

H-25

Harmony Corridor Plan
and
City Plan Amendment

Table of Contents

| | |
|-------|---|
| Tab 1 | Cover Letter – City Plan Amendment |
| Tab 2 | Statement Addressing City Plan Amendment Criteria |
| Tab 3 | Appendix A to Statement Addressing City Plan Amendment Criteria |
| Tab 4 | Graphic Illustrations |
| Tab 5 | Redlined Harmony Corridor Plan Document |

Tab 1

Cover Letter – City Plan Amendment

February 7, 2018

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City of Fort Collins Planning and Zoning Board and City Council
c/o Clark Mapes
Advance Planning Department
P.O. Box 580
Fort Collins, CO 80522-0580

RE: Application for City Plan Amendment for Harmony I-25

Dear City of Fort Collins Planning and Zoning Board and City Council:

The enclosed application for an Amendment to City Plan Fort Collins ("City Plan") (1) amending the City Structure Plan (the "Structure Plan") to designate the southern portion of the 265.6-acre property located at the southwest intersection of Harmony Road and I-25 in Fort Collins (the "Property") from Rural Lands Edge to Employment District, and (2) amending the Harmony Corridor Plan ("HC Plan") to create a new Harmony Corridor Gateway "Activity Center" designation that would allow secondary uses to occupy up to 75% of gross area (the "HC Gateway") (together, the "Amendment") is submitted on behalf of the Property owner, Harmony McMurray LLC ("HM LLC").

I. Amendment Summary

HM LLC requests the Amendment in order to construct a mixed use, amenity-driven development to create a regional office and commercial employment center with residential components – that provides opportunities to work, live, innovate and play within one site. The proposed changes provide the underlying framework to mix office, commercial and residential uses in a way that is not currently allowed by the City Plan, but which is in step with what highly skilled employees demand from their workplaces.

II. The Proposed Amendment Meets the City Plan Approval Criteria

City Plan requires that any application for an Amendment satisfy the following criteria: (1) City Plan and/or any related element thereof is in need of the proposed amendment; and (2) the proposed amendment will promote the public welfare and will be consistent with the vision, goals, principles and policies of City Plan and the elements thereof. As further demonstrated in the attached statement, the Amendment meets or exceeds both of the criteria. Accordingly, HM LLC respectfully requests initiation of the Amendment and recommendation of approval from the City of Fort Collins Advance Planning staff, a recommendation of approval from the City of Fort Planning and Zoning Board, and approval from the City of Fort Collins City Council to amend City Plan as summarized above.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



Carolynne C. White

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Tab 2

Statement Addressing City Plan Amendment Criteria

STATEMENT ADDRESSING CITY PLAN AMENDMENT CRITERIA
HARMONY I-25
HARMONY MCMURRAY LLC

I. The Proposed Amendment Meets the City Plan Approval Criteria

City Plan requires that any application for an Amendment satisfy the following criteria:

1. The existing City Plan and/or any related element thereof is in need of the proposed amendment; and
2. The proposed amendment will promote the public welfare and will be consistent with the vision, goals, principles and policies of City Plan and the elements thereto.

a. *The City Plan is in need of the proposed Amendment.*

- i. *The proposed Amendment adds needed definition to the goals and purpose of the Harmony Road Gateway area and the associated allowed uses.***

Although the Harmony Corridor Gateway area is generally identified in the HC Plan at the intersection of Harmony Road and I-25 and designated as a “Special Urban Design Opportunity”, the HC Plan does not provide any specific guidance as to the characteristics of this area that differentiate it from the rest of the Harmony Corridor. *HC Plan, Map 10*. This has been identified as a “gap” or unfinished element of the HC Plan. The proposed Amendment would revise Map 10 of the HC Plan to designate this Special Urban Design Opportunity area and other portions of HM LLC’s Property as Harmony Corridor Gateway Activity Center, and would add guidelines within the HC Plan to help direct future development. Specifically, the Harmony Corridor Gateway Activity Center designation would allow secondary uses to occupy up to 75% of gross area, as opposed to the current limitation of 25%. This lays the groundwork for the Gateway area to be a hub of innovative employment uses, discussed further below, which is a primary goal of the City Plan for this area.

- ii. *The proposed Amendment creates the opportunity for unified development of a highly visible piece of property located along I-25, which is currently not possible under the City Plan.***

The Amendment proposes to change the designation of the southern portion of the Property from Rural Lands Edge to Employment District under the City Structure Plan. Rural Lands is envisioned to consist of agricultural and sparsely developed residential areas to form the community’s edge. *City Plan, Rural Lands, Purpose*. While this was an appropriate designation at the time the City Plan was adopted, the proposed Amendment presents an opportunity to designate the entire 265.6 acre Property to Employment District. This change would allow for unified development of this highly visible piece of property in a manner that is consistent with the goals set out in the HC Plan for development of this area as a major regional business center. For many passersby on I-25, this area is the first impression they have of the City of Fort Collins, and it is a key opportunity for innovative development that represents the City’s core values. In addition, the inclusion of the southern portion of the Property adds an additional 125.9 acres into Employment District, which helps to minimize any loss of employment uses associated with allowing a higher percentage of secondary uses within the newly created Harmony Corridor Gateway Activity Center.

Note also that the Property is under unified ownership. Under the current City Plan designation, the Property must be developed under two different City Structure Plan designations, which prevents this area from being developed in a uniform way under one set of development regulations. Therefore, the

City Plan needs the proposed Amendment to allow for uniform and innovative development of this highly visible Property, which is also under unified ownership.

iii. The elements of the City Plan related to the I-25 and Harmony Road Gateway area are in need of the proposed Amendment in order to achieve the stated goals of creating a major business center in Northern Colorado.

One of the City's central goals for the Harmony Corridor as reflected in City Plan and the HC Plan is economic growth driven by the establishment of office or business parks within this area. *HC Plan, Policy LU-2*. The concept outlined in the HC Plan is that these suburban commercial parks would attract users such as research facilities, testing laboratories, health-related uses, business or private schools or universities, financial services and professional office. In other words, these are sophisticated companies with highly educated and sought after workers. Certain amenities or "secondary uses" such as hotels, restaurants, neighborhood convenience shopping centers and residential uses could be integrated with the suburban commercial parks, but they may occupy no more than 25% of the total gross area of any Overall Development Plan or Planned Unit Development, as applicable.

The HC Plan was adopted over a decade ago. While the Harmony Corridor remains fundamentally attractive for new development, the reality is that suburban commercial parks are increasingly obsolete. The emergence of this trend is one that urban planners, business organizations and real estate developers have been watching closely. In just one example, a March 2017 article from Business Insider noted that some of the largest companies in the country are either leaving their suburban headquarters for downtown locations or rebuilding their suburban headquarters to mimic urban environments.¹ This change in preference is credited to a number of factors, but it is primarily due to the fact that younger, increasingly influential employees' prefer walkable environments that are reflective of urban living. Industry resources cite that employee preferences for mixed-use areas alone is sufficient motivation for business location decisions.² In the place of suburban commercial parks, employees and employers are looking for integrated mixed use developments that offer opportunities to work, live, innovate and play within one site, which is desirable because it can reduce the time and expense spent on commuting and transportation.³ In addition, these areas create a "sense of place" that is in high demand, and this preference by employers and employees continues to strengthen.^{4 5}

The way to create a desirable mixed-use environment is to have a rich mix of amenities such as restaurants, athletic clubs and residential spaces integrated with office and business uses. In fact, a 2015 study conducted by real-estate advisory firm Newmark Grubb Knight Frank found that one of main factors that could predict that level of obsolescence for existing suburban office parks was proximity access to amenities like restaurants and shopping.⁶ It is not only urban destinations that can provide such a mix of uses. Suburban office markets that can provide "an urban-like live-work-play environment within areas where people already live are well positioned to capture strong demand from office users."⁷ Another study

¹ Chris Weller, MILLENNIALS ARE FORCING AMERICA'S LARGEST CORPORATIONS TO KILL TRADITIONAL SUBURBAN OFFICE PARKS, Business Insider (March 6, 2017) available at <http://www.businessinsider.com/millennials-forcing-end-suburban-office-parks-2017-2>.

² HR&A, GROWING TREND: ADVANTAGE OF LOCATING OFFICE PRODUCT IN MIXED-USE PROJECTS AND NEIGHBORHOODS (2016), p. 1.

³ CBRE (Global Investors), U.S. URBANIZATION TRENDS: INVESTMENT IMPLICATIONS FOR COMMERCIAL REAL ESTATE (Summer 2016), p. 1.

⁴ HR&A, p. 1.

⁵ CBRE (North American Suburban Office Trends Report), THE MIGHTY URBAN-SUBURBAN SUBMARKET (Summer 2017), p. 2.

⁶ Newmark Grubb Knight Frank, SUBURBAN OFFICE OBSOLESCENCE: QUANTIFYING CHALLENGES AND OPPORTUNITIES (September 2015), p. 6.

⁷ CBRE (Suburban Office), p. 3.

has shown that such mixed-use districts had lower vacancy rates than Center Business Districts (CBD) in most instances.⁸

The proposed Amendment seeks to address the issue of suburban commercial park obsolescence by increasing the amount of secondary uses from up to 25% of the total gross development area to up to 75% of the total gross development area. This will allow developments within the newly designated Harmony Road Gateway Activity Center to provide the level of connectivity and the variety of amenities that talented employees, and therefore their employers, are seeking. In turn, this will help City Plan achieve its envisioned goal of making the Harmony Corridor a major regional business center, while also providing amenities to surrounding neighborhoods. While the Amendment only proposes this change for a limited area, this may become a model for other areas in the Harmony Corridor.

To summarize, in order to attract high quality businesses and meet its goal of economic growth, the City Plan needs the changes proposed by the Amendment. To further support the position that mixed-use areas are a determining factor in attracting top tier businesses, attached as [Appendix A](#) to this document are several of the articles cited above with relevant information highlighted for reference. These articles, which are both recent and published by respected organizations in the real estate industry, provide additional information on this issue.

b. The proposed Amendment will promote the public welfare and will be consistent with the vision, goals, principles and policies of City Plan and the elements thereto.

i. Public Welfare

As summarized above, the proposed Amendment is intended to allow a mix of office, commercial and residential uses in a way that is not currently allowed by the City Plan, but which is in step with what highly skilled employees demand from their workplaces. By creating such an environment, the Amendment will provide the framework for development of a contemporary regional office and commercial employment center with residential components, and also with great access to recreation and transportation opportunities. As stated in the HC Plan, attracting desirable businesses into the Harmony Corridor achieves an important public purpose because it promotes job growth and generally enhances the local economy, which is to the overall benefit of the public welfare. *HC Plan, Policy LU-2*. The benefit to the public welfare is further enhanced given the highly visible location of the Harmony Road Gateway area at the intersection of I-25 and Harmony Road. High quality development that reflects the City's values of innovation and connectivity in this area will have an especially meaningful impact as it is a major an entrance into the City.

Economic growth is not the only way the proposed Amendment promotes public welfare. A development with a mix of amenities designed for employees and on-site residents will be equally appealing to residents of the many surrounding neighborhoods, both those that are currently developed and those that will be built in the future. Development in the Harmony Road Gateway area will further serve as a physical buffer between the busy I-25 traffic and residential areas, improving the daily experience of residents. Without the Amendment, it is more likely that some of these properties will continue to sit vacant.

ii. Vision, goals, principles and policies of City Plan

As further described below, the proposed Amendment is consistent with the vision, goals, principles and policies of City Plan.

Economic Health

One of the key issues addressed by City Plan is the economic health of the Fort Collins community. As described above, the proposed Amendment helps promote the public welfare by encouraging job growth

⁸ HR&A, p. 1.

and generally enhancing the local economy. This is consistent with both the City Plan and the HC Plan. More specifically, by allowing a greater proportion of secondary uses in the Harmony Road Gateway area, development in this area will be better poised to create a sense of place, which will encourage an innovative and creative atmosphere and help attract and retain a high-quality, creative workforce. *City Plan, Economic Health Vision*. In turn, this will help the City remain competitive in the face of regional retail and employment competition. *City Plan, Economic Health Key Issues*. Other specific policies that the proposed Amendment helps support include job creation (Policy EH 1.1), maximizing retail sales tax revenue (Policy EH 1.2), supporting an innovative economy (Policy EH 2.2) and reducing barriers to infill development and redevelopment (EH 4.2).

Moreover, one of the key overall themes of City Plan is innovation with the aspiration for Fort Collins to be a world-class City. *City Plan, Vision for a World-Class Community*. The same qualities of the proposed Amendment identified above that support economic growth also support innovation in terms of built environment and attracting entrepreneurial businesses and employees. Note that the share of venture capital investment in the U.S. that is going to walkable suburban areas is growing, as opposed to being directed to traditional suburban office parks.⁹ These community characteristics are what will enable Fort Collins to continue to transcend being just an economically healthy community to being a world-class one.

Environmental Health

The proposed Amendment supports a number of goals related to the City Plan environmental health vision. The Property is located in a key stormwater management area, and development of it will require multi-functional stormwater facilities, which would ultimately allow development at a sub-watershed level. *Principle ENV 20*. In particular, it is anticipated that any development of the Property would incorporate lake and canal features which would both manage possible water runoff and also serve as an amenity for the neighborhood. Development of the Property as a live-work community with multimodal transportation options also promotes the type of urban living that has the potential to reduce total mobile source emissions, ultimately improving air quality and combatting climate change. *Policy ENV 9.1; Principle ENV 10*.

Community and Neighborhood Livability

In tandem with its emphasis on economic health, City Plan makes clear that development should be of a high quality so that it enhances the overall community. This is the balance that the proposed Amendment envisions. Allowing a greater ratio of secondary uses in the Harmony Road Gateway area will enable development that is more distinctive, connected and amenity-oriented than the traditional suburban commercial park currently envisioned. Further, the proposed Amendment would encourage development within an area that has been specifically identified by City Plan as appropriate for redevelopment and infill. This is reflected by the fact that the Harmony Corridor is shown on the City Plan Targeted Infill and Redevelopment Areas Map as a “Targeted Activity Center”, and by Principle LIV 13, which emphasizes the importance of developing community gateways at the I-25 corridor interchanges. *City Plan, Figure LIV 1; Policy LIV 13 and 13.1*.

Transportation

The proposed Amendment will allow users to employ a variety of modes of transportation from and within the Harmony Road Gateway area. This has exciting implications for connectivity. Among other opportunities, Harmony Road Gateway area includes easy access to I-25 and access to the Harmony Park & Ride. Not only will community members within this area have the opportunity to work-live-play within one site, they will also have multi-modal options to travel throughout the City and the region. These factors are consistent with numerous City Plan transportation principles and policies, including the goal to coordinate land use planning decisions with the City’s transportation vision (Principle T 3), encouraging

⁹ CBRE (Global Investors), p. 8.

multiple mobility options (Principle T 7) and allowing residents to lead healthy and active lifestyles (Principle T 8).

Other

This overview does not highlight every vision, goal, principle or policy of the City Plan, as some are more relevant than others to the proposed Amendment. However, it is important to note that a close review of City Plan does not reveal any instances where the proposed Amendment is contrary to City Plan. Accordingly, the proposed Amendment is consistent with the vision, goals, principles and polices of City Plan, and it is especially helpful to the City achieving its goals related to economic health, community and neighborhood livability and transportation.

II. Conclusion

In summary, the existing City Plan needs the proposed Amendment in order to meet its stated goal of economic growth driven by new employment opportunities in the Harmony Corridor. While this is currently a central theme in the City Plan and HC Plan, the outdated suburban commercial park concept is a barrier to such growth. Allowing a greater proportion of secondary uses within the newly designated Harmony Corridor Gateway Activity Center will help establish development that will help attract and retain a high-quality, creative workforce. Further, the proposed Amendment will promote the public welfare and will be consistent with the vision, goals, principles and policies of City Plan and its elements. This specifically includes goals related to economic health, community and neighborhood livability and transportation. Therefore, the Amendment meets or exceeds both of the required criteria.

APPENDIX A

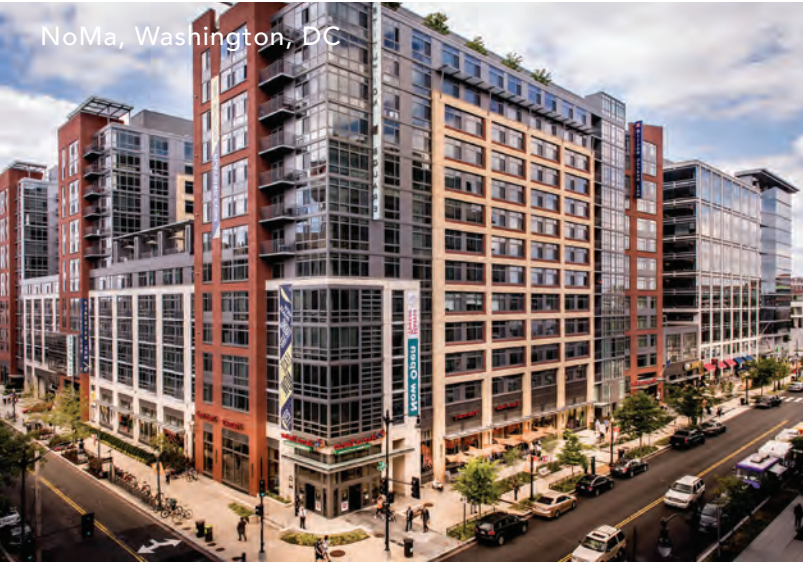
Real Estate Development & Employment Trends Articles

1. HR&A, GROWING TREND: ADVANTAGE OF LOCATING OFFICE PRODUCT IN MIXED-USE PROJECTS AND NEIGHBORHOODS (2016)
2. CBRE (Global Investors), U.S. URBANIZATION TRENDS: INVESTMENT IMPLICATIONS FOR COMMERCIAL REAL ESTATE (Summer 2016)
3. CBRE (North American Suburban Office Trends Report), THE MIGHTY URBAN-SUBURBAN SUBMARKET (Summer 2017)
4. Newmark Grubb Knight Frank, SUBURBAN OFFICE OBSOLESCENCE: QUANTIFYING CHALLENGES AND OPPORTUNITIES S (September 2015)

Tab 3

Appendix A to Statement Addressing City Plan Amendment Criteria

NoMa, Washington, DC



Reston Town Center, Fairfax, VA



Santana Row, San Jose, CA



Pearl District, Portland, OR



Growing Trend

Advantages of Locating Office Product in Mixed-Use Projects and Neighborhoods

EXECUTIVE SUMMARY

This report examines the growing trend of locating significant amounts of office space in mixed-use developments in the urban and suburban contexts in terms of demand, supply, financing mechanism, and market performance.

Beginning in the 1990s, increased demand for urban environments fueled investment in many American cities. This investment transformed downtown neighborhoods. Mixed-use is a large component of this urban renaissance. In contrast to the dominant strip malls, single-use office districts and suburban office parks, and suburban housing developments that prevailed from the 1950's to the early 1990's, recent urban developments are denser, include office, retail and residential uses in close proximity (or even in the same building), and are more oriented towards pedestrians instead of vehicles.¹ Originally an unconventional development typology in the 1990s and early 2000s, this report finds that the market has embraced these mixed-use developments.

