

## **Downtown Denver Buildout Scenario:** **Achieving Pedestrian Activity through Residential Density**

### **Introduction**

The City of Denver does not appear to be a thriving center when compared to other cities of similar size category such as Seattle, Portland, Houston, or Nashville, to name a few. What Denver appears to be lacking is a pedestrian active city center. Although the City of Denver has begun to revitalize the Lower Downtown area (LoDo), with entertainment venues, retail, and restaurants uses, not much emphasis has been placed on increasing residential uses. What was initially found during this Study was that the existing pedestrian uses in LoDo currently, do not constitute a full time venue. With a lack of residential density, people are not in the LoDo area much later than after business hours during the week, leaving the area to return home. The major theory behind revitalizing Downtown Denver within the terms of the Study is a massive increase of residential units and minor increase in retail, entertainment and office uses. We believe that increasing the residential base in LoDo will force a pedestrian active community, and commercial uses will follow.

### **Downtown Denver Area Overview**

The character of Downtown Denver is one forged by the history and culture of the city. Denver is now experiencing a change, with the development of outlying office parks many jobs have left the Central Business District of Denver, creating a vacuum which needed to be filled. This vacuum has created a situation where Downtown Denver has started to become not only a business center, but also a residential and entertainment destination. This change has created the opportunity to restore areas of Denver that were previously affected by the loss of office space demand in the city center.

The 16<sup>th</sup> Street Mall, LoDo, Union Station, Pepsi Center, Coors Field, Elitch Gardens, and new light rail stations are just a few of the features which are attracting people to the area and serve as the fuel to drive the urban renewal in Downtown Denver. The 16<sup>th</sup> Street Mall is a great retail feature that has been developed recently in Denver. The Mall ties in closely with the surrounding residential and commercial areas, because the

majority 16th Street Mall customers either live or work in nearby areas. The Mall also helps to connect those surrounding residential and commercial areas of downtown with the historic Lower Downtown Denver District which has been developing over the years as a major residential and entertainment area. The restaurants and retail shopping in LoDo tie in with the entertainment provided in addition to Coors Field. LoDo’s location, adjacent to Union Station, as well as the Pepsi Center, Elitch Gardens, and Coors Field, gives LoDo the opportunity to enhance and connect these various entertainment locations and provides a strong historical context to the city. The historically renovated architecture of LoDo helps give character to the city and begins to identify Denver in a unique way. Also, LoDo’s proximity to these strong entertainment and transportation locations serves as a solid starting point for the expansion of urban renewal throughout the downtown area. The development of new light rail stations throughout downtown, Union Station will begin connect the rest of Denver to itself, and ultimately LoDo. This connection also reinforces LoDo’s position as a strong starting point for the urban renewal of Downtown Denver. These light rail stations will also connect the rest of Downtown Denver together as well as the outlying metropolitan area. This connection will further expand the opportunities for residential development in the downtown area.

However, regardless of the number of opportunities and attractions a city provides, a certain constant density in the downtown is required to support the activities it provides. In order for Denver to fully redevelop in an effective way, the number of residential living units must be significantly increased in order to achieve the necessary density to support the new retail, office and entertainment areas downtown.

The borders of the Study Area for our project are nearly identical to the borders of the Downtown Business Improvement District, or BID. The Downtown Business Improvement District incorporates a wide variety of uses within its 120 block area. Some

<b>Downtown</b>	<b>Rental Units</b>	<b>Sale Units</b>	<b>Total Units</b>
Existing	3,348	2,823	6,171
Under Construction	492	571	1,063
CBD Proposed	818	1392	2,210
<b>Total</b>	<b>4,658</b>	<b>4,786</b>	<b>9,444</b>

Figure 1<sup>1</sup>

examples of the uses the District supports are night clubs, restaurants, office spaces, retail, and residential. These uses are scattered across the District in such a way that it

