone is shown in Figure 11 (page 25) above. The data shows there are 18 undeveloped parcels in C2, 44 undeveloped parcels in B1, and 28 undeveloped parcels in B2. Again all numbers except for the parcel count are in square feet. It is important to note how large many of these parcels are, as seen in the maximum and mean shown in Figure 11 along with the sheer size of the parcels in the map of undeveloped parcels in Figure 12 (page 26). The map shows that many of these large properties are on arterials and in the periphery of Laramie, which is a logical place for commercial development to move forward. The colors on the map were selected to be consistent with the total parcel map and also to distinguish the zones. Some areas were zoomed in on to show where the highest concentrations
of the undeveloped properties are.

**Figure 12:** Map of Undeveloped Parcels
c. Under Utilized Parcels

![Table of Data for Under Utilized Parcels]

There were much fewer under utilized parcels in the study than undeveloped parcels. This is possibly due to the strict criteria for selecting under utilized properties. C2 contained 7 properties, B1 contained 3 properties, and B2 contained 15 properties. The high standard deviations shown (Figure 13 page 27), again in square feet, refer to the vast differences in property size and elude to the non-normal distributions in each set. Again the map (Figure 14 page 28) shows many of these properties are on the periphery while also showing notable properties such as the Territorial Prison and Walmart. On the map C2 is shown in yellow, B2 is shown in green, and B1 is shown in blue which is consistent with the other maps created. The
minimum in each data set is consistent with the requirement that no parcels was to be smaller than 10,000 square feet.

**Figure 14:** Map of Under Utilized Parcels
d. Housing in High Use Districts

Figure 15: Data for Housing in Commercial Districts

This final data (Figure 15 page 29) set depicts the housing located in commercial districts. C2 and B1 show moderate numbers of housing within the district at 24 and 52 respectively, while B2 shows a large amount of housing with 253 units. The square footage of all parcels in the category ranges from 1,200 square feet to 14,255 square feet. This along with the modest mean of approximately 5,000 square feet for each zone and the high number of sample points makes the standard deviation much more applicable. The map on the following page (Figure 15 page 30) shows the location of the majority of the housing in each zone. It is split up into B2 in the green, C2 in the yellow, and B1 one the blue. The maps depict that while there is a
lot of housing in these specific districts, the housing is concentrated in core areas through the City.
IV. Discussion

a. Overview

In general, the data shows a lot of undeveloped and under utilized properties. Although the parcel count for under utilized and undeveloped properties is fairly low, the amount of square footage in these parcels is extremely high as a percentage of the zone. Based on the findings of this study, there is significant land to be developed by the City. As Laramie grows into these under utilized and undeveloped space it will be necessary to expand these zones to introduce further economic development.

b. B1 (Limited Business)

The B1 zone has a noteworthy amount of undeveloped land. There are 44 parcels in the zone with a square footage of 7,324,179 square feet in these parcels. The mean square footage of the undeveloped parcels in this zone is 166,458. This, when compared to the total parcels in B1, shows that 20% of the parcels in B1 are undeveloped with 36% of the total square footage in the B1 zone being undeveloped. Also, the mean square footage of all parcels in B1 is 95,291 square feet with the undeveloped parcels being 166,458 square feet. All of these numbers put together shows there is adequate designated space for the B1 zone in the foreseeable future in regards to undeveloped properties. 36% of the entire zone is still developable. The discrepancy in square footage mean shows there is potential to subdivide the undeveloped parcels to further commercial and economic development in the zone. 36% may appear to be too much developed land, but, when accounting for future land use, the development of the new Laramie High School will further expansion along 45th Street to Interstate 80.

The Limited Business zone has very few under utilized parcels with only three. These properties are located on the east end of Laramie off of Grand Avenue. Although there are only
three properties, there is significant commercial opportunity due to their location. The parcels reside in an ideal location for commercial development along the Grand Corridor. As Laramie grows and beautifies its gateways, the parcels will likely see development interest.