Based on quantitative analyses of seven mixed-use districts and their adjacent central business districts (CBDs), a review of relevant studies, an independent survey of worker preferences in the Washington region, and interviews of real estate experts and tenants, our research generated the following findings:

Office Space Demand

- Tenants reported that their firms moved to mixed-use areas to increase their ability to attract top-tier talent. Tenants cite employee preferences as sufficient motivation for location decisions.
- Mixed-use neighborhoods are in high demand and growing because employees want to live and work in places with a "sense of place" and convenient access to amenities.
- High absorption of Class A office space in mixed-use districts between 2006 and 2015 as compared to CBDs demonstrates the robust demand for mixed-use environments. Net office absorption in NoMa was 3,236,410 square feet, while DC's CBD only gained 398,966 square feet in the last decade. Office absorption was higher in three of the four urban mixed-use case studies than in the associated CBDs.
- In urban mixed-use districts, vacancy rates are similar to or lower than CBDs, indicating new mixed-use districts are competitive with these more established office submarkets. On average, vacancy rates were 8.8% in 2016 for the four mixed-use areas, while the CBDs had an average vacancy rate of 10.1%. Office vacancy was lower in three of the four urban mixed-use case studies.
- This strong demand for mixed-use is often described as a "flight to quality." Office tenants are increasingly choosing to leave single-use zones for modern mixed-use environments.

Office absorption was higher in three of the four urban mixed-use case studies than in the associated CBDs.

Urban mixed-use districts are competitive with adjacent CBDs, while suburban mixed-use projects strongly outperform the surrounding office market.

Office Space Supply

- Between 2006 and 2016 the inventory of office space in the four urban mixed-use case studies made up much of the growth in office space in their respective cities, ranging from 18 (Portland) to 48 percent (Boston) of the growth in the overall office market.
- The amount of office space in CBDs grew at a slower pace between 2006 and 2016 than adjacent mixed-use neighborhoods, ranging from no growth in San Francisco to 40 percent growth in Portland. Portland was an outlier in this case, with growth of its CBD actually surpassing growth in the mixed-use Pearl District.
- Suburban mixed-use office remains a niche product as compared to single-use suburban office space and commands a large rent premium. This limited supply is partly due to the expense and long build-out times of suburban mixed-use projects.

Finance and Market Performance

- In urban settings, office rents for new mixed-use districts were competitive and sometimes surpassed rents in the adjacent CBDs. In Washington, DC, rents in NoMa were discounted by \$3.86 per square foot over the CBD. Boston's Seaport District commanded a premium of \$10.48 over the Financial District. The competitive quality of office rents in mixed-use districts demonstrates the high demand for and value of office space in mixed-use development.
- Office space in suburban mixed-use projects enjoy a significant rent premium compared to the surrounding office market. The suburban mixed-use case studies each revealed premiums in excess of \$10 per square foot annually.



"We've seen that amenities in general are being weighed more heavily in a tenant's decision-making matrix."

—Katie Coppins, CBRE, Broker

METHODOLOGY

For the purposes of this report we considered areas to be “mixed-use” when they (1) integrate complementary uses – office, retail, residential, hospitality – in proximity to each other, (2) are walkable in nature, (3) contain elements of the “live-work-play” environment, and (4) have meaningful public spaces. The mix of uses in such areas varies, but the combination in each creates a pedestrian-friendly atmosphere that is attractive to workers, residents, and visitors.

Four research approaches were employed. They were: 1) literature review, 2) case study quantitative analyses, 3) interviews of tenants and real estate industry professionals, and 4) a worker preference survey.

Literature Review

Our literature review of relevant articles and reports on mixed-use development and office preferences revealed a rich history on the evolution of mixed-use districts in cities. Mixed-use development had been common in cities before the advent of widespread public transit and the automobile.² Without an efficient form of transportation, urban residents needed all aspects of daily life to be within close proximity. Industrialization brought heavy manufacturing to cities. Overcrowding and pollution became a problem in many urban environments. Cities developed regulations to address these problems, starting with an attempt by Los Angeles to prevent development of heavy industry in residential zones, and followed by New York City in 1916 with the first zoning code. Called “Euclidean Zoning,” this approach relegated industry and other manufacturing to specific areas of the city and set limits on the density of development. Eventually, zoning regulations required separation of retail, residential, and office uses.³ As new transportation options became prevalent, the geography of metropolitan areas expanded and many urban residents moved out of the urban core to suburbs, beginning the process of segregating uses into distinct zones.⁴

Although zoning sometimes mitigated overcrowding and the impact of industrial pollution on residential properties, cities remained dense centers. The creation of highways and policies promoting homeownership in the 1950’s were important factors contributing to middle class movement from cities to suburbs. These low-density suburbs were dominated by single-family homes. Suburban residents of communities utilized new highways to commute to work in the central business district (CBD), resulting in the development of large parking lots around downtowns to accommodate vehicles.⁵ A confluence of factors, including the movement of middle class workers, pushed retail and office development into the suburbs during the 1960s and 1970s.⁶ This separation of uses resulted in CBDs that remained regional centers but were dominated by office uses.

The trend back to the urban center and mixed-use neighborhood over the last decade has been remarkable. All age groups, including trend-setting “millennials” are increasingly drawn to the core of cities. The aging “boomer” population is also increasingly choosing convenient, walkable, urban neighborhoods in cities.⁷ In order to cater to these preferences, mixed-use development has become more prevalent. An expansive combination of uses – retail, residential, office, hotel, and open space – promotes the lively, livable communities now preferred by residents and workers alike. It is no longer radical or innovative – rather, mixed-use development has become routine for new developments.

The current growth of urban populations is now attracting office tenants back to the core of the city. **Instead of returning to established CBDs, tenants increasingly demand office space in the mixed-use environments that their employees desire to live in.** We identified a striking increase in the demand for office space in mixed-use environments and office space. A substantial increase in supply is a corollary of the growth in demand. As cities look towards the future, the urban spaces that nurture mixed-use neighborhoods will have a competitive advantage as they seek to attract residents and grow businesses.

An academic study of office markets by NAIOP and Colliers International found a rent premium for office space in mixed-use environments in a 2009 article.⁸ In a 2014 article, The NAIOP Research Foundation identified a preference for office space in downtowns or mixed-use suburban environments by analyzing rents and survey data.⁹ Pivo and Fischer (2011) found that walkability, an element associated with mixed-use, increases property values for the residential and office sector. Both a 2010 Harvard Business Review article and a 2015 report from Smart Growth America and Cushman & Wakefield documented the trend of office tenants moving back to the city from suburban settings to better compete for workforce talent.^{10,11}

Additionally, in 2015, the Urban Land Institute and PwC published “Emerging Trends in Real Estate,” identifying the 18-hour district as an emerging trend.¹² Somewhere between the traditional 9-to-5 business district and the 24-hour entertainment zone, 18-hour districts are typically active in the evening but are still attractive for residential uses. Such districts represent the live-work-play environments that residents and employees desire.

“I think you’re going to see a big shift in the next decade in embracing mixed-use development. The need for and demand for mixed-use has always been there, but it didn’t start to substantially escalate until the start of this cycle in 2009 and has drastically increased each year thereafter.”

—John Sikaitis
JLL, Researcher

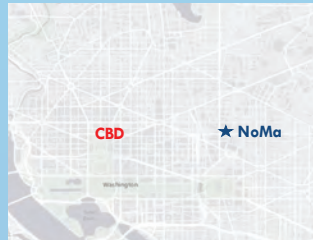


Case Studies

Following the literature review, we identified a set of mixed-use districts comparable to nearby single-use neighborhoods for quantitative analyses. In urban areas, we focused on recently developed mixed-use neighborhoods adjacent to established CBDs which are predominantly office space. We chose these case studies as these new districts had, for the most part, amenities and features comparable to the CBD, such as regional economic effects and accessibility. Suburban mixed-use projects were compared to the overall surrounding suburban class A office market. Our quantitative analysis focuses on four urban case studies and three suburban case studies to assess the effect of mixed-use in both settings. We compared data of office market performance such as rents and vacancy rates for each of these areas, identifying common trends. Sources included CoStar and the US Census for neighborhood characteristics and metrics such as gross rent, vacancy rates, inventory of square feet, and net absorption rates between 2006 and Q1 of 2016.

Urban Mixed-Use Districts Studied

NoMa, Washington DC



| | |
|----------------------------------|------------|
| NoMa Office Square Feet: | 9,568,851* |
| CBD Office Square Feet: | 25,228,330 |
| NoMa Office Buildings: | 29 |
| CBD Office Buildings: | 108 |
| NoMa Walkability Score**: | 93 |
| CBD Walkability Score: | 97 |
| NoMa Transit Score: | 82 |
| CBD Transit Score: | 100 |

North of Massachusetts Avenue, or NoMa, transformed underutilized parking lots into a vibrant neighborhood in the past decade. Aided by the construction of the NoMa – Gallaudet U Metro station, the area's office inventory and retail offerings rapidly grew. In recent years, the focus has been on residential development resulting in construction of over 4,000 units, and another 6,000 units planned.

Mission Bay, San Francisco, California



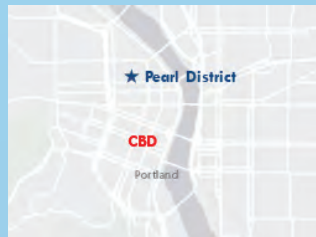
| | |
|--|------------|
| Mission Bay Office Square Feet: | 3,495,463 |
| CBD Office Square Feet: | 29,803,156 |
| Mission Bay Office Buildings: | 23 |
| CBD Office Buildings: | 171 |
| Mission Bay Walkability Score: | 82 |
| CBD Walkability Score: | 95 |
| Mission Bay Transit Score: | 94 |
| CBD Transit Score: | 100 |

Mission Bay developed over the past decade, converting old docks and warehouses into a mixed-use neighborhood with a focus on bio-tech and health research space laboratories. Mission Bay is anchored by a new University of California, San Francisco campus. The district has many luxury condominium buildings, but has also steadily incorporated retail and office space. A light rail line connects Mission Bay with the trendy SoMa neighborhood and the CBD.

*Excludes government-owned properties.

**Walkability and Transit Scores are from walkscore.com. Neighborhood boundaries defined by walkscore.com do not match the neighborhood boundaries defined by HR&A.

Pearl District, Portland, Oregon



Pearl District Office Square Feet: 1,183,610
CBD Office Square Feet: 10,627,013
Pearl District Office Buildings: 9
CBD Office Buildings: 34
Pearl District Walkability Score: 96
CBD Walkability Score: 95
Pearl District Transit Score: 86
CBD Transit Score: 92

Formerly a district filled with obsolete warehouses, the Pearl District is now a high-performing luxury residential and office market in the heart of Portland, and includes large amounts of retail as well. Aided by Portland's requirement for active retail on the ground floor, the district is a hub for local shops and eateries, along with several well known breweries.

Seaport, Boston, Massachusetts

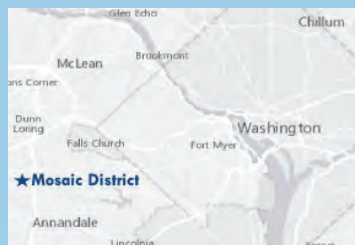


Seaport Office Square Feet: 5,746,525
CBD Office Square Feet: 30,654,152
Seaport Office Buildings: 15
CBD Office Buildings: 66
Seaport Walkability Score: 87
CBD Walkability Score: 96
Seaport Transit Score: 70
CBD Transit Score: 100

Located across Boston's Fort Point Channel, Seaport became a prime development location after the "Big Dig" project buried Interstate 93 and thus removed a physical barrier hindering access. Office expanded rapidly on former port facilities, followed by new residential buildings. On some streets, retail space and small blocks create an attractive environment, but in other areas large superblocks limit connectivity and activity.

Suburban Mixed-Use Districts Studied

Mosaic, Fairfax County, Virginia



Amenities: Residential, Retail, Restaurants, Office
Office Square Feet: 75,000
Major Tenants: Target, Angelika Film Center, MOM's Organic Market, Neiman Marcus Last Call Studio, CustomInk
Proximity to Public Transit: Shuttle to Dunn Loring-Merrifield Metro Station
Mosaic Rent: \$39.87
Fairfax Rent: \$30.58

The Mosaic describes itself as an upscale "curated" shopping experience, and offers residential and office space in the same center. Combining a number of national chains with best in class local retailers, Mosaic is a distinctive neighborhood. Amenities include a butcher, a gelato shop, a movie theater, green space, and a farmers market. Housing options include townhomes and condominiums.

Reston Town Center, Fairfax County, Virginia



Amenities: Residential, Retail, Restaurants, Office, Hotel

Office Square Feet: 2,492,055

Major Tenants: Google, Rolls-Royce, Apple

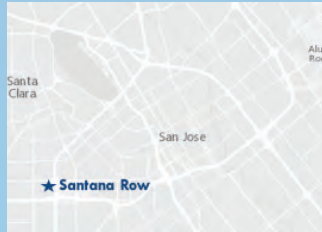
Proximity to Public Transit: Silver Line Metro in Two Years at Wiehle Avenue

Reston Town Center Rent: \$42.21

Fairfax County Rent: \$30.58

Reston Town Center, located in Fairfax County, features an attractive mixed-use environment containing both residential and office space. Wide sidewalks and open avenues create a pedestrian-friendly environment with many shopping and dining options. This large project required significant investment in infrastructure and was developed over two decades. It is a stable neighborhood commanding premium office rents.

Santana Row, San Jose, California



Amenities: Residential, Retail, Restaurants, Office

Office Square Feet: 280,421

Major Tenants: Crate & Barrel, CineArts, H&M, Best Buy

Proximity to Public Transit: No

Santana Row Rent: \$48.03

San Jose Rent: \$38.74

Santana Row combines upscale retail, over 800 homes, and 280,421 square feet of office space in one lifestyle center. A combination of anchor stores, smaller chains, and local boutiques make up the retail, in addition to over 20 restaurants, nine spas and salons, and a movie theater. Due to the success of the office component, Santana Row is constructing two additional office buildings with over 500,000 SF for delivery by the end of 2016.

Case Study Insights

Mixed-use requires achieving scale to create complete neighborhoods. Thus, in suburban settings where developers must create an entire district to achieve this scale, the investment required for buildings and infrastructure is extremely high. Developers noted that few companies have the financial backing and knowledge to manage such large projects. These developments often deliver in phases over multiple decades and can require capital that is extremely patient and able to manage the risk associated with upfront investment and delayed payment. This patient capital is limited to select developers and lenders that are comfortable with these risks. Mixed-use suburban centers such as Reston Town Center enjoy significant rent premiums compared to the surrounding market. Their development, however, is limited by the large investment required and the need for extremely patient capital.

“First-Mover” Projects Bring Confidence to Unproven Districts

Pioneering mixed-use projects often face challenges in demonstrating demand to financial partners. Investors may require higher levels of developer equity for unproven uses, increasing risk for the developer. Techniques to establish demand and minimize risk include robust marketing campaigns, pre-leasing, and appealing to price sensitive office users such as government agencies. Developers noted that there is a higher probability of substantial market demand for new office space within districts adjacent to established CBDs making the creation of new, mixed-use districts with a substantial office component easier in neighborhoods adjacent to established office hubs.

Office developers in mixed-use areas stated that they develop office space in response to measurable demand. One developer noted that the industry closely tracks projects that attempt to open new markets or neighborhoods. New projects quickly follow in areas that prove successful. As tenants, residents, and employees choose to locate space in vibrant, mixed-use areas, they reinforce the cycle and spur increased supply.

Interviews

Following the quantitative analysis and identification of key trends, HR&A conducted interviews with 19 real estate professionals and tenants of mixed-use developments to better understand the benefits and challenges associated with office product in mixed-use settings.

The real estate professionals and tenants volunteered their time and insights, and came from four broad backgrounds:

- Tenants of mixed-use office space
- Developers of mixed-use
- Brokers
- Lenders and equity investors

Our interviews revealed that businesses are increasingly choosing to locate their offices in mixed-use areas because employees prefer to work in environments that offer convenient access to amenities and leisure activities. In order to remain competitive and attract top talent, tenants stated they feel a need to locate in a mixed-use district that offers employees good residential options, transit access, restaurants, groceries, shops, and appealing public spaces. Developers and tenants alike attributed increases in demand for mixed-use areas to a desire for environments that have an attractive sense of place. Elements described as contributing to a sense of place include public realms and ground floor spaces that create pedestrian scale and street level activity. Inviting public plazas, unbroken retail space, and attractive streetscapes are all elements that help create this feeling. Several interviewees noted that these elements, particularly multiple retail storefronts with high ceilings, may reduce immediate returns, however, they often increase the value of residential and office space on higher floors.

Numerous tenants identified the need to stay competitive and attract top talent as the biggest factor driving increased demand for office space in mixed-use districts. This desire for activity and amenities near the workplace has contributed to the success of office projects in mixed-use environments, and allowed them to compete successfully with more established CBDs.

Together, the results of the data and interviews highlight the many elements required to produce a successful mixed-use neighborhood, the benefits for office users, and the challenges associated with mixed-use development.

"We're definitely seeing more blurring of the line between where housing is, where retail is, and where office is."

—Lisa Frisch
Downtown Portland Clean &
Safe District, BID



Results from the Worker Preferences Survey



84%

of respondents indicated the overall neighborhood surrounding their workplace is at least somewhat important.



72%

of respondents indicated that having park space in close proximity is at least somewhat important.



57%

of respondents preferred a mixed-use neighborhood over a mix of office and retail or pure office.



47%

of respondents identified a mixture of open workspace, creative meeting rooms as the preferred office layout.

Worker Preference Survey

To explore worker preferences, the NoMa BID commissioned an independent workplace preference survey of more than 1,000 workers from the Washington, DC region. Completed in March 2016, the survey results demonstrated that most people prefer to work in mixed-use environments and take these preferences into account when choosing their place of work. The survey was administered by Research Now, who distributed it by email to a panel of respondents that reflect the overall demographics of the Washington, DC MSA.

The survey focused on identifying neighborhood characteristics and physical attributes of office space preferred by respondents. It showed that location matters: respondents indicated that proximity to home, transit availability, and good restaurants were the top three neighborhood features they looked for. A striking 72 percent desired park space near their workplace. In addition, 84 percent stated that neighborhood influenced their choice of workplace. Lastly, 20 percent stated that building design preferences had influenced their employment decision. People prioritized natural light, appealing interior design, and flexible meeting spaces as the most important attributes for their workspace.

The survey reinforces the messages delivered by interviewees; namely, that workplace amenities affect employers' ability to attract top-tier talent and confirms that demand for office space in mixed-use environments is driven, at least in part, by worker preference for these mixed-use districts. All survey respondents were employed, 68% had incomes of over \$50,000 a year, and 57% had at least a bachelor's degree.

FINDINGS

Consumer preferences drive strong growth in demand for office space in mixed-use urban environments.

Demand Growth

Higher Demand for Mixed-Use

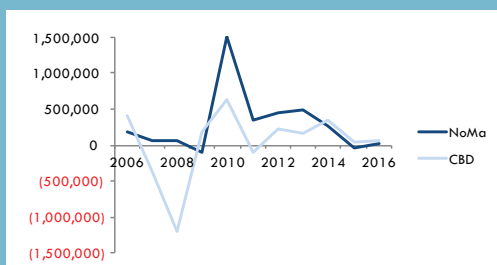
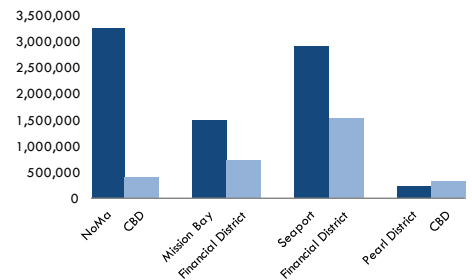
Increased demand for office space in mixed-use environments is driving growth in supply. Metrics analyzed show that mixed-use areas are increasingly competitive with CBDs. Demand for a live-work-play environment and diverse amenities make new mixed-use districts adjacent to an established CBD an attractive choice for office tenants, despite the distance from the historic center of the office market.