<sup>1</sup> Information taken from the Downtown Denver Partnership, Inc.’s Downtown Overview Report 2005

creates “dead zones”, which are areas of inactivity, during different hours of the day. This activity is necessary to support additional retail and office space in the Downtown area. However, since 1990, Downtown Denver has had over 5 billion dollars worth of new development. Of this, 39% was spent on entertainment venues and attractions, 18% on housing, 15% on transportation, 14% on retail, and 13% on office. Figure 1, illustrates the break down of housing units that are existing in the downtown area in addition to, the number of units under construction and proposed in downtown. These numbers reflect the strong movement towards developing Denver as an entertainment and residential area rather than an office and commercial center. Besides the development of new housing units, some of the entertainment budget has gone towards the development of attractions such as the Denver Art Museum, the Museum of Contemporary Art, and the Newton Auditorium Theater. Denver is also currently redeveloping the historic Union Station, with a potential price tag of 9 billion dollars, to renovate and convert the facility to a multi-modal transportation center. There is also a planned 325 foot pedestrian bridge which will span the distance over I-25 to connect the Highlands neighborhood to the entertainment of Downtown Denver. This amount of new development embodies the notion that Denver is becoming less of a major commercial and office center to a more as an entertainment and residential destination.

### **Development Potential**

The area within Denver for the purpose of our Study is the Lower Downtown Denver area. LoDo is the urban core in which the City aims to provide a pedestrian center of activity. In order to achieve the desired effect, the City must house a number of mixed use activities in this area. For this Study, the City of Denver Zoning and Development Code was followed to achieve maximum build out of the Study Area.

The Study Area included 77 parcels, a total of 1,396,100 square feet (32 acres). The parcels in the Study Area were either vacant or under utilized parcels, primarily at grade parking lots (refer to Exhibit A, Existing Conditions Land Use Map). Parking is essential to a mixed use area for the purpose of getting people to the urban core. However, Denver City Code permits parking to be underground and within the building structure footprint. To achieve the maximum build out for the Study Area, this was implemented in the Plan to replace the loss of parking lots in the area.

The location of the parcels are dispersed throughout the Study Area between existing developed sites. However, there were some adjacent vacant or under utilized parcels which were combined with other under utilized parcels if under 10,000 square feet respectively, or over 10,000 square feet in selective cases if viewed to achieve a positive effect in conjunction with the intent of the Plan.

<b>Combined Lots</b>
Lot 3,32
Lot 5,6, 7
Lot 16,17,20
Lot 18,74
Lot 23,25
Lot 28,29
Lot 30,31
Lot 33,79
Lot 34,35
Lot 36,38,40
Lot 37,39
Lot 42,43
Lot 42,43
Lot 44,45,46
Lot 52,53
Lot 55,57,59
Lot 56,58
Lot 64,67
Lot 75,76,79

The combined lots within the Study Area are shown in the Table below (refer to Exhibit A, Existing Land Use Map for locations). Through the process of combining parcels, a more realistic perception of how to achieve the Study’s intent of maximum build out was reached. Some parcels were too small to be developed otherwise. In some cases, due to the surrounding circumstances, it was beneficial to combine the lots rather than have small stand alone development sites in relation to the surrounding developed parcels.

The relationship of the parcels studied to existing building masses and uses was taken into consideration. In many cases the buildings within the study exceed the mass and scale of adjacent existing buildings. This is due, in most part, to the Study’s intent of achieving maximum build out and Floor Area Ratio (FAR) wherever possible. This Study also considers that some existing uses may change over time as the market demands change. In addition, it considers that if building mass increases overall in the area, some existing smaller mass buildings may be redeveloped in the future on a larger scale and mass

In conclusion, the parcels within the Study Area represent a large area for future development (32 acres). It is apparent through the Study that through maximizing the FAR for each parcel under the Denver City Code, Denver is capable of providing the densities desired in Lower Downtown for an active pedestrian urban environment. This Study is based on the Plan as described further in the proposed Buildout Scenario Section below.

## Proposed Buildout Scenario

Our overall development theme is high density mixed use with the majority of square footage being occupied by residential. The “signature piece” of our development scheme is the 106,400 SF Lot 2. This lot will house a 1,245 ft residential tower combined with 91,600 SF of commercial space. For the rest of the lots, we tried to match and blend the proposed uses with existing nearby uses and play on the existing strengths and character of Downtown Denver. Overall, increasing the number of residential units and creating a strong hotel bed base around the convention center were our two top priorities.