Lastly, in B1, is the number of housing units in the district. There are 52 housing parcels located within the district. Although housing parcels are not generally viewed as the best usage of land within commercial districts, they are permitted in certain situations. These situations include when housing is a pre-existing use and when the parcel is within the Residential Overlay for Business, or ROB, districts. The wording of the ROB districts in the Unified Development Code states, “[H]owever, in recognition that residential and business uses can be compatible in specific locations and under specific criteria, an overlay district to allow this coexistence in B1, B2, C2, and DC districts is hereby established.” As commercial development grows, preexisting housing could turn into commercial development, especially along specific corridors.

c. B2 (Business)

B2, as mentioned before, has more intense uses than the B1 zoning district. That being said, the district still has an adequate amount of undeveloped space to foster commercial development for several years. The district has 5,403,614 square feet of undeveloped property, which is 19% of the total parcel square footage in the zone. In order to develop and facilitate the most commercial growth within the City, the Planning Department will likely need to subdivide as there are only 28 parcels undeveloped in the zone. The majority of these parcels are located along the south and west entrances to Laramie, which will be well suited for future developments. Based on this study, the City has adequate space in the zone for the next several years.

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33 Laramie, *Unified Development Code*, Community Development Department.
The under utilized properties in the B2 zone also have potential. There are 15 parcels with 11,216,575 square feet total in the parcels. However, because these are under utilized properties rather than completely undeveloped properties there is less square footage to be developed. Based on at least 25% of the properties being undeveloped, there is at least 2,804,143 square feet of undeveloped property. Two notable undeveloped properties in this zone and category are the Wyoming Territorial Prison and Walmart. Walmart has development potential on the northwest side of the property, such as an opportunity for development like that seen in UW Plaza (a strip mall with small business such as restaurants, banks, salons, and coffee shops). The Wyoming Territorial Prison is a different story. The entire west side of the property is vacant with substantial opportunity along Interstate 80. However, this development is completely up to the state as the property has significant historical importance. The space may meet opposition to improvements as it is currently open space and preserves view sheds for the Territorial Prison. The under utilized properties in B2 are highlighted by these two important properties. B2 maintains high development possibilities for its under utilized properties.

Housing in B2 is important to survey. There are 253 housing parcels located within the district along with housing accounting for 1.3 million square feet within the district. As shown on the map (Figure 16 page 30) the housing in B2 is concentrated along the 3rd Street Corridor extending into 4th, 5th, and 6th Streets. Much of the housing in this district is located within the Tree District, which has historic significance to the City of Laramie. These homes are often among the oldest in Laramie. The ROB overlay district defined and discussed within the previous subsection also apply to this area as it is all under the ROB overlay banner. So, although there are many parcels in B2 that are housing, they are completely permissible. As 3rd Street changes and the Harney Street Bridge is completed, these housing units will be seen to
have significant development potential.\textsuperscript{34} Harney Street will become an important corridor and will change the layout of the intersection between Harney and 3\textsuperscript{rd}. Many of the houses will be seen to have new potential as the intersection becomes a commercial hotspot. The housing in B2 is substantial and permissible, but may see changes as Laramie continues to develop.

\textit{d. C2 (General Commercial)}

The majority of C2 undeveloped parcels are located on the periphery of the City to the south, west, and north. The parcels are aptly placed for the C2 district as they are located in areas that can handle heavy traffic and large vehicles. There are 18 of these parcels with 12,212,598 square feet of undeveloped space. This leads to a median parcel size of 678,477 square feet, which is extremely large (the mean for the entire district is 119,801 square feet). 60\% of the entire C2 district is taken up by these undeveloped parcels. It is safe to say the amount of undeveloped land in the zone can foster development in Laramie for the years to come. With the median parcel size being almost six times the average for the zone as a whole, it may be necessary to subdivide the parcels. Seeing that undeveloped parcels make up 60\% of the total square footage, it would be acceptable to review undeveloped parcels to see if they could be put into a different zone lacking development possibilities (though it is noted that the largest parcel accounts for 33\% of the total undeveloped square footage).

The General Commercial District also contained seven under utilized properties with a total of almost 3 million square feet. Again, one must note that the properties have at least 25\% undeveloped square footage, leading to approximately 700,000 square feet of undeveloped space. With the mean square footage of parcels in the zone being just over 100,000 square feet, there is substantial possibility for development in the under utilized C2 parcels. The parcels are mainly

\textsuperscript{34} Derek Teini, Personal Communication, Spring 2016.
located in the southern portion of the City, which is ideal for commercial development. If the under utilized properties were to subdivide, the sites would be suitable for C2 commercial expansion.

Lastly, there are 24 housing units in the General Commercial District. These parcels are mainly located on South 3rd Street near the railroad. Most of the parcels are small with little opportunity for commercial development. Based on their size and location in the ROB Overlay zone, the parcels are seen to have little development opportunity. The mean property square footage in these housing parcels 5,543 while the average for the zone is around 100,000 square feet, showing little opportunity in these housing parcels. If the housing is vacated and parcels are combined, there may be development potential.