Demand for mixed-use has increased due to factors beyond price. This demand is illustrated by strong net absorption and reduced vacancy rates in mixed-use environments. The driver of this demand is largely employee preferences. Tenants prefer mixed-use environments to single-use areas because their staff prefer to work in environments that offer housing, restaurants, shops, engaging public spaces, and active streetscapes.

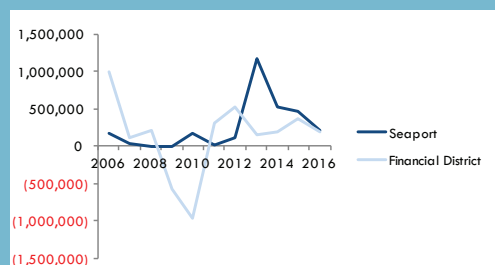
Net Absorption Shows Mixed-Use Competitive

Net office absorption data shows that, on average, mixed-use environments have been able to attract and absorb more square feet of office space than CBDs in the past decade. Growing demand for office space in mixed-use districts is making these districts highly competitive with the more established and larger CBDs.

Total Net Absorption Square Feet 2006 - Q1 2016



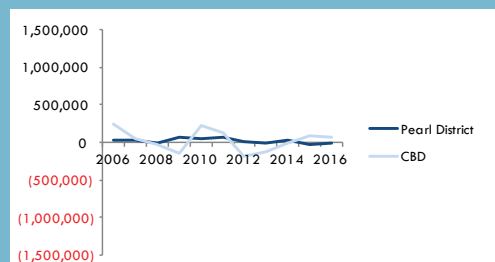
Washington, DC



Boston, MA



San Francisco, CA



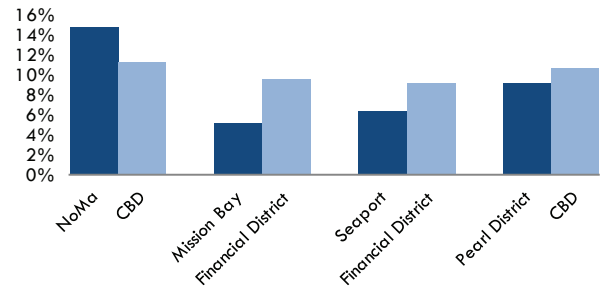
Portland, OR

Between 2006 and Q1 2016, net absorption in mixed-use districts was higher than in comparable CBDs.

Falling Vacancy Rates in Mixed-Use Districts

Over the past 10 years, vacancy rates in mixed-use environments have approached or fallen below levels in adjacent CBDs. By 2016, in all of the urban mixed-use districts studied, vacancy rates were near parity with rates in the adjacent CBD. Due to the smaller amount of total office space and rapid growth, vacancy rates in mixed-use districts were more volatile than in CBDs, but generally trended downwards indicating market maturation. Falling vacancy rates show that office tenants want to be in mixed-use districts.

Vacancy Rates Q1 2016

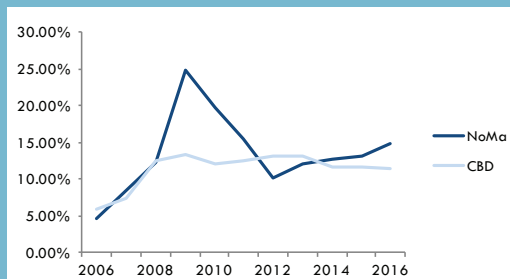
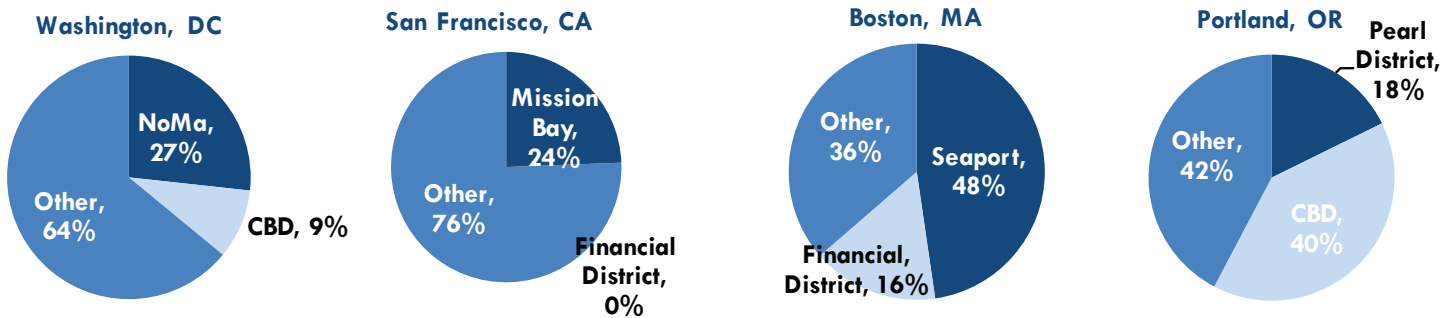


Supply Growth

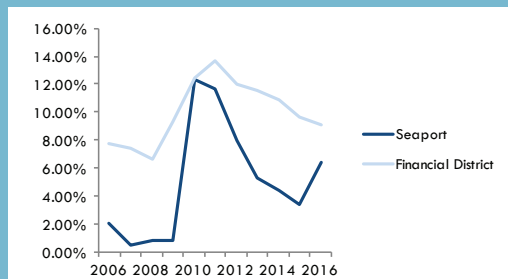
In Past 10 Years Most Additional Office Space Developed in Mixed-Use Districts

Developers are responding to the increased demand for space in mixed-use districts through a rapid expansion of supply. Since 2006, new office space in the new mixed-use districts comprised much of the expansion of office supply in the urban areas studied, ranging from 18 percent of all new office inventory in Portland to 48 percent in Boston. During this period the office supply in CBDs grew at a substantially slower pace, and in San Francisco even stagnated. Although experts acknowledged that the new districts had more available land for development compared to CBDs, they also stated that strong demand for mixed-use is driving the abundant growth in these new districts.

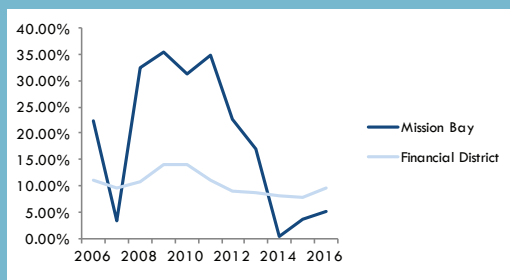
Percentage of Total Office Square Feet Added within Market (2007- Q1 2016)



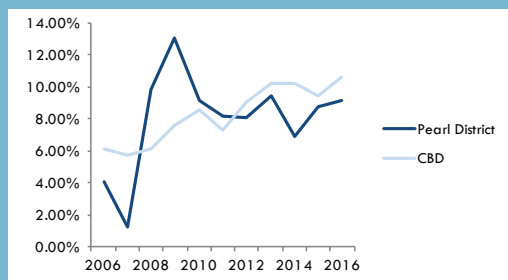
Washington, DC



Boston, MA



San Francisco, CA

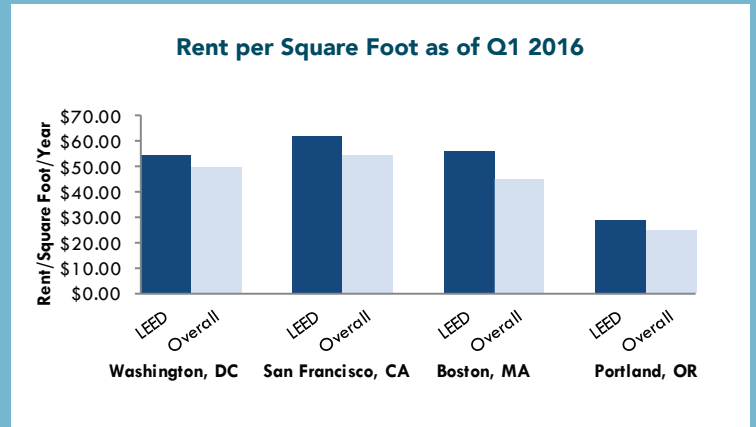


Portland, OR

Vacancy rates in mixed-use districts have stabilized and are similar to rates in adjacent CBDs.

Trends in LEED Certification

Once seen as an optional measure of upscale office development, LEED certification has quickly become a standard feature for many developers. Developers stated that LEED Gold is the “price of admission” to the Class A and “trophy” office development market. They also indicated that LEED certification had little impact on rent premiums. HR&A’s analysis found that rents for LEED office space command a slight premium over rents for the total office market. However, LEED buildings are typically newer, in better condition, and offer more amenities on average than the overall office market. This potentially explains a portion of these higher rents.

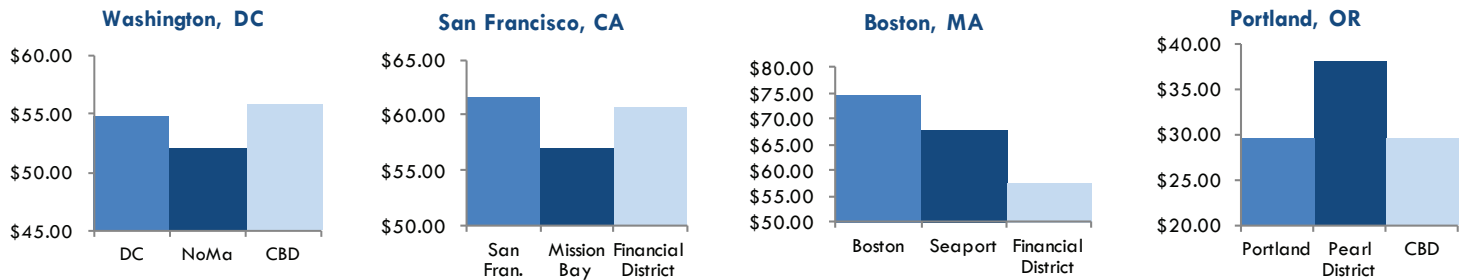


Financing and Market Performance

Urban Mixed-Use is Strong Competition for Downtown CBDs

Rents in the office sector in urban mixed-use districts are typically only modestly discounted relative to rents in the adjacent CBDs. Mixed-use district rents surpass CBD rents in both Portland and Boston. Discounts may be outweighed by premium prices for land in some CBDs. We believe the competitiveness of mixed-use district rents demonstrates the high value that office users place on amenities, a sense of place, and increased after-work activity.

Annual Office Gross Rent per Square Foot (Q1 2016)¹³

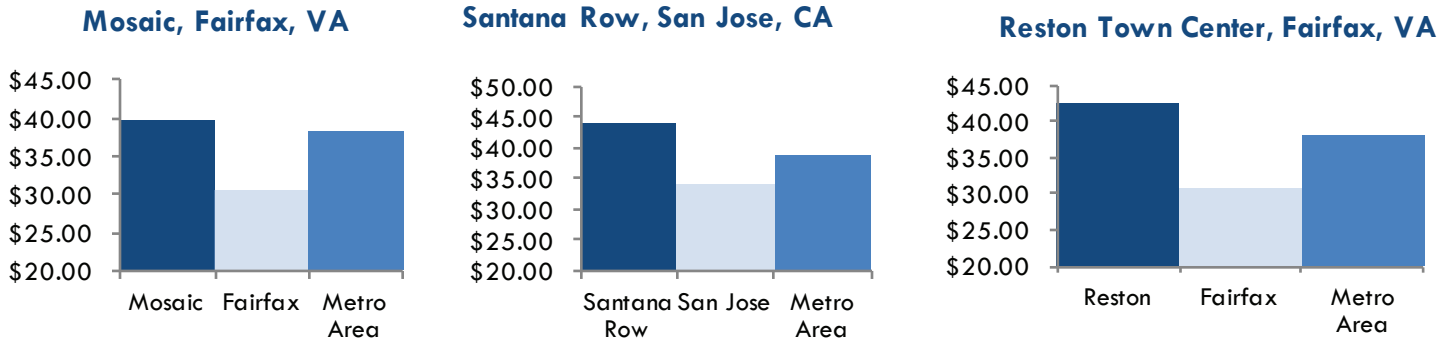


Declining vacancy and rapid growth show that tenants are increasingly choosing to locate in mixed-use environments.

Performance of Suburban Projects Demonstrates Value of Mixed-Use for the Office Sector

Unlike urban mixed-use districts, where rents are often somewhat discounted as compared to rents in adjacent downtowns, office space in suburban mixed-use projects commands a substantial rent premium over the surrounding market. Compared to markets dominated by single-use office parks, office space in mixed-use suburban developments command rent premiums in excess of \$10 per square foot annually. These premiums highlight the value that mixed-use adds to office performance. Additionally, the suburban projects sustained increased performance over a full decade since 2006, indicating mixed-use environments retain their competitive advantage as they mature.

Annual Office Gross Rent per Square Foot (2015)



Flexibility

Mixed-Use Increases Flexibility to Reposition Assets

According to the finance professionals and developers interviewed, mixed-use environments help preserve property value by increasing the flexibility to reposition an asset should the market change. Experts stated that, in mixed-use districts, the established residential and office sectors make it possible to convert underperforming office space to residential space. In contrast to office-dominated areas, mixed-use districts have after-work and weekend activity that makes the area attractive for residential development. We would note that although mixed-use makes this conversion possible, it is still difficult to make these projects financially feasible due to the high costs, and thus there are few examples of successful conversions.



Low Demand for Suburban Single-Use Office

Demand is low for single-use suburban office parks. Facing high vacancy rates and low rental rates, developers and investors alike report forgoing these once-profitable developments. Real estate experts stated that office tenants perceive single-use office parks as dull and only lease space at reduced prices. Experts also stressed the difficulty of redeveloping these large properties due to the lack of connectivity with the surrounding area and the significant investment required. Though single-use will remain relevant in the suburban office space market, the future appears to be in mixed-use suburban projects.

CONCLUSION

Many employees inherently prefer the amenities and environment of mixed-use areas and indicate that these preferences influence their choice of workplace. Recognizing that recruiting a talented workforce is an essential element dictating firm performance, firms are satisfying employee preferences by relocating to mixed-use districts.

Neighborhoods that offer a balanced mix of office, residential, and retail hold a competitive advantage over single-use areas. Mixed-use promotes active streets and ground floor activity. Eventually, mixed-use office space may command significant rent premiums, a phenomenon already seen in Portland's Pearl District.

Successful mixed-use projects and districts are hard to replicate due to the large capital requirement and development time. Mixed-use developments require a number of features that establish a sense of place, which may be difficult to create within established urban zones. As a result, existing mixed-use districts have a distinct and durable market advantage and will likely see continued growth.

"I don't think mixed-use is niche anymore, everyone has gotten on board with them, and they know it's not a fad."

—Jeff Kreshek
Federal Realty, Broker



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ENDNOTES

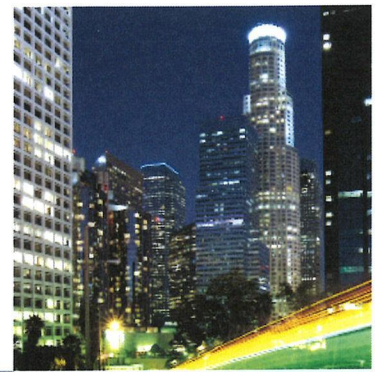
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13. "Gross Rents" refer to the listed rental rates, also known as "Face Rents." Gross Rents do not include concessions or incentives provided by the building owner.

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U.S. URBANIZATION TRENDS: INVESTMENT IMPLICATIONS FOR COMMERCIAL REAL ESTATE

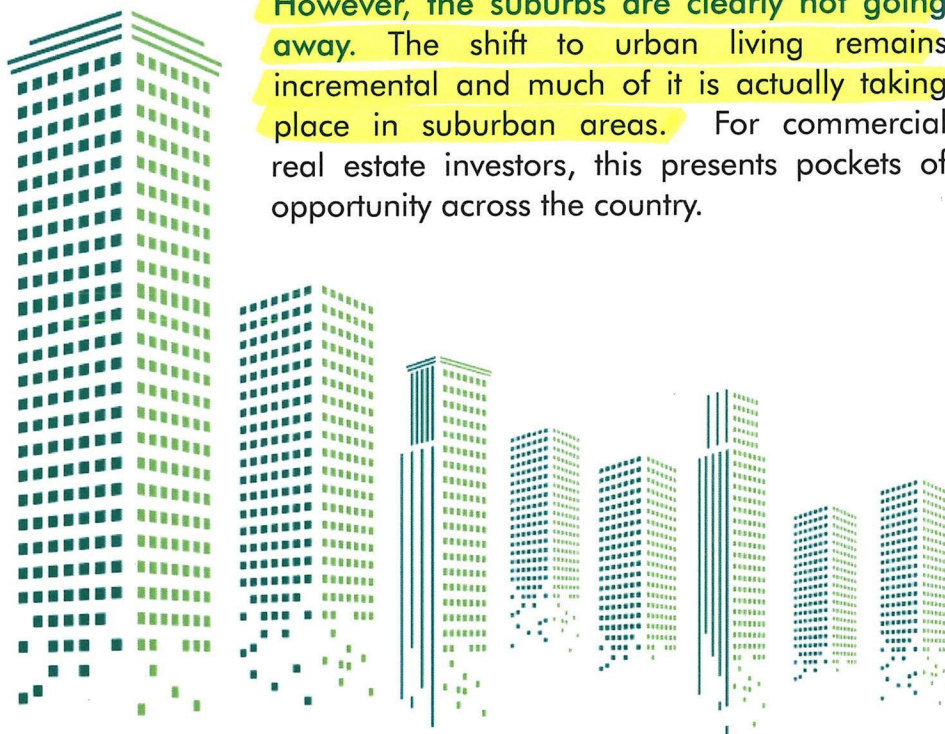


The way that many people choose to live is changing. In 2011, for the first time in nearly one hundred years, the rate of urban population growth outpaced the suburbs.

Americans once flocked to the suburbs in search of a better life. Today many young workers prefer city life, pursuing an urban lifestyle and seeking proximity to jobs.

More than ever, talent is clustering in dense, urban areas. There are locational advantages to living and working in cities. America's global competitiveness is largely sustained by the innovation and creativity that occurs in cities.

However, the suburbs are clearly not going away. The shift to urban living remains incremental and much of it is actually taking place in suburban areas. For commercial real estate investors, this presents pockets of opportunity across the country.