As stated above, our signature piece of the Buildout Scenario would be the 1,245 ft. residential tower located on Lot 2. As proposed, the building would be one the tallest structures in the world and possess the highest occupied residential floor in the world at 1,205 ft. This building would re-define the Denver skyline and transform it into one of the most dramatic in the country. At first glance the building’s height does seem out of character for Downtown Denver, but keep in mind this is a proposed build out for the future of Denver. At one time such iconic buildings as the John Hancock Center in Chicago and the Transamerica building in San Francisco were viewed in the same regard, now they are regarded as symbols of their respective cities. The building’s “Mega Module” design is based on engineering principles pioneered by Fazlur Kahn and Bruce Graham, invented specifically for the construction of the Sears Tower in Chicago. How the “Mega Module” works, is at the base of the tower is nine individual 2,956 SF footprint towers bundled into one building. Of the original nine modules only five go all the way to the top. Two modules terminate at the 51<sup>st</sup> floor, and two others at the 90<sup>th</sup> floor. The termination of the modules allows for the building to have a unique stepping appearance while at the same time, meeting the maximum F.A.R. and retain its height. Contained within this massive structure is 91,400 Net SF of mixed retail and residential support. This component would be very similar to what is found at the base of the John Hancock Center in Chicago and would likely include restaurants, retail, grocery, and a post office. The total number of proposed residential units is 782 spaced over 1,713,348 Net SF. The top two floors of the structure would be occupied by an observatory deck and fine dining establishment. The tower would serve as an icon for the region drawing many visitors to Downtown Denver who otherwise would not come.

Obviously, the massive residential tower is just one component in our proposed build out for Downtown Denver, but it does set a trend, and this trend is a vast increase of new residential units downtown. Currently within the boundaries of this project are 2,111 residential units. Within this proposal, we are planning for 10,796 additional residential units. This would be a 511% increase to the available housing units in the area<sup>2</sup>. This is certainly a dramatic increase, but we are planning to implement it throughout the area in order to give downtown a constant vitality it often lacks after the business day ends. It is our belief that a sizable increase in population is what is needed to make retail viable and diverse again. By sprinkling this residential development throughout the area, it should eliminate the zones of void near the current office buildings, and at the same time be spread out enough to avoid overwhelming pockets residential units. Within the development area we are proposing 32 buildings with a residential component. The average building will have 182 one bedroom units and 155 two bedroom units. It is our belief that having a large residential population downtown is the key component to make all other aspects of downtown work. We anticipate that by increasing the number units by such drastic number that it would be possible to have an adequate mixture of rental and owner occupied dwellings at a variety of price levels.

In addition to our massive increase in residential square footage, we have proposed an additional 698,736 SF in retail that will also be scattered throughout downtown. This additional space would be a 24% increase to the existing 2,800,000 SF. Most of this retail space will be contained on the ground floor of the proposed residential and office buildings. This implementation of retail is done for a host of reasons. First, we envision that much of this space will serve residents in a residential support capacity. Tenants such as convenience stores, dry cleaners, post offices, coffee shops, restaurants, bars, and specialty boutiques would be drawn to these areas of commercial space and conversely these types of businesses will be useful to area residents. Second, by having ground floor retail occupying most residential and office structures we believe we are spurring a pedestrian active environment. The implementation of retail on ground floors will give this area a greater sense of life and vibrancy and at the same time

---

<sup>2</sup> All information on existing residential units, existing retail SF, existing office SF, existing total floor space and existing hotel rooms in *Proposed Buildout Scenario* is from [www.denvergov.org/aboutdenver](http://www.denvergov.org/aboutdenver) and the 2000 Census tract 17.02 Denver County, Colorado.

residents and visitors have a greater sense of security and comfort. Third, by limiting most retail to ground floor, it follows a commonly held notion in the real estate world that ground level is the most commercially viable. In most cases, we did not formally spell out what the retail space would be specifically used for, other than stating that it may be a good space for a restaurant, child care, etc. This non-specific description was done deliberately because in all reality the market would ultimately dictate what would go where. By officially choosing areas for specific types of retail we would get away from our theme of true mixed use and make it harder to fill retail space with tenants quickly. Altogether 38 of our 45 sites have ground floor retail. Contrary to some current thought the additional retail space will not be a competing force with existing retail such as the 16<sup>th</sup> St. Mall. This is due in part because of the massive influx in residential population to the area as compared with the relatively small increase of retail square footage. In the end with the major population influx, all retail shall be vibrant.