V. Acknowledged Deficiencies

The parcel study survey is as accurate and as complete as possible with the time constraints of a semester. That being said, if there were more time the study could be improved upon to complete the study with the most accurate numbers possible for the planning department. Three acknowledged uncertainties in the semester long parcel study include the potential for missing parcels, the parcel being mistaken for a residential unit when it could be a business (such as a law office), and the definition of underutilized properties.

The first potential shortcoming in the parcel study survey is the possibility of missing properties during the visual survey. Figure 17 (page 36) depicts a parcel that is completely undeveloped but could have potentially be missed due to an error in the visual survey (this parcel was not missed, but is an example of a parcel that could have been missed). The error in the visual survey comes about due to the scale at which the parcels are surveyed. The image in Figure 17 is at approximately at a 1:1000 scale, meaning one inch on the map means 1000
inches of actual area. At this scale it is easy to discern which parcels are developed and which are not. However, most of the visual survey was completed at a 1:3500 scale. At this scale it is easy to find larger undeveloped properties and allows the survey to completed much faster. However, residential parcels which are not developed are not easily recognizable. Due to the vastness and time constraints of the study, there is a potential for smaller parcels of these commercial districts to be skimmed over.

![Image of potentially missed parcel]

**Figure 17:** Example of Potentially Missed Parcel

The second potential shortcoming in the parcel study survey is the possibility for mistaking small businesses in residential areas as a residence. This again is an error in the visual survey. Residential neighborhoods, especially those surrounding 3rd street in the ROB overlay district, have dense residential units. Typically, every block in these neighborhoods includes approximately 8 parcels. The problem here is that all of these units are not necessarily residences. **Figure 18** (page 37) depicts an example of this predicament as the highlighted parcel appears to be a residence, but is actually a law office. This problem in identifying these units is vast throughout the tree district along 4th, 5th, and 6th streets with many law offices, beauty salons, real estate offices, and small business offices scattered throughout the residential parcels.
The only way one could fix this would be through surveying each individual parcel with City records or doing field work to identify these parcels. With more time, this would have been possible to improve the accuracy of housing in commercial zoning districts.

![Figure 18: Example of Law Office in Residential Home](image)

The last uncertainty and shortcoming in the parcel study survey comes in regards to under utilized properties. For the intents, purposes, and time constraints of this data, under utilized properties were defined as properties that were greater than 10,000 square feet in area coupled with 75% or less of the property being fully developed. While this is a good baseline for under utilized properties, the definition could be improved to provide a more accurate depiction for under utilized properties. The definition could be added upon to count items such as parking lots, smaller buildings, or less intense usage as under utilized. It is important to note that some of these examples could be necessary and extremely important, but in some instances they are not living up to their full development potential. Adding this to the study is an important component for the future of the study, but this would require field study on every parcel in each of the specified zones.
One last component of the definition of under utilized and undeveloped parcels that is slightly ambiguous is the definition of what qualifies as an improvement. Improvements are generally anything built on a specific parcel, but the ambiguity comes form the word “improvement’s” connotation with physical betterment. This is difficult when parcels are deemed under utilized or undeveloped, but may be better suited as park land and open space. This would require rezoning and dedication to park land, but deciphering this definition would also improve the data. Some parcels were taken into account for park and open space in the study, but this was only for City designated park land that was already in possession of the City. It did not account for parcels not owned by the City that have the potential for open space. Bettering the definition of under utilized properties is important in regards to developed land and potential open space parcels.

V1. Conclusions

The Laramie Parcel Study Survey provides integral information for the City of Laramie to move forward with the City of Laramie Economic Initiative over the next year. The parcel data and the maps will provide Laramie with essential information on economic development in the City and allow planning staff to decide whether and zone changes need to be made for the surveyed parcels. The information will also be essential for the future land use plan update. That be said, the uncertainties show much more surveying must be done in order to get completely accurate information. Staff will have to decide on a more accurate definition for under utilized properties, identify potentially missed properties, and survey the possibility that small businesses were included in the within the housing count. Overall, the study was extremely informative and resulted in drastic improvements in my GIS and planning capabilities. The project will prove to be an invaluable experience for my future as a planner.
Bibliography


*General Direction and Recommendation for the Project*