SUMMER 2016

Background
Page 2

Urbanization Drivers
Page 2

Population Trends
Page 3

Public Transit
Page 4

The Debate
Page 5

Suburban Changes
Page 5

Millennials
Page 6

Benefits From Cities
Page 8

Implications For
Commercial Real Estate
Page 9

Prepared by:

Anthony Wirth

Global Strategy &
Research Team

CBRE
GLOBAL
INVESTORS

BACKGROUND

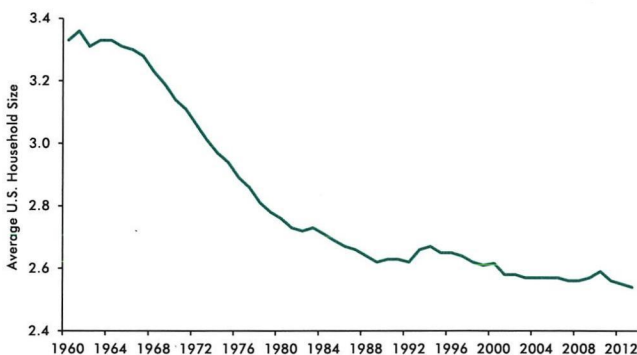
Cities became dirty and dangerous after the industrial revolution with the rise of factories and crime. After the suburban flight of the 1950s, large-scale social unrest in the 1960s and the crack epidemic of the 1980s, the term “inner city” took on increasingly negative connotations. The revitalization of cities then became a prime focus of city officials. As a result, many urban areas have become much safer and more appealing. Downtown areas have become not only a place to work but also a place to live.

Millennials have become an integral part of the workforce, and they are looking to reduce time and expenses spent on commuting and transportation. As a result, millennials are forgoing the comforts of larger detached homes they grew up in and are instead opting to live close to work, transit and amenities.

Several factors have contributed to the renewed interest in urban living:

1. Deindustrialization of central cities
2. Changing lifestyle preferences
3. Shifting demographics:
 - a. **Living single:** the overall share of married Americans declined from 72% in 1960 to 51% in 2010
 - b. **Marrying later:** median age at first marriage has never been higher for brides (26.5 years) and grooms (28.7 years)
 - c. **Smaller families:** 3.33 persons was the average household size in 1960, down to 2.58 in 2010 (Exhibit 1)

EXHIBIT 1: The Average U.S. Household Size Has Declined

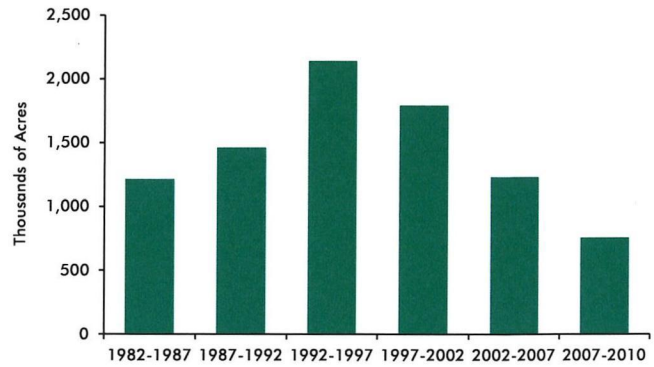


Source: U.S. Census Bureau

URBANIZATION DRIVERS

Another reason for slower outward growth is that many cities have reached their boundaries, and it is much more difficult to build on unincorporated county land. Developers crunch the numbers, look at the path of least resistance and decide that it is simply easier to focus on infilling areas that were initially bypassed during past periods of urbanization.

EXHIBIT 2: Acres of Land Developed



Sources: Payton Chung (West North), National Resources Inventory

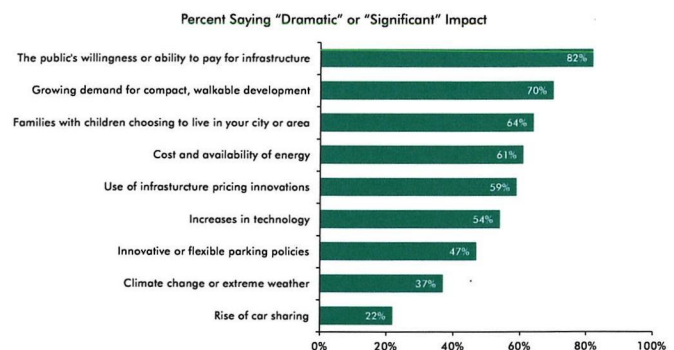
The drop-off in developed land started before the housing bubble and Great Recession. It is a fact, not just urbanist wishful thinking. (Exhibit 2)

Many national retailers are realizing that densely populated urban areas are undersupplied and are focusing on scaled down facilities for future growth. WalMart and Target, which built their businesses in recent decades by focusing on the suburbs, have dramatically changed course. After seeing the suburbs saturated with retail space and sales growth flatten, many retailers are now intensely focused on smaller store formats in urban locations to capitalize on one of the nation’s few underserved retail opportunities.

Governments, especially local officials, are recognizing the role urbanization plays in creating productive, vibrant, cultural and social spaces.

As Americans continue to weigh the trade-off between location-location-location and access-access-access, the country’s largest urban areas are looking more like a patchwork of urban nodes. This can mean more polycentric areas, with mini pockets of urbanism connected to each other by improved public transit options. This is one of the several factors driving urban growth. (Exhibit 3)

EXHIBIT 3: Key Trends Driving Urban Growth



Source: ULI Infrastructure 2014

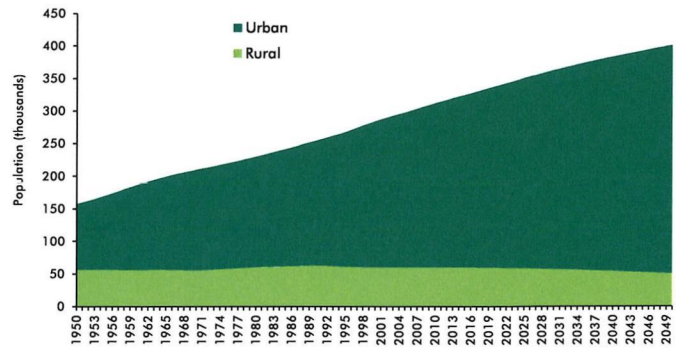
Researchers at MIT and NYU that study urban physics (analyzing urban variables such as crime and traffic to understand emerging patterns, problems and opportunities for change) say that offices need to be designed more like neighborhoods. Companies are phasing out conventional workspaces in favor of connected spaces that encourage innovation and collaboration.

POPULATION TRENDS

The pace of U.S. population growth is moderating. However, the U.S. has 39 counties with one million-plus people, and almost all of them are growing at a much faster rate than the nation (the counties that include Detroit and Cleveland are exceptions). Most of the U.S. population growth in the last few decades has occurred in urban locations. (Exhibit 4)

Metropolitan areas with five million or more residents increased on average by double-digit percentage rates between 2000 and 2010. The city that had the greatest increase in its downtown population (defined as within two miles of the central city's city hall) was Chicago, where 48,000 people moved into the city center. Runners-up include New

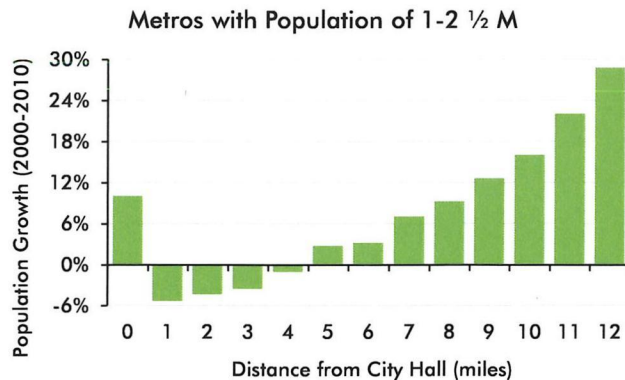
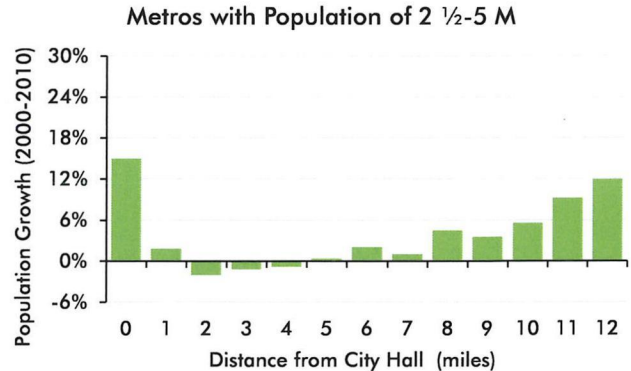
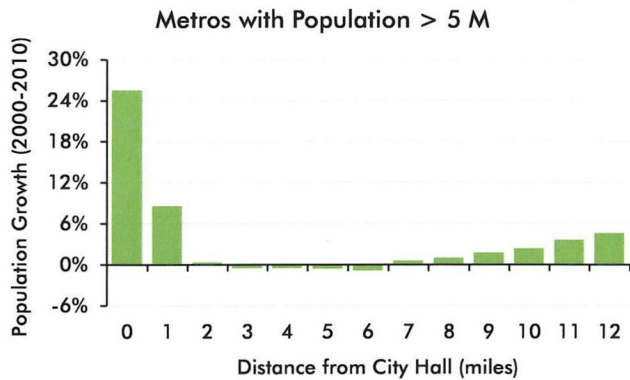
EXHIBIT 4: The U.S. Urban Population Will Continue to Grow



Source: United Nations

York, San Francisco, Philadelphia and Washington, D.C. The major population losers were the inner-suburbs. Thus, while downtowns and the more far-flung periphery areas showed population growth, it was the inner-suburbs that tended to decline. (Exhibit 5)

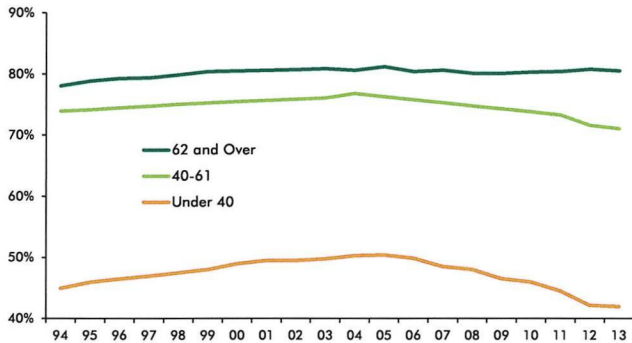
EXHIBIT 5: Recent Population Growth Has Been Concentrated in City Centers



Note: Calculations are based on the averages of all the metro areas and the average of all metro areas within each specified segment
Source: U.S. Census Bureau

The Department of Housing and Urban Development and the U.S. Census Bureau have released statistics saying that by 2025, only 10% of new households (ex: adult children leaving their parents' households, singles moving out of shared housing, etc.) will have children. Some forecasters have even said that by 2025 only 25% of all U.S. households will have children. (Exhibit 6)

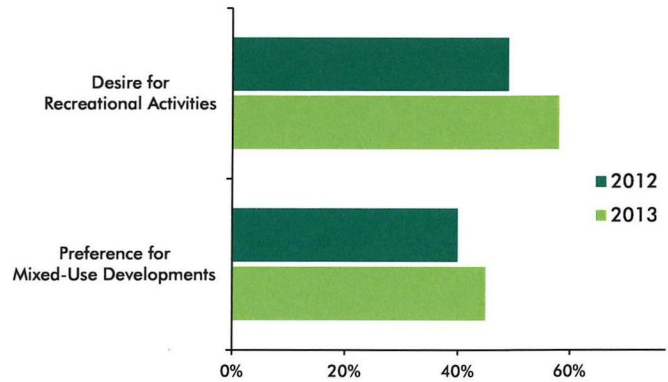
EXHIBIT 6: Homeownership Rate by Age of Family Head



Source: U.S. Census Bureau

There will definitely be demand for more detached homes in the future, but many of them will be closely clustered around urban nodes with walkable streets and superior amenities. The American Institute of Architects' 2013 Home Design Trends Survey shows an increased preference among all homeowners for mixed-use developments. (Exhibit 7)

EXHIBIT 7: What Homeowners Want

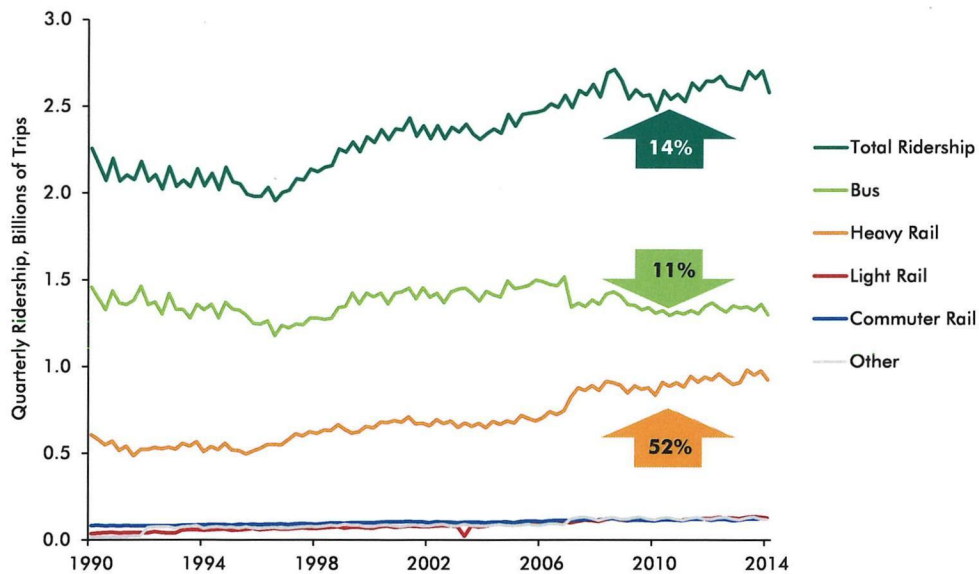


Source: American Institute of Architect's 2013 Home Design Trends Survey

PUBLIC TRANSIT

Public transportation use in the U.S. in 2013 rose to 10.7 billion trips – the highest number in 57 years. However, recent growth in public transit ridership is almost entirely attributable to increased heavy rail (subway) ridership, which is almost exclusively located in ultra-urban locations. Ridership on light rail, commuter rail and buses has increased at a much slower pace, or even declined, over the past decade. (Exhibit 8)

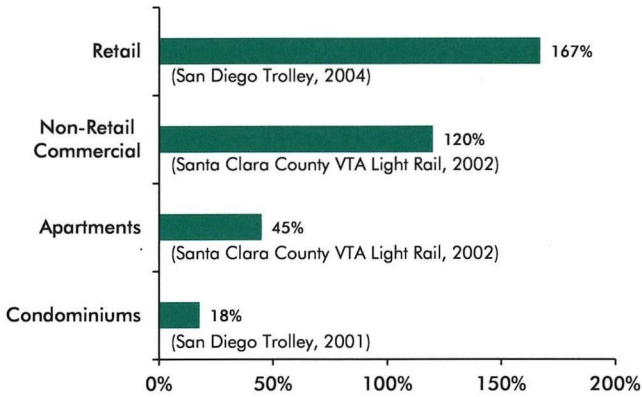
EXHIBIT 8: Transit Ridership



Source: APTA; % change represents cumulative change from 1990Q1 - 2014Q1

Studies have definitively shown that properties located near transit have higher values. This difference in property net income and market values from proximity to transit increases even further for suburban properties. (Exhibit 9 & 10)

EXHIBIT 9: Examples of Increased Property Values Following the Opening of Nearby Public Transit



Source: Center for Transit-Oriented Development, 2008

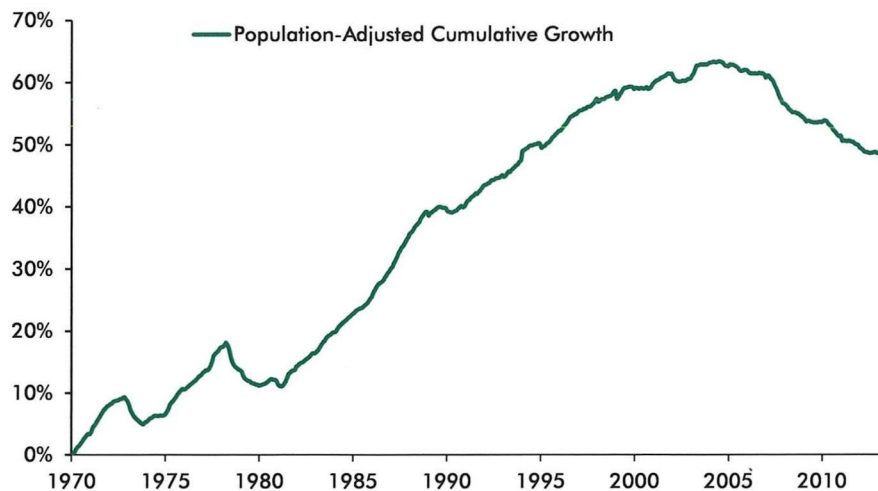
EXHIBIT 10: Properties Near Transit (1998-2008)

| | Suburbs | CBD |
|---------------|---------|---------|
| Net Income | +12.70% | +4.50% |
| Market Values | +16.20% | +10.40% |
| Cap Rates | -0.30% | -0.20% |

Source: "Investment Returns from Responsible Property Investments: Energy Efficient Transit-oriented and Urban Regeneration Office Properties in the US from 1998-2008," Pivo and Fisher (2008).

Car ridership in the U.S. has stopped increasing, and is actually trending down, when measured by vehicle miles driven and adjusted for population growth. (Exhibit 11)

EXHIBIT 11: Estimated Vehicle Miles Driven On All U.S. Roads



Source: Federal Reserve, dshort.com

THE DEBATE

The suburbs are not going away. Many Americans still want tree-lined streets, soccer leagues and tranquil cul-de-sacs. But they are also getting tired of punishing commutes and endless sprawl. More people are placing a higher value on cultural amenities and are shunning isolated, single-class communities. Popular culture frequently highlights the negative qualities of chain-store-laden, tract-housing-dominated suburban sprawl.

The indie rock band Arcade Fire took home a Grammy for "The Suburbs," an entire album dedicated to teen angst and isolation as felt by the band members after growing up in Houston's The Woodlands master-planned community; but that may just be what they felt at the time. Many of today's younger urban professionals may eventually be drawn to the suburbs as they begin to raise families and they search for top schools, a yard of one's own and more space for storage.

SUBURBAN CHANGES

Many suburbs are getting an urban makeover. Mixed-use development, thoughtful public space, transit options and community-focused, street-level development are allowing some suburban cities to redevelop themselves into more attractive communities.

Richard Florida, writing in *Urban Land*, describes what he calls "The Great Reset," the movement from simply creating denser communities to creating more people-friendly communities: "The Great Reset is not just about the intensification of cities but their extensification, as great metropolitan areas morph into even larger mega-regions. Our suburbs need to be reimagined and rebuilt as more walkable, human-scale, mixed-use places. They are the next arena and next agenda for large-scale place making."

More than half of Americans live in suburbs. Approximately 75% of postwar construction has happened in the suburbs. Diverse suburban neighborhoods in the U.S. now vastly outnumber diverse city neighborhoods. Many suburbs have created urban pockets by building high-quality public transit to ease traffic congestion and are encouraging mixed-use or high-rise construction instead of more single-family housing.

William Frey, one of the most respected demographers in the U.S., has written that the distinction between cities and suburbs is falling apart. He believes that suburbs are becoming more diverse ethnically, socioeconomically and in their real estate, with more housing and retail options in close proximity to office, flex space and other uses.

Furthermore, opportunities are arising as efforts to reduce our “carbon footprint” are becoming engrained into the culture of real estate investment management firms. The built environment is by far the largest contributor to greenhouse gas emissions, dwarfing both industrial production and automobile driving. Retrofitting and redeveloping suburban real estate has the potential to be very profitable while also helping firms achieve their goals for environmental stewardship.