Yet another component of our downtown build-out is office space. Office space was the traditional staple of downtowns in past eras. Today, demand for downtown office space has remained stagnant and this trend does not appear to be changing anytime soon. With lower cost, flexible space that has appeared around the edges of cities, making a decreased demand for office space in central business district. Acknowledging this trend, we have only added an additional 3,276,699 SF of office space to the Study Area. This is a 13% net increase over the existing 25,000,000 SF in the same area. Overall, it is our desire that the added residential will spur demand for downtown office space, but at the present time, we are being very conservative in the creation of office space.

A use category we are viewing more bullish is hotel development. Throughout the development zone we are adding seven new hotel sites. Within these sites 5,470 additional rooms are proposed, this is 102% increase over the 5,329 rooms that exist in the downtown area. Hotel development was our group's second area of focus after residential since the current bed base is woefully inadequate compared to similar downtowns in terms of size and amenities. If no other component of our proposed plan was implemented, the hotel aspect would still be a commercial success in its own merits. The vast majority of the hotel beds proposed is located in the direct vicinity of the Convention Center and Performing Arts Center. One example of our proposed hotels that are located in this area is located on Lot 12. Loy 12 has a 989 room hotel, with

7,810 of ground floor net retail SF that is located on 15<sup>th</sup> St. directly across from the Convention Center. Additional hotel beds are absolutely essential for the continued success and viability of the downtown area and specifically for the Convention Center and Performing Arts Center.

A final component to our Buildout Scenario is transportation. In creating dense urban population center livability, a key component of that livability is incorporating a hassle-free transportation system. The transportation concept for the downtown build-out will certainly be multimodal. First, with the overall density pedestrian systems, bicycling will be a large component within the downtown area. Pedestrian activity will also be complemented in the form of local buses within this area in a fashion similar to the 16<sup>th</sup> St. Mall buses in operation today. In terms of commuting outside of the downtown core, the Fas-tracks system will play a large role, particularly for those individuals residing downtown and commuting to work outside of the area. This is a situation that can not be ignored and hopefully Fas-tracks and other public transportation systems will help alleviate the dependence of the automobile for downtown residents that face the reality of working in the periphery of Denver's edge cities. A final less utopian component of the transportation for downtown is the automobile. This situation is obvious by the sheer volume of parking spaces, 29,182 in all, that were proposed for this Study. The automobile will still be a major component for those traveling outside of the downtown core but will be utterly useless for travel between sites within the downtown area.

## **Conclusion**

Colorado, and specifically the Denver area, have long been regarded as a sought after place to reside. This is due to the close proximity of natural resources, recreation, and a healthy job base. As evidence to this assertion, the Denver area has consistently been one of the fastest growing regions in the United States for the past three decades. In order for Denver to move into the next echelon of urban centers and be regarded as a great city and not simply a convenient portal to nearby amenities, it has to create a sense of vibrancy in its downtown. Through increasing the residential population of downtown significantly, we believe a critical mass can be achieved that will facilitate a new vibrancy to the downtown area. This residential critical mass is exactly what has been lacking in downtown and is the reason why there are at many times zones of void.

Through our plan for maximum build-out, we believe that high levels of residential occupancy it will spur other activities and uses such as retail, entertainment and office creating the vibrancy that the City of Denver strives for. If implemented as proposed, our plan would transform the image Denver from one of a nice, mainly suburban area to reside, into one of the most thriving downtowns in the western United States.

### **Exhibits**

Exhibit A: Existing Land Use Map

Exhibit B: Proposed Land Use Map

Exhibit C: Proposed Downtown Denver Buildout Matrix