There now numerous reports and websites that study and analyze walkability in U.S. cities. A study by George Washington University¹ indicates that metros found to have high walkable urbanism are models for the future development patterns of many – and possibly most – of the largest 30 U.S. metros. These trends suggest future demand for tens of millions of square feet of walkable urban development and hundreds of new walkable urban places. This demand would provide an economic foundation for the U.S. economy, similar to the building of drivable suburbs in the mid-to-late 20th century. The author writes that, “I believe the future, based on my research throughout the country, belongs to the urbanization of the suburbs.”

MILLENNIALS

Millennials, people born between the early eighties and late nineties, are driving the steady movement toward more compact suburban growth. This 80 million-member demographic is entering the market for housing and jobs, and they tend to favor the convenience of urban-style environments. (Exhibit 12)

Millennials are multi-modal; they choose the best transportation mode (driving, transit, bike or walk) based on the trip they are planning to take. Communities that attract millennials have a multitude of transportation choices and urban lifestyle components (whether they live in cities or in the suburbs). As a result, the top 15 markets will represent a larger percentage of the labor force in the future. (Exhibit 13)

EXHIBIT 12: Percentage Ranking at Top (6-10 score out of 10)

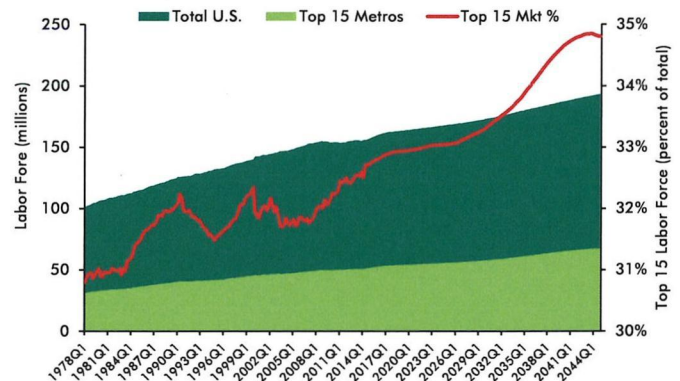
| | Millennials | Gen X | Baby Boomers |
|--------------------------------------|-------------|-------|--------------|
| Short distance to work and school | 82% | 71% | 67% |
| Walkability | 76% | 67% | 67% |
| Distance to family/friends | 69% | 57% | 60% |
| Distance to shopping/entertainment | 71% | 58% | 67% |
| Convenience of public transportation | 57% | 45% | 50% |

Source: ULI America in 2013 Survey

Millennials will dominate the workforce by 2015 and will comprise 75% of the workforce by 2030, according to the BLS. They are the workers that employers want to attract and retain – especially in the TAMI segment (technology, advertising, media and information businesses). The oldest millennials are approaching their mid-30s and are now in positions to start making decisions on office space.

Will millennials commit to cities as a place to remain, settle down and raise families? There is not yet enough evidence to say yes or no.

EXHIBIT 13: The Largest Metros Will Account For a Higher Share of Future U.S. Job Growth



Source: United Nations

Millennials have a stronger preference for city living and a high propensity to rent – factors that have contributed to urban gentrification, strong apartment demand and development activity in markets across the country. And while millennials tend to want to live alone, they are also highly social creatures: they want newer apartments with well-appointed indoor and outdoor common areas, coffee bars, communal grills and high-speed internet access in public areas.

¹ Foot Traffic Ahead: Ranking Walkable Urbanism in America’s Largest Metros; Christopher Leinberger and Patrick Lynch, George Washington University, 2014

The choice to live in cities is no longer economic; it is cultural. Millennials prefer to live downtown and closer to work. North America used to account for only one-third of the worldwide car sharing market in 2006. That share had increased to over 50% by 2012. (Exhibit 14)

EXHIBIT 14: Worldwide Car Sharing Services



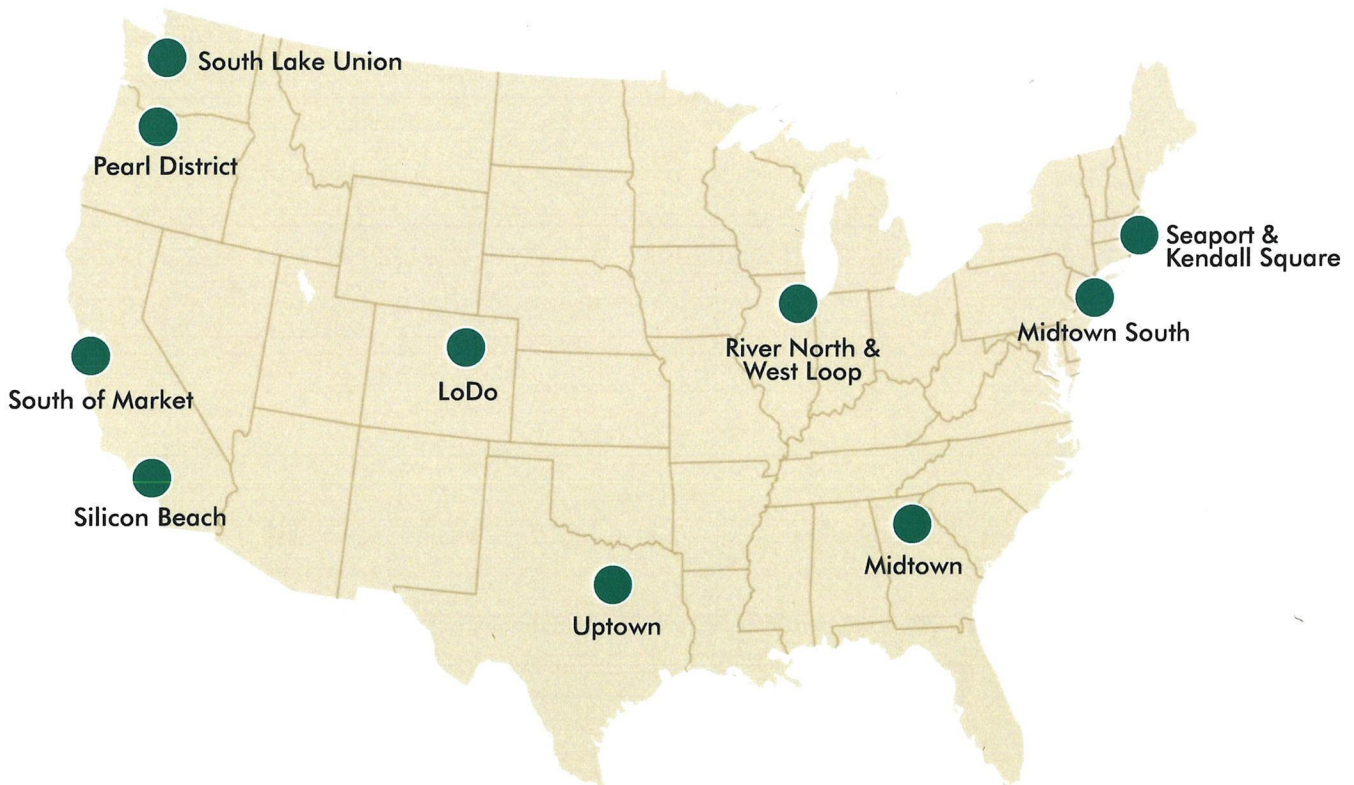
Source: United Nations

The cultural shift of millennials has not gone unnoticed by employers. Companies are opening offices in CBD adjacent locations so that employees can have the desired urban-amenitized lifestyle in close proximity to work. These areas

are rapidly growing in popularity and have now become known as “innovation” districts due to the high-concentration of industry-leading companies and vibrant startups. These districts have been historically underdeveloped, but cutting-edge companies are now embracing the alternative location as a way to break-out from the traditional CBD office space profile and to design creative, open-plan environments that promote collaboration. This trend is most prevalent in the millennial-driven high-tech industry where competition is fierce to attract and retain top talent. Many “innovation” districts now have lower vacancy rates than their respective metro average and even the CBDs. The growing corporate presence in “innovation” districts has led to a boom in apartment and retail development as well. (Exhibit 15)

Of course, cost is still an enormous challenge. Studies show that millennials may say they want to live in a nice building near Main and Main, but they frequently choose to live further away where they can actually afford the rent; and boomers also say they want to live near developments with a mix of shops, but they are focused on preservation of their capital and are not interested in taking on more expenses by moving to a city with a high cost of living. Developers should make their offerings attractive and appealing, but they cannot lose sense of costs and affordability as supply increases.

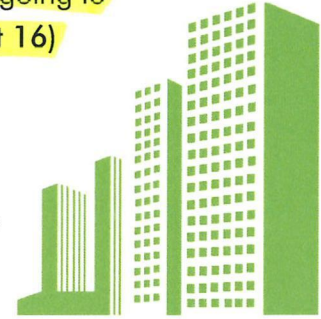
EXHIBIT 15: Key U.S. “Innovation” Districts



Source: CBRE Global Investors

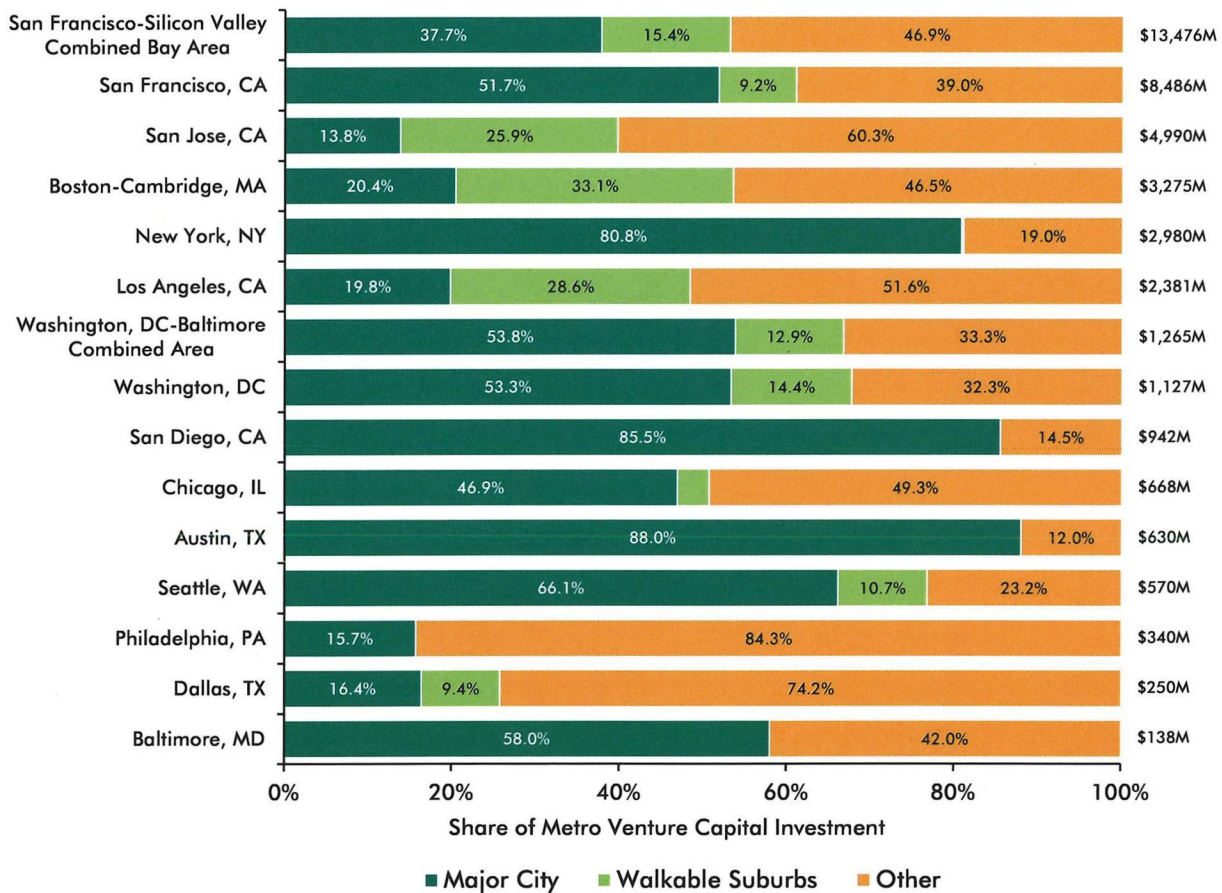
BENEFITS FROM CITIES

- More than 10% of global GDP growth through 2025 will come from large U.S. cities.²
- Suburban office parks are no longer attracting all of the newer and more innovative companies. The share of venture capital investment in the U.S. that is going to central city areas and to walkable suburban areas is growing. (Exhibit 16)
- 80% of the U.S. population lives in large cities, vs. less than 60% in Europe.²
- Three-fourths of the U.S. lead in per capita GDP over Western Europe is explained by differences in the regions' largest cities.²



²Urban America: U.S. Cities in the Global Economy; McKinsey Global Institute; April 2012

EXHIBIT 16: Share of Venture Capital Investment Going To Center Cities, Walkable Suburbs and Other Places



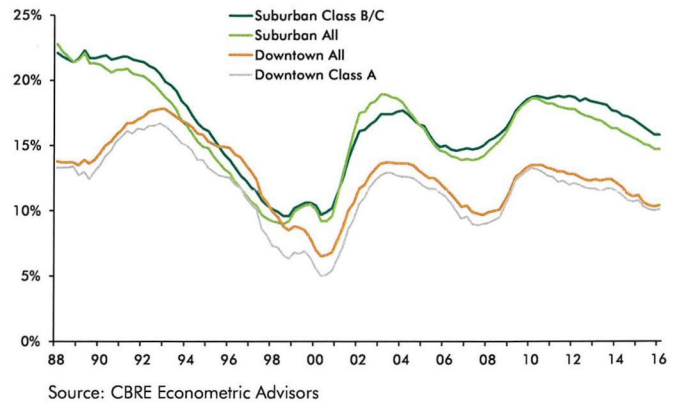
Sources: Martin Prosperity Institute; The Atlantic

IMPLICATIONS FOR COMMERCIAL REAL ESTATE

Urban commercial real estate has historically outperformed its suburban counterpart. High-rise apartment rents, located primarily in urban cores, have grown almost twice as fast as rents in garden-style apartments. A similar trend has persisted in downtown office versus suburban office. Strong rent growth and lower vacancies have given investors the confidence to deploy capital in the urban areas.

The spread between urban and suburban office cap rates, and high-rise versus garden-style apartments, are near the widest point in over 14 years. The prominence of urbanization will continue to fuel sustained demand for real estate in core, urban areas, which provides unique opportunities for real estate investors.

EXHIBIT 17: Office Vacancy Rates



There are three main factors that drive real estate investment values: land, buildings and tenants. Many businesses will continue to pay for property that provides access to a broad, skilled labor pool that is available in central locations. Urban office and apartments will be a perk for employees, and investors will continue to demand property in central business and “innovation” districts.

Although the macro trends support urbanization, urban investing is difficult and requires experience. Investors and developers will need to be selective in choosing a building or potential development site. Preferred locations for investment and development should show strong projections for solid demand, higher occupancy, strong rent growth, and greater marketability and liquidity.

Below are some key qualities to consider:

- A) Properties should be located on streets not roads. Streets have life, pedestrians, cyclists, tourists, workers, commuters, cyclists, etc. Roads convey cars from Point A to Point B.
- B) Some prime locations have handsome buildings with old bones and urban character that is unique in the metro, drawing in both millennials and boomers.
- C) Access to amenities and public transportation is vital for tenants and will drive long-term demand.

Investors and developers should focus largely on locations with supply constraints, whether from zoning, availability of sites, or fierce community opposition to densification. Find the locations that are expected to grow in population but that can no longer grow outward, where going vertical is an inevitable part of the long-term viability of the region.



OFFICE – WHERE AND WHAT TO BUY AND BUILD

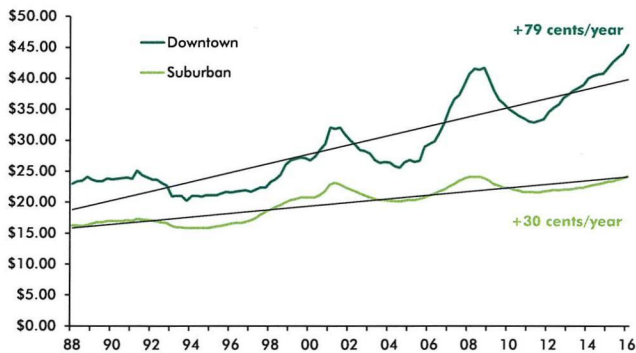
Location

- CBDs or “innovation districts” that provide work/live/play environments and attract business services and creative industries
- Suburban nodes that provide a highly amenitized “edge city” environment
- Readily accessible mass transit

Building Features

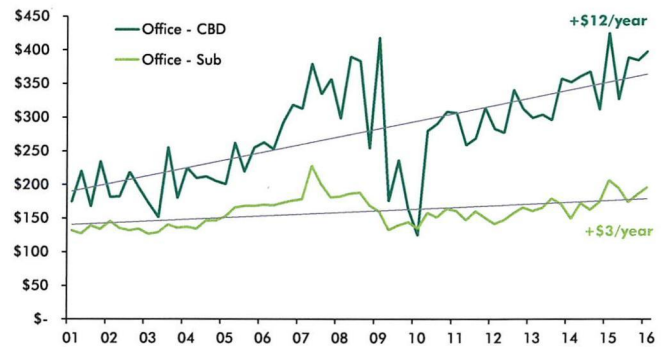
- Floor plates between 23k and 35k SF with limited obstructions to creating open-plan layouts
- High parking ratios for buildings not near mass transit
- Green, such as LEED certification, high HVAC efficiency and natural lighting
- Ability to provide on-site amenities e.g. fitness center, meeting/concierge facilities

EXHIBIT 18: Office Rents



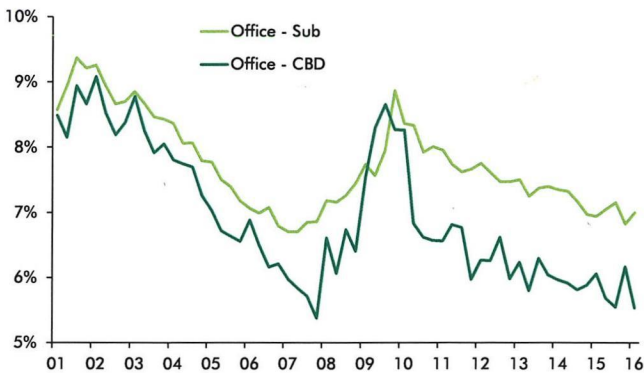
Source: CBRE Econometric Advisors

EXHIBIT 19: Office Price Per SF



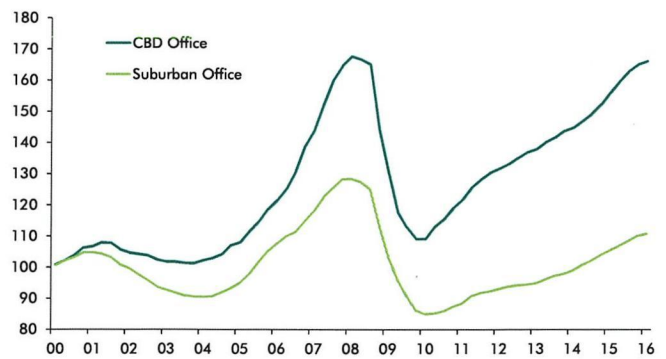
Source: Real Capital Analytics

EXHIBIT 20: Office Cap Rates



Source: Real Capital Analytics

EXHIBIT 21: Office Appreciation



Source: NCREIF, Q4 1999=100

APARTMENTS – WHERE AND WHAT TO BUY AND BUILD

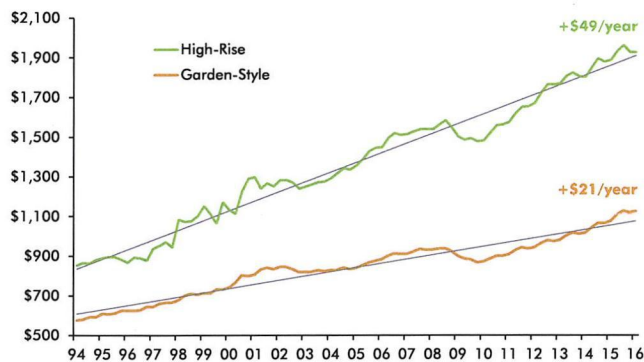
Location

- Major population centers in coastal markets where low housing affordability is a barrier to homeownership
- High population/job growth markets, primarily in the West and South
- Infill neighborhoods close to growing employment nodes or “innovation districts,” preferably with good transit access and quality school

Community Features

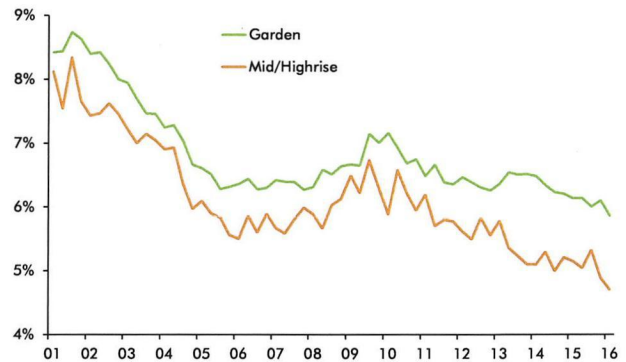
- “Lifestyle” apartments that appeal to affluent renters-by-choice
- Comprehensive amenity package including resort pool, club house, fitness center, social areas with Wi-Fi, concierge services and “green” features
- Building height, unit mix and size, and parking provision that’s competitive in the market area
- Upgraded unit features such as granite countertops, stainless steel appliances, washer/dryers and high ceilings

EXHIBIT 22: Apartment Rents



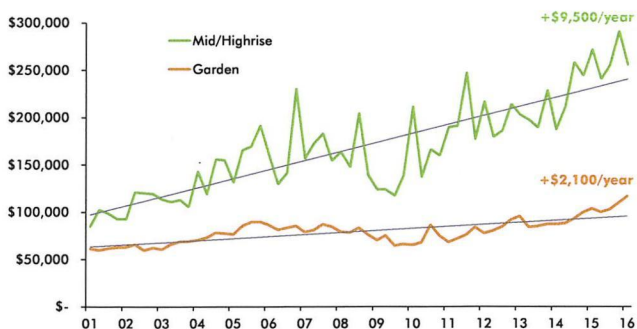
Sources: CBRE Econometric Advisors; CBRE Global Investors
 Note: Data after 2002 is from Axiometrics, prior data is constructed using growth rates from MPF Research

EXHIBIT 23: Apartment Cap Rates



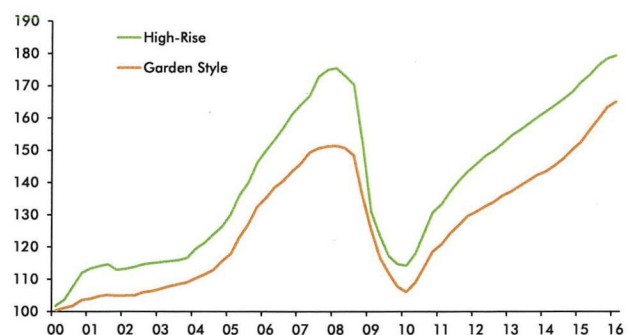
Source: Real Capital Analytics

EXHIBIT 24: Apartment Price Per Unit



Source: Real Capital Analytics

EXHIBIT 25: Apartment Appreciation



Source: NCREIF, Q41999=100

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Summer 2017

The Mighty Urban-Suburban Submarket

Key Takeaways

- Suburban office submarkets with urban characteristics are in the best position to capture occupier demand, and may provide unique opportunities for occupiers to secure space at lower rents and for investors to buy at lower prices in areas that are poised for future growth.
- These “urban-suburban” submarkets are characterized by live-work-play dynamics, including higher densities of office space, housing and retail, as well as transportation access and other amenities. Examples of established urban-suburban markets that offer many or all of these attributes include the New Jersey Waterfront, Santa Monica in Los Angeles and Palo Alto in the San Francisco Bay Area.
- Occupancy rates and asking rents in emerging urban-suburban submarkets are typically on par with the broader suburban markets in which they are located, while established submarkets tend to outperform. Rents in more than 50% of the most established submarkets also exceeded their downtown counterparts.
- Net absorption and construction activity have been disproportionately concentrated in urban-suburban submarkets relative to their share of suburban office inventory.



The so-called downfall of the suburban office sector has been a common narrative in recent years. In CBRE’s Suburban Office Trends series, we determine the validity of this claim in the U.S. by analyzing suburban office performance during the current economic expansion. We also explore the characteristics of successful suburban office markets/submarkets, the adaptation of 20th century office markets and buildings for 21st century tenants, and the impact of long-term demographic shifts on suburban office demand.

INTRODUCTION

As detailed in the first installment of CBRE’s Suburban Office series, suburban office markets in the U.S. have performed better than is commonly perceived. But not all suburbs are on equal footing. In this second installment of the series, we break down the traditional CBD/suburban boundaries to take a deeper look at suburban submarkets with

urban characteristics. These “urban-suburban” submarkets address a paradox in office market dynamics. On the one hand, the preference of both tenants and employees for office locations in walkable areas with nearby housing, retail and entertainment options—as well as convenient transportation access—continues to strengthen.

Yet the reality is that most Americans live in suburban areas and not the urban cores where these kinds of workplace dynamics are most common. As a result, suburban office markets that can provide an urban-like live-work-play environment within areas where people already live are well positioned to capture strong demand from office users.

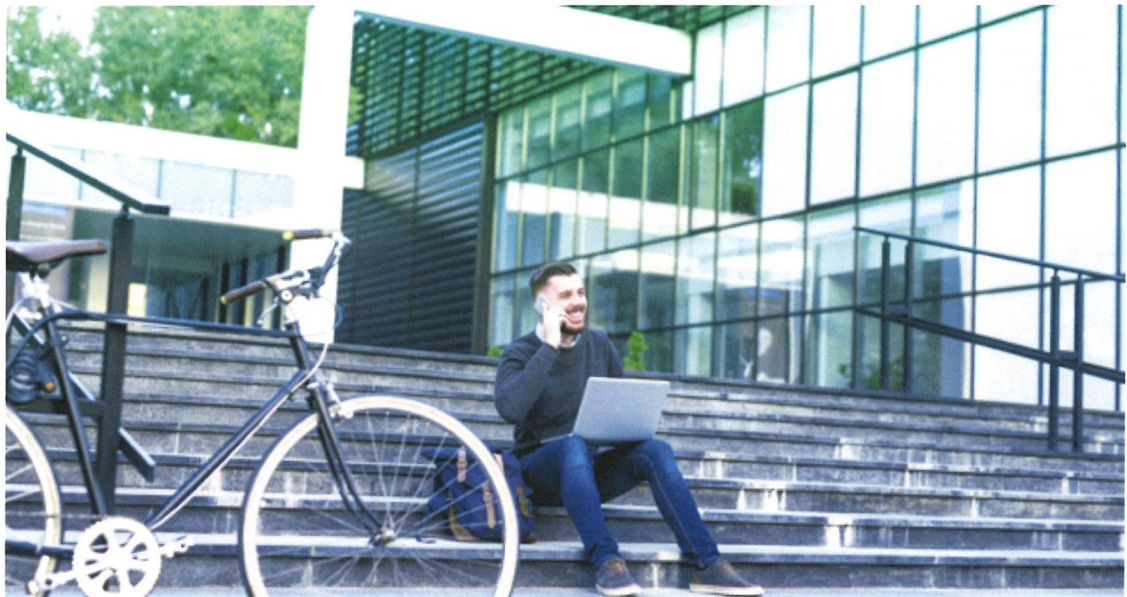
These urban-suburban submarkets come in many varieties. Some are close-in suburbs with easy access to the CBD, which benefit from spillover effects of activity in the downtown area. Some are truly suburban towns and cities with walkable downtowns or amenity-rich mixed-use developments that provide an urban-like environment but don't require a long commute, such as the rapidly developing Plano/Frisco area north of Dallas.

Within each of the 25 largest suburban office markets* covered by CBRE Research, we identified the submarkets that best demonstrate the live-work-play dynamics associated with urban environments.

We further divided this set of submarkets into those that are currently the most in-demand and those that are up-and-coming, referred to as "established" and "emerging" submarkets.

We examined the attributes that are shared by these urban-suburban submarkets and also took note of differences between those that are established and emerging. This attribute analysis was then reinforced using data from CBRE Econometric Advisors' Live-Work-Play (LWP) Index. Finally, we compared the performance of urban-suburban submarkets with other suburban submarkets wherein these attributes are less developed, as well as to downtown submarkets.

As fundamentals in the U.S. suburban office market continue to strengthen, this analysis is intended to help both investors and occupiers recognize the characteristics of suburban submarkets that are most likely to be attractive to today's office workers and thus most competitive in terms of market performance.



*Note: Chicago was excluded from the national roll-ups due to the large size of its suburban submarkets, which resulted in submarket statistics that were not representative of trends within its live-work-play micromarkets.

Attributes of Urban-Suburban Submarkets

The attribute analysis is based on a survey of CBRE Research professionals in the 25 largest suburban markets, which asked them to identify what factors set apart the emerging and established submarkets that they identified from the other suburban submarkets in their respective metro areas. The researchers focused on the predominant factors that make these submarkets the premier live-work-play areas within the market rather than providing a comprehensive list of every characteristic of a given submarket.

The most common attributes of both established and emerging live-work-play submarkets are the presence of retail, office and housing options. Each of these three elements was explicitly mentioned as a contributing factor to the success of more than 50% of all the urban-suburban submarkets surveyed. Other attributes that were mentioned about equally for established and emerging submarkets were employment opportunities and walkability. Many of the survey respondents

referenced specific large employers, such as corporate campuses, medical centers or colleges/universities. The technology industry has a fairly modest impact on urban-suburban submarkets at this point and was much more often cited for established submarkets than emerging ones (12% vs. 4%), reflecting many tech companies' continued preference for urban locations.

Other attributes were more likely to be associated with either established or emerging submarkets. When describing established submarkets, researchers were more likely to mention amenities, including entertainment and recreational offerings (43% vs. 19% of emerging submarkets), restaurants and grocery stores (30% vs. 18%) and public transportation access (40% vs. 33%). Moreover, for the one-third of emerging submarkets where researchers did reference public transportation, many did so in the context of ongoing or planned transit projects, whereas the established markets typically had existing transit options.

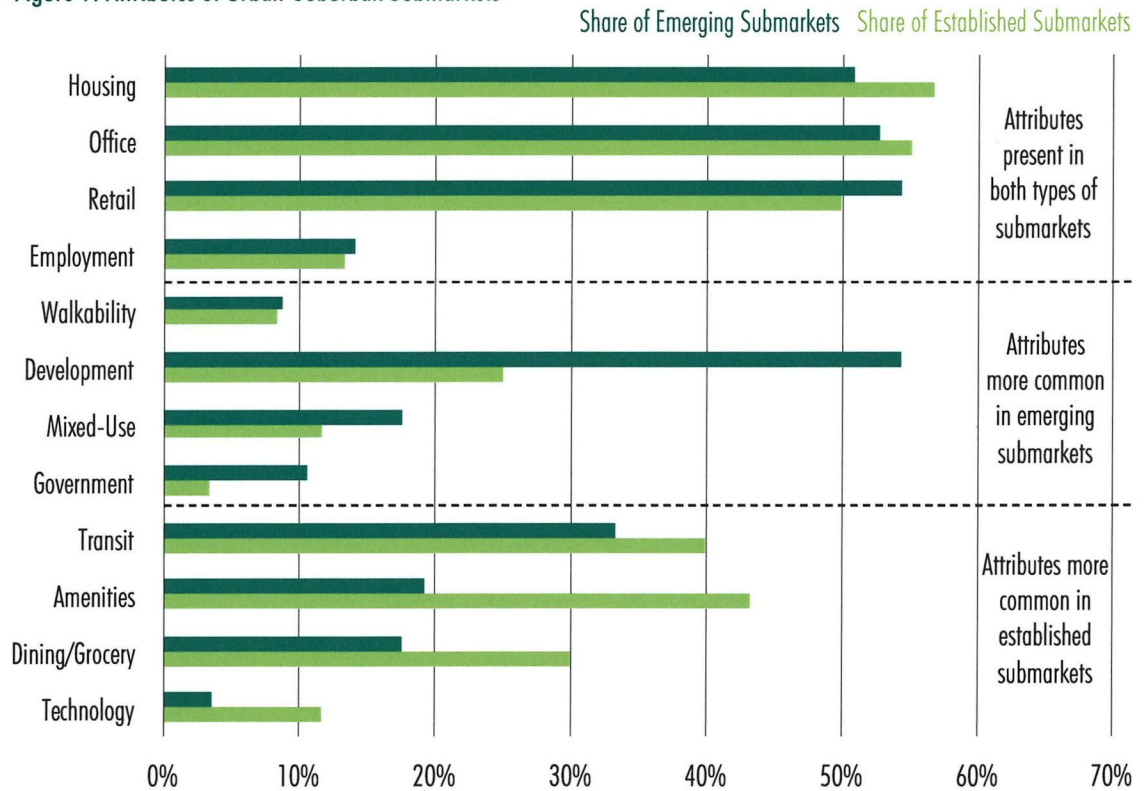


When describing emerging submarkets, researchers were more likely to note attributes that reflect the transitional, up-and-coming nature of these areas. Development, construction or renovation were mentioned as a key factor shaping dynamics in 54% of the emerging submarkets surveyed, compared with just 25% of established submarkets. Emerging submarkets also were mentioned more than established submarkets in the context of mixed-use projects (18% vs. 12%). This pattern makes sense, as mixed-use projects often serve as a catalyst for additional development in a particular area,

spurring interest in the surrounding neighborhood and eventually driving demand to spill over into the broader submarket. Thus, this is not to suggest that mixed-use projects do not also exist in established submarkets, but rather that these kinds of developments have become less central to the identity and performance of the submarket over time.

Finally, emerging submarkets were more often cited for utilizing government incentives, zoning changes or other public commitments to assist development (11% vs. 3%).

Figure 1: Attributes of Urban-Suburban Submarkets



Note: Data represents percentage of submarkets identifying attribute as a predominant factor in local live-work-play dynamics.

Source: CBRE Research, Q1 2017.

Overlap with CBRE EA's LWP Index

A recently released index by CBRE Econometric Advisors (CBRE EA) measures live-work-play (LWP) dynamics across more precise geographical boundaries than the traditional CBD/suburban breakdowns. This LWP index employs an algorithm that links proprietary data on population and housing density, concentration of office inventory, and concentration of retail space. Overlaying the submarket boundaries used in this analysis with average LWP index scores confirms that the urban-suburban submarkets identified in the 25 largest suburban markets have more urban characteristics than other suburban submarkets within those metros.

On average, the LWP index score was 0.25 for emerging submarkets in the top metros, 0.36 for established submarkets and 0.11 for other

suburban submarkets (higher scores equal higher urbanicity). Downtown submarkets within these metros had an average score of 0.82. However, these averages mask the full range of index scores achieved by the urban-suburban submarkets. For example, the highest index score for an established submarket was 1.87 (Bellevue CBD in the Seattle metro), exactly equal to the highest downtown index score (Market Street East in Philadelphia). The highest score for an emerging submarket was not far behind at 1.53 (Tacoma CBD, also in the Seattle metro).

The highest established submarket index scores were recorded for San Francisco, Tampa and Houston. The highest emerging submarket index scores were recorded for San Francisco, Northern Virginia and Houston.

Figure 2: Average LWP Index Scores by Submarket Type, Top Metros

| Metro | Emerging Submarkets | Established Submarkets | Other Suburban Submarkets |
|-------------------|---------------------|------------------------|---------------------------|
| San Francisco | 1.10 | 1.17 | 0.29 |
| Houston | 0.75 | 0.78 | 0.33 |
| Atlanta | 0.47 | 0.67 | 0.19 |
| Silicon Valley | 0.46 | 0.68 | -0.02 |
| Northern Virginia | 0.85 | 0.12 | 0.17 |
| Kansas City | 0.22 | 0.73 | 0.09 |
| Tampa | n/a | 0.94 | 0.09 |
| Detroit | 0.20 | 0.71 | 0.25 |

Note: Metros ranked by highest urban-suburban index score (emerging plus established).
 Source: CBRE Econometric Advisors, CBRE Research, Q1 2017.

Performance Comparison

Relative to the overall suburban markets in which they are located, urban-suburban submarkets have relatively high occupancy rates and asking rents. For emerging urban-suburban submarkets, the building momentum has yet to fully show up in market statistics, and performance in these submarkets is roughly on par with the overall suburban average. Established submarkets, however, not only tend to outperform the broader suburbs but also rival downtown submarkets in many metros.

As of Q1 2017, the vacancy rate for the top 25 largest suburban markets tracked by CBRE Research was 15.0%. Within the urban-suburban submarkets, the emerging vacancy rate was slightly higher at 15.3%, but the established vacancy rate was a full 120 basis points lower at 13.8%. The vacancy rate for the downtown submarkets within the same 25 markets was 12.8% as of Q1.

The average rent for the 25 largest suburban markets in Q1 was \$27.79 per sq. ft. (weighted by vacant sq. ft.). Established urban-suburban submarkets are currently priced at a premium of 14.8% over the broader suburban market, with an average rent of \$31.90 per sq. ft. In contrast, rents in emerging submarkets have yet to surpass the overall suburban average but were essentially equal at \$27.46 per sq. ft.

In aggregate, all types of suburban submarkets have lower asking rents than the weighted downtown average for this set of markets, which was \$35.90 per sq. ft. in Q1. At the metro level, however, this is not always the case. In just over half the markets, the average weighted rent for established submarkets was higher than the downtown rent, including five markets in which the average established rent exceeded the downtown rent by more than 10% (Silicon Valley, Los Angeles, Phoenix, Philadelphia, and San Diego).

Figure 3: Q1 2017 Average Rent and Vacancy Rate by Submarket Type

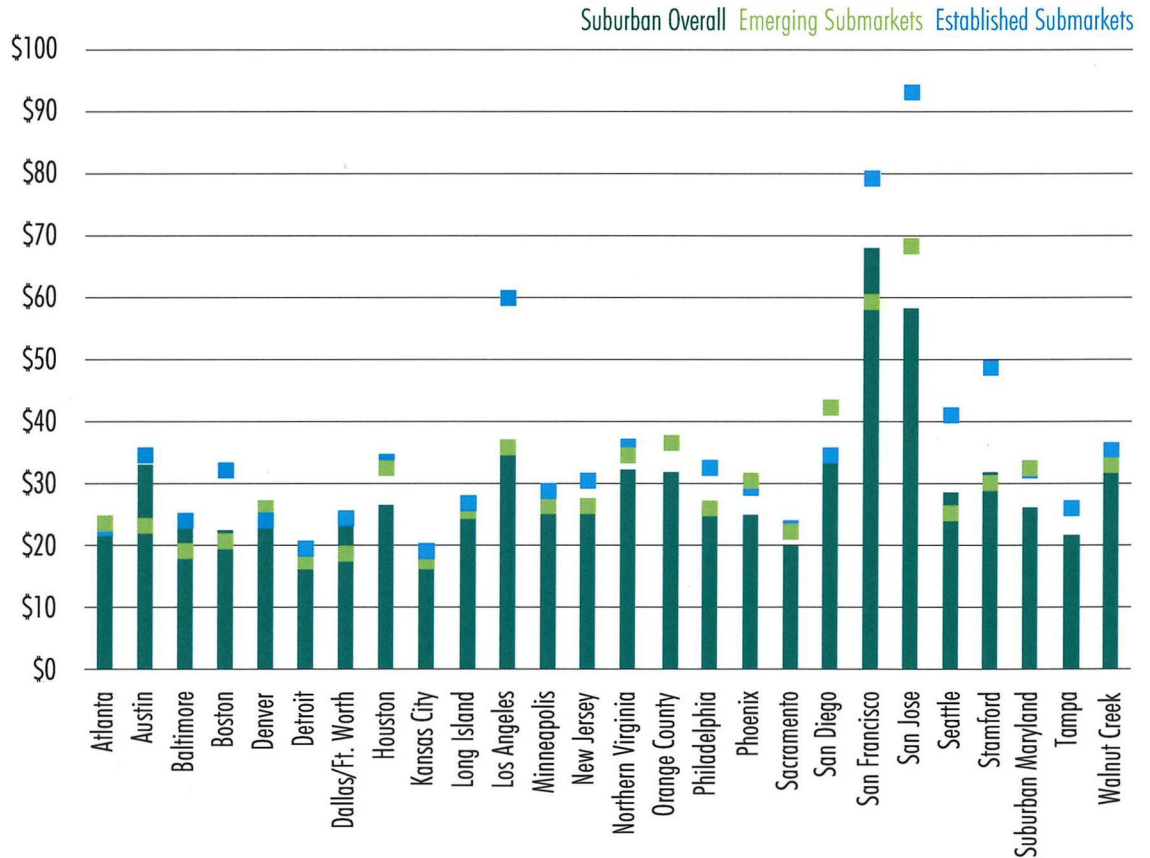


Note: Overall suburban averages include only top 25 largest suburban markets; downtown averages include only the downtown submarkets of the same 25 markets.
 Source: CBRE Research, Q1 2017.

This analysis reveals two important points. First, established urban-suburban submarkets have the potential to command rents that are at least as high, if not higher, than downtown rents, reflecting strong tenant demand for these locations. Second, emerging urban-suburban submarkets have the potential to become

established submarkets, presenting unique opportunities for occupiers to secure space for lower rents and for investors to buy for lower prices in areas that are poised for future growth.

Figure 4: Q1 2017 Average Rent, Urban-Suburban Submarkets vs. Suburban Overall



Note: No emerging submarkets were identified in Tampa; no established submarkets were identified in Orange County
 Source: CBRE Research, Q1 2017.

Construction & Absorption

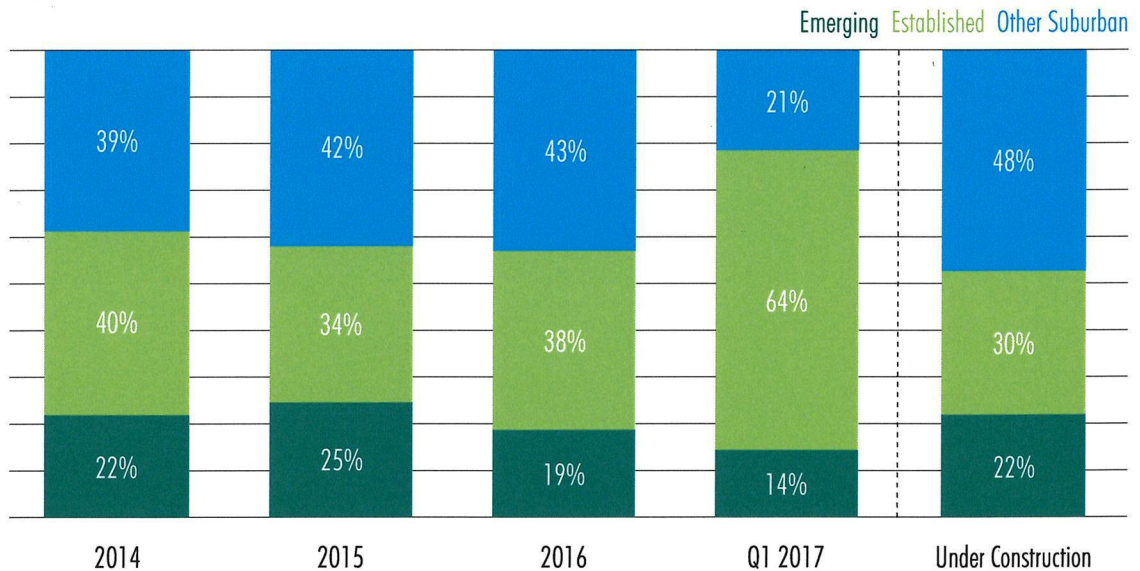
As demand for space in urban-suburban submarkets increases, these areas have a disproportionate share of construction activity relative to their share of total suburban office inventory. Although urban-suburban submarkets account for 46% of total inventory (20% emerging and 26% established) across the 25 largest suburban markets surveyed, they recorded on average 59% of construction completions from 2014 through 2016. In Q1 2017, this share rose to 79% of total suburban completions.

Established submarkets have been the driver of construction activity over the past three years, while completions in emerging submarkets have been roughly proportionate to their share of inventory. Trends are similar for net absorption. Established submarkets accounted for about one-third of total net absorption in the top 25 suburban markets during the past three years,

while emerging submarkets accounted for 18% on average.

Looking ahead, the amount of new office construction currently underway in urban-suburban submarkets remains slightly outsized relative to their share of inventory. Emerging submarkets account for 22% of total square footage under construction in the top 25 suburban markets and established submarkets account for 30%. In certain metros, these shares are much higher. Urban-suburban submarkets account for 100% of the suburban office space currently under construction in Sacramento, Minneapolis/St. Paul, Kansas City and Austin. In Orange County, Phoenix and Los Angeles, the amount of space under construction in urban-suburban submarkets is between two and four times the share of inventory.

Figure 5: Total Construction Completions, Urban-Suburban vs. Other Suburban Submarkets

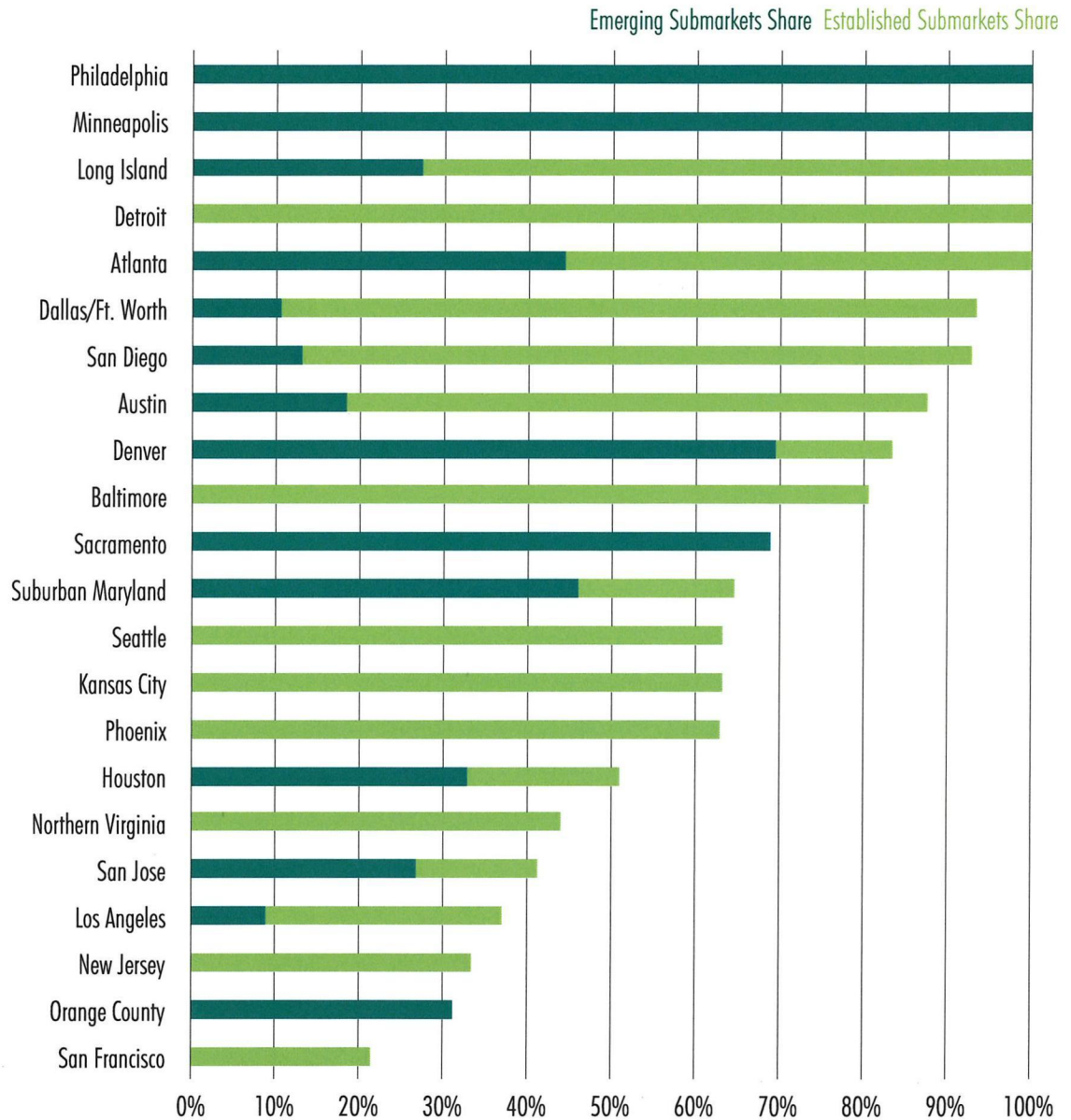


Note: Data represent shares for the top 25 suburban markets. Some numbers may not total due to rounding. Source: CBRE Research, Q1 2017.

Most of these metros also had disproportionate shares of completed construction concentrated in urban-suburban submarkets over the past three years. In all but four metros, the share of total

completions since 2014 located in urban-suburban submarkets exceeded the share of inventory, and in 10 metros these submarkets accounted for 80% or more of all suburban office completions.

Figure 6: Share of Suburban Construction Completed in Urban-Suburban Submarkets, 2014 to Q1 2017



Note: Boston is excluded; no suburban construction was completed in Stamford, Tampa, or Walnut Creek
 Source: CBRE Research, Q1 2017.

OUTLOOK

Even as growth in the overall suburban office market is expected to moderate in the near term, CBRE Research believes that the performance of some suburban areas will continue to strengthen. Steep rental rates and an increasingly limited supply of quality space, especially in large blocks, in downtown submarkets will continue to make more tenants look for office space in suburban markets. Moreover, as more millennials age and begin families, many will eventually move to the suburbs, and office locations that can provide the urban characteristics this pool of workers has grown accustomed to will be in highest demand.

As these trends unfold, established urban-suburban submarkets offer investors and occupiers a relatively low-risk alternative to downtown office space, as fundamentals in these submarkets already outperform the suburbs overall and, in many metros, rival the CBD. Alternatively, emerging urban-suburban submarkets offer those with longer-term strategies an opportunity to secure space in up-and-coming areas while there are still more options to choose from and purchase prices and rents are more affordable.



Urban-Suburban Submarkets in Top 25 Suburban Markets

| Market | Emerging | Established |
|-----------------------------|------------------------------|------------------------|
| Atlanta | Central Perimeter | North Fulton |
| | Northlake | |
| | Cumberland | |
| Austin* | East Downtown (East) | The Domain (Northwest) |
| | Riverside Corridor (South) | Southwest |
| Baltimore | Baltimore County East | Columbia |
| | Hunt Valley | |
| Boston | Framingham/Natick | Burlington |
| | Quincy/Braintree | Somerville |
| | Malden/Everett/Chelsea | Waltham |
| Denver | Denver Tech Center | Cherry Creek |
| | Northwest | Greenwood Plaza |
| Detroit | River North | West |
| | I-275 Corridor | Ann Arbor |
| Dallas/Ft. Worth | Rochester | Birmingham/Bloomfield |
| | Southfield | Troy |
| | Mid-Cities | Far North Dallas |
| Houston | North Ft. Worth | Las Colinas |
| | South Ft. Worth | Richardson/Plano |
| | East | Allen Parkway |
| Kansas City | Energy Corridor | The Woodlands |
| | Greenway Plaza | West Loop/Galleria |
| | South Kansas City | North Johnson County |
| Long Island | Central Nassau | South Johnson County |
| | Central Suffolk | Western Nassau |
| Los Angeles | El Segundo | Western Suffolk |
| | Glendale | Culver City |
| | Venice/MDR | Playa Vista |
| Minneapolis/St. Paul** | East Bloomington (494) | Santa Monica |
| | | West End (394) |
| New Jersey | | Centennial Lakes (494) |
| | Morristown | Urban Essex/Newark |
| Northern Virginia | Palisades | Waterfront |
| | Ballston | Reston |
| | Crystal City | Rosslyn |
| Orange County | Herndon | Tysons |
| | Costa Mesa | |
| Philadelphia | Irvine Spectrum | |
| | Exton/West Chester | Bala Cynwyd |
| | King of Prussia/Valley Forge | Conshohocken |
| Phoenix | Plymouth Meeting | Main Line |
| | Camelback Corridor | Downtown Scottsdale |
| | | Downtown Tempe |
| Sacramento | | Kierland |
| | Campus Commons | Midtown |
| | Elk Grove | Roseville |
| San Diego | Hazel/Folsom | South Natomas |
| | Del Mar Heights | Carlsbad |
| | South San Diego | Mission Valley |
| San Francisco | Sports Arena/Point Loma | UTC |
| | San Mateo | Palo Alto |
| San Jose | | Redwood City |
| Seattle | Sunnyvale | Mountain View |
| | Bel-Red | Bellevue CBD |
| Stamford | Bothell | Kirkland |
| | Tacoma CBD | Redmond |
| | Fairfield Central | Greenwich CBD |
| Suburban Maryland | | Stamford CBD |
| | Rockville | Bethesda/Chewy Chase |
| Tampa | | North Bethesda |
| | | St. Petersburg CBD |
| Walnut Creek/I-680 Corridor | | Westshore |
| | San Ramon | Dublin |
| | | Walnut Creek |

*Emerging statistics for East and South submarkets; established statistics for Northwest and Southwest submarkets

**Emerging statistics for 494 submarket; established statistics for 394 submarket

Note: Listed submarkets are those identified by CBRE Research as the primary live-work-play areas and do not necessarily represent every submarket with LWP characteristics in the metro area.

Source: CBRE Research, Q1 2017.

To learn more about CBRE Research, or to access additional research reports, please visit the Global Research Gateway at www.cbre.com/researchgateway.

Additional U.S. Research from CBRE can be found [here](#).

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SUBURBAN OFFICE OBSOLESCENCE

QUANTIFYING CHALLENGES AND OPPORTUNITIES

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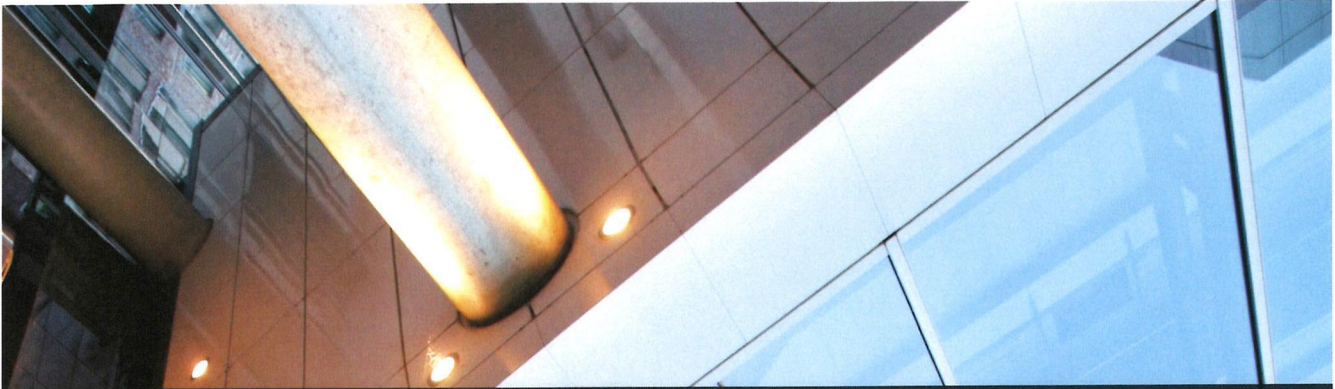


TABLE OF CONTENTS

| | |
|-----|---|
| I | THE CHALLENGE OF OFFICE ASSET OBSOLESCENCE PAGE 4 |
| II | OUR APPROACH TO QUANTIFYING OBSOLESCENCE PAGE 6 |
| III | INCURABLE VS. CURABLE OBSOLESCENCE: THEIR IMPACTANCE TO OWNERS, PROSPECTIVE INVESTORS, AND TENANTS PAGE 7 |
| | QUANTIFYING SUBURBAN OBSOLESCENCE: A DEEP DIVE INTO FIVE REPRESENTATIVE U.S. SUBMARKETS PAGE 9 |
| | SAN FRANCISCO BAY AREA, CALIFORNIA; SANTA CLARA SUBMARKET PAGE 10 |
| | DENVER, COLORADO; SOUTHEAST SUBURBAN SUBMARKET PAGE 12 |
| | CHICAGO, ILLINOIS; OHARE SUBMARKET PAGE 14 |
| | WASHINGTON, DISTRICT OF COLUMBIA; RESTON/HERNDON VIRGINIA SUBMARKET PAGE 16 |
| | NEW YORK, NEW YORK; PARKWAY NEW JERSEY SUBMARKET PAGE 18 |
| | CONCLUSION: WHAT CAN SUBURBAN OFFICE OWNERS, PROSPECTIVE INVESTORS, AND TENANTS LEARN FROM THE OBSOLESCENCE CHALLENGE? PAGE 20 |
| V | ACTION STEPS FOR OWNERS AND POTENTIAL INVESTORS PAGE 21 |
| | ACTION STEPS FOR TENANTS PAGE 21 |
| VI | DECISION MAKING FLOW CHART: IS MY OFFICE BUILDING OBSOLETE? PAGE 22 |



KEY FINDINGS

- Obsolescence of office space is a natural process, underway since modern office buildings were introduced in the 19th century. However, this process has accelerated in the 21st century due to rapid changes in the way tenants use office space, in part brought about by technology and changes in the organizational structure of the office environment, and accelerated further by economic considerations coming out of the Great Recession.
- We find degrees of obsolescence – from buildings in the early stages that can be cured with prudent retro-fitting, to buildings completely obsolete and in need of repurposing.
- Based on a study of five representative suburban submarkets from coast to coast we conclude that 14% to 22% of the suburban inventory is in some stage of obsolescence. While one outlier submarket's inventory was 8% obsolete, we believe this is not representative of the bulk of suburban markets in America.
- If 14% to 22% of the U.S. suburban inventory is obsolete, that suggests that between 600 million and 1 billion SF in the 50 largest U.S. metros is not competitive in today's market, equivalent to approximately 7.5% of the entire U.S. office inventory.
- There are many factors that signify obsolescence. Some are curable while others are not. We have identified six quantifiable factors. We believe that curable factors include amenities, age (via renovation), and parking (although the last of these is not always curable). Incurable factors (or at least incurable without massive expense) include location, floor plate size, and building size.
- We find that key tenant preferences vary by market, and that is what has driven this analysis. However, location (relative to mass transit and highways) and access to building and neighborhood amenities appear to be a common theme among tenant preferences nationwide.
- Proactive owners, prospective investors, and tenants each can leverage obsolescence to their advantage.

I THE CHALLENGE OF OFFICE ASSET OBsolescence

In the recovery period that has followed the Great Recession of 2007-2009, most discussion of the U.S. office market has focused on demand – or the lack of it. With concern over slow employment, growth in office-using sectors of the economy and deflation (the reduction in square feet leased per worker), modest levels of demand have resulted in a slow comeback for office space. That is not the case everywhere – some metro areas, such as San Francisco and Boston, boast tight office market conditions in 2015, with low vacancy rates and rapidly rising rents. Overall, however, the return to owner-favored market conditions has been a gradual one, with demand unlikely to match the peak levels of prior expansion cycles.

Least in this concern over demand is what the condition of the existing office supply means for the future of the market. As the needs of the modern tenant have become increasingly clear – often defined as Trophy or Class A office space that is proximate to mass transit and with robust in-building amenities – older properties are challenged to compete. In particular, as tenants prioritize walkable, “urban” office space, owners of suburban properties – especially those in

1980s-era campus settings – are increasingly finding their assets to be obsolete. Some of those assets are *incumbently obsolete* – due to factors such as location or floor plate size. Increasingly they simply do not offer the experience most of today’s tenants are seeking, and no feasible investment in the asset is likely to change that status. Others are *cureably obsolete* – with the right investment in amenities and building systems, the asset may be brought up to modern standards, allowing it once again to compete for tenants.

There is a *spectrum of obsolescence* as shown in the flow chart at the back of this report, and some outdated properties may still appeal to tenants who are very value-conscious or who are seeking a very specific type of space. Overall, however, buildings near the incurably obsolete end of the spectrum are candidates for repurposing – conversion to other uses.

Obsolescence is a problem of massive scale. As shown in the graph below, approximately two-thirds of U.S. office buildings are at least 25 years old, with about half of that share built during the boom decade of the 1980s. The other half was built before that decade began. Of the properties that are at least 25 years old, 2.8% are less than 5% leased. In fact, 2.4% of

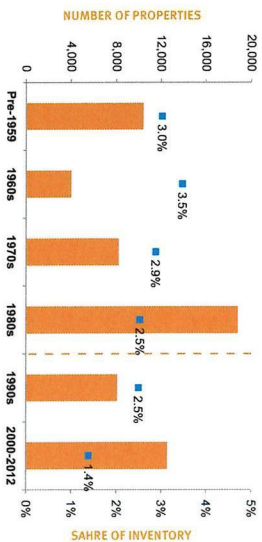
those older properties are completely vacant. Put another way, 1,169 U.S. office properties totaling 95.2 million square feet of space may be wholly non-competitive in today’s market based on age and leasing performance.

These figures just hint at the scale of the challenge – in addition to the properties that are largely or completely vacant, there are thousands of other office buildings (many Class B or C) that are partially leased but not able to attract new tenancy due to physical or locational deficiencies. In fact, as shown in the graph on the following page, 7.3% of U.S. office properties that were built before 1990 are less than 50% leased. What can the owners of non-competitive properties do to re-establish the value of their assets?

“PUT ANOTHER WAY, 1,169 U.S. OFFICE PROPERTIES TOTALING 95.2 MILLION SQUARE FEET OF SPACE MAY BE WHOLLY NON-COMPETITIVE IN TODAY’S MARKET BASED ON AGE AND LEASING PERFORMANCE.”

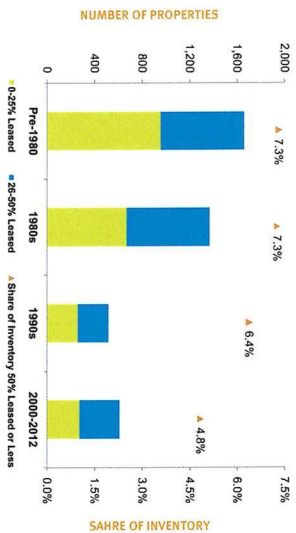
Our goal in this study is two-fold:

- Examine five major U.S. office submarkets that highlight the expanding problem of obsolescence in the suburban office inventory, and quantify the extent of the threat to those submarkets’ future competitiveness.
- Use this research to generate recommendations for owners, prospective investors, and tenants on how to leverage obsolete office assets.



Note: Properties built from 2013 to the present are considered to be in the following categories per reporting from the source. Source: CoStar, NBER Research, September 2015.

AMERICA’S AGING OFFICE INVENTORY UNDERPERFORMING PRODUCT BY YEAR BUILT



Note: Properties built from 2013 to the present are considered to be in the higher age categories as outlined from this study. Source: CoStar, NBER Research, September 2015.

A WORD ABOUT “OBsolescence”

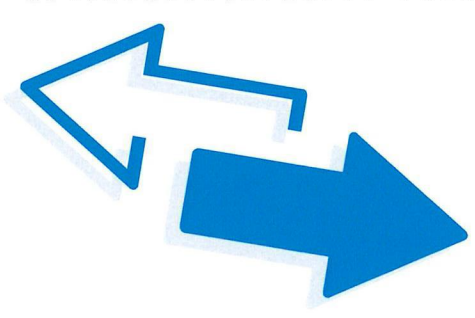
As used here, “obsolescence” is the decline in the economic value of the office building improvement. This decline comes from net operating income insufficient to “reward,” or provide a sufficient yield, to the office building improvement after adequately compensating (rewarding) operating costs and underlying land value. This insufficiency of return to the office improvement (the building) comes from a combination of:

- A rise in land value (perhaps but not always for a higher and better use) and hence the need to yield more to the land component of the capital investment.
- A decline in appeal of the space (some of which can be “cured” with modernization and some of which cannot) and hence a decline in achievable rent. If “cured” with capital expense, then the capital base increases and requires higher return to capital and hence higher rent.

“THERE ARE THOUSANDS OF OFFICE BUILDINGS THAT ARE PARTIALLY LEASED BUT NOT ABLE TO ATTRACT NEW TENANCY DUE TO PHYSICAL OR LOCATIONAL DEFICIENCIES.”

This is a natural process. It is fundamental to the notion of the economic useful life of commercial real estate and is the basis for tax depreciation – or should be.

By this view, an office building improvement is 100% obsolete (although the obsolescence may be curable) when net operating income (after operating expenses) yields \$0 after compensating current land value (at its highest and best use) at an appropriate rate of return. What is typical is that this yield to the building improvement, even with capital improvement along the way to help keep it “modern,” declines – thus depreciation or obsolescence takes place over an extended period. During periods of market stress (when the market is soft, as it was from 2009 to 2012 in most U.S. markets), this process often is accelerated. During periods of rapid changes in tenant preferences (as has been the case from 2009 to the present) this process also is accelerated. **When those two factors are combined, obsolescence runs at break-neck speed.**



II

OUR APPROACH TO QUANTIFYING OBSOLESCENCE

In looking at the obsolescence problem in suburban office space, the key question is how do we quantify what makes a building obsolete? While there are a number of factors and attributes that make each building unique, we identified six quantifiable factors that are important to office tenants across most suburban markets. They are:

- Location, as determined by proximity to public transit and/or highway access
- In-building amenities, particularly on-premises food service, fitness centers, and conference centers
- Parking ratio
- Age of the property, based on year built or renovated
- Size of the building
- Size of the floor plate

In order to keep the scope of this study manageable – but also applicable to major markets across the United States – we identified

one key submarket in each of five major metro areas that is suffering from a partially obsolete inventory. Our goal was to draw conclusions from the performance of illustrative submarkets that met these four criteria:

- The submarket has a **significant share of obsolete inventory** (there is a problem that needs to be addressed)
- The submarket has **valuable, unique, or notable characteristics**, such as a popular town center, proximity to a major airport, or serving as a hub to a growing industry (there is something to recommend it)
- The submarket has **some functional, well-performing office assets** (there is a basis for comparison)
- There are **enough amenities, transit access, or job creation to allow for some curbing** of the obsolescence challenge (investors are looking for and willing to fund solutions)

In addition to analyzing the six metrics listed for each property being studied, we sought the opinion of tenant representatives in the five subject submarkets. We asked them to identify the key considerations their clients have when seeking new space, and we ranked

“IN LOOKING AT THE OBSOLESCENCE PROBLEM IN SUBURBAN OFFICE SPACE, THE KEY QUESTION IS HOW DO WE QUANTIFY WHAT MAKES A BUILDING OBSOLETE?”

The six key metrics accordingly, with some variation across the submarkets. For more details on these rankings, see the submarket-specific analyses in Section IV of this report.

III

INCURABLE VS. CURABLE OBSOLESCENCE: THEIR IMPORTANCE TO OWNERS, PROSPECTIVE INVESTORS, AND TENANTS

In a business that values location above all else, when tenants' locational preferences change, asset values can be affected dramatically. For example, the equisiteness, serenity, and security of the 1980s suburban office campus once made that environment appealing for many professional and business services firms. Now, however, walkability and activated environments are at the top of many tenants' lists of must-haves. Suburban office buildings that have become obsolete due to car-centric and removed locations – and which do not have some factor that will remedy these traits in the future (such as a planned transit station or new highway exits) – are unlikely to achieve market-average rents as leases roll. In extreme cases, properties that are **incumbly obsolete** – primarily those at undesirable locations or with building sites or floor plates that tenants now find either too large or too small – may never lease again. Or, they may lease at rates that no longer yield a return to the improvement, with the lease rate just covering operating costs and return to land value.

Incumbly obsolescence is a function of the unchangeable features of an office property. The major, quantifiable characteristics of incurable obsolescence are:

- Building location
- Building size
- Building floor plate
- Ceiling height

In the analysis that follows, we have analyzed the first three of these in the five illustrative submarkets noted earlier. Unfortunately, the data sample for ceiling heights was insufficient and too unreliable to include in our analysis.

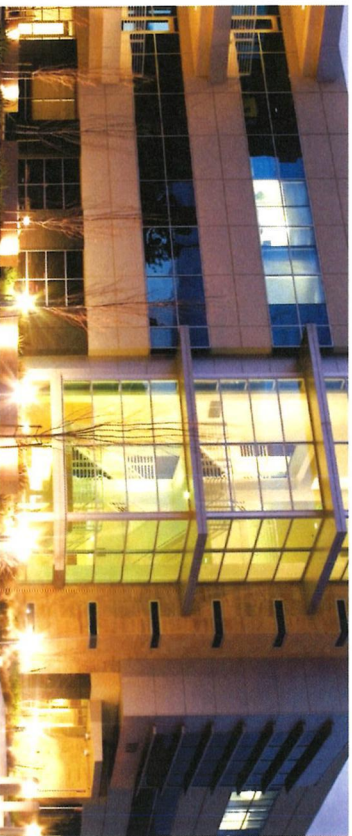
For those buildings in an acceptable suburban location – which we and many tenant brokers define as being within a half-mile of mass transit or with premier highway access – there are some steps owners can take to modernize their assets and increase their appeal to today's tenants. These buildings are **cumbly obsolete** – they are

challenged by today's standards, but they can be upgraded to meet the needs of many tenants in the market. That does not mean that it makes financial sense to make these upgrades. That must be established on a building-by-building basis. But, at least money has the potential to solve these obsolescence challenges – therefore the moniker “curable obsolescence.”

Curable obsolescence revolves around the changeable features of an office property. The major, quantifiable characteristics of curable obsolescence are:

- Amenities (in-building or neighborhood)
 - Building age (accounting for major renovations)
 - Parking ratio at the property
- In the analysis that follows, we have analyzed these for the five illustrative submarkets noted earlier.





Based on broker input provided for this analysis, among buildings in suburban locations where neighborhood amenities are not walkable, in-building amenities determine whether or not a building even gets an initial tour. Typically, the top three must-have in-building amenities for suburban properties are a conference center, a fitness center, and food service. Buildings lacking one or more of these amenities are unlikely to make an initial tour list. Conversely, those buildings located in denser, more urbanized suburban areas do not need to depend as much on in-building amenities. If neighborhood amenities are walkable and readily available. So the basic formula goes: if tenants are not able to walk to nearby retail or a neighboring office property to get lunch, they had better be able to get it at their own building. With substantial blocks of available space in many suburban submarkets, tenants have numerous options to consider. Also, tenants recently have shown an affinity for more modern and urban space – hence the plethora of stories about office moves from suburban campus locations into major urbanized town centers and downtown areas, and the success of newer transit-accessible

trophy assets compared to the broader market. As a result of these two trends, the market has prescribed a “renovate or die” approach for owners of obsolete properties. Properties with outdated elevators, lobbies, and building systems generally do not succeed in today’s market. If an outdated asset has other redeeming qualities such as good transit or highway access or a strong amenity base, building upgrades are the next major requirement for achieving market-competitive rents. Investing capital into a property to improve the window line, upgrade the HVAC and other building systems, modernize lobbies, and overhaul elevators can be a lifeline in today’s competitive suburban markets. Modernization may not set a building apart, but it can help ensure that tenants will at least consider touring the property if it has a location to recommend it.

Why should investors take seriously this challenge of building obsolescence, and consider major investments to keep their assets modern? Further, why should tenants care? According to the Bureau of Labor Statistics, the median tenure for U.S. workers is 4.6 years. A company’s ability to attract and retain talent depends on providing an environment where young people want to spend their time. For the Millennial generation, that is typically in a modern, collaborative office environment, or completely un tethered to an office at all. Tenants committed to space in isolated, suburban assets are facing a losing battle to retain their best workers as the employment market continues to tighten. Owners of such space are facing an even greater challenge – how to keep their investments attractive to tenants as leases roll and space reaches the market. The distinctive qualities that owners should consider vary by submarket, and our analysis that follows accounts for different tenant preferences in different places.

“IF AN OUTDATED ASSET HAS GOOD TRANSIT OR HIGHWAY ACCESS OR A STRONG AMENITY BASE, BUILDING UPGRADES ARE THE NEXT MAJOR REQUIREMENT FOR ACHIEVING MARKET-COMPETITIVE RENTS.”

In summary, there will always be extremely value-conscious tenants who set cost as their most important requirement. As a result, there will always be some market share for value-priced properties, even if those properties do not conform to the current trends of transit-adjacent, amenity-laden space. There is a market for obsolete office space. But there is little to no return to the office improvement after consideration of operating expenses and yield to land value.

For owners seeking to generate market-competitive rents and increase the long-term value of their assets, tackling the challenge of curable obsolescence where it exists in their portfolios is a critical next step.

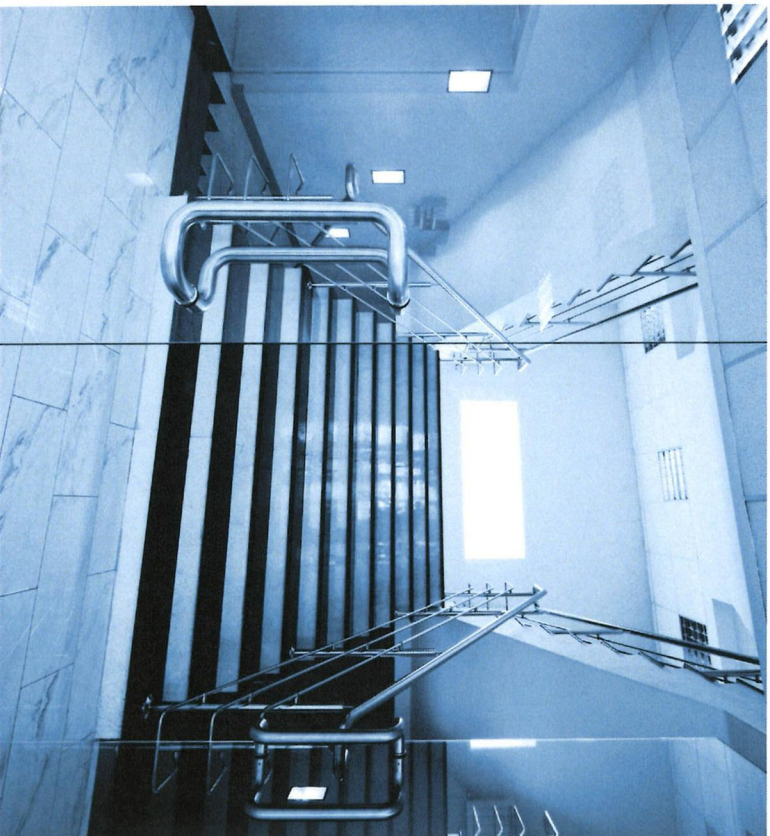
IV QUANTIFYING SUBURBAN OBSOLESCENCE: A DEEP DIVE INTO FIVE REPRESENTATIVE U.S. SUBMARKETS

As described earlier, in order to assess America’s suburban office obsolescence problem, we identified one suburban submarket in each of five major U.S. metro areas that is illustrative of the obsolescence problem. We then examined the office inventory for each of these submarkets based on an ideal range for the following quantifiable metrics: location, building

size, floor plate size, amenities, year built or renovated, and parking ratio. The ideal ranges were developed after consultation with local brokers and other market experts. The ranges are submarket-specific and therefore vary. Please see the table on page 23 for details. **For the purposes of this study, we defined obsolete product as those properties meeting the acceptable range for**

less than two of the six metrics. The financial challenge to investors may be too great to remedy properties that do not already meet at least two of the six criteria noted.

Following is our analysis of five submarkets that illustrate the growing challenge of suburban office property obsolescence, presented from west to east.



SAN FRANCISCO BAY AREA, CALIFORNIA: SANTA CLARA SUBMARKET

OVERVIEW: SANTA CLARA'S OBSELESCENCE PROBLEM

The Santa Clara submarket is located just north of San Jose and to the south of San Francisco Bay. The red-hot Silicon Valley submarkets of Palo Alto and Mountain View are located close by and Santa Clara has become a more affordable alternative for tenants who are priced out of those submarkets. With strong market fundamentals across the region, Santa Clara's availability rate has declined nearly five percentage points in the past year. However, the city of Santa Clara has a number of areas that were dominated by the semiconductor industry in past decades. This has led to a wake of obsolete office product centered around Santa Clara's downtown area that is not close to transit. This area was originally fueled by Santa Clara University but in more recent cycles development has been centered closer to transportation.

WHAT MATTERS TO SANTA CLARA'S TENANT BASE?

According to local market experts, proximity to transit and top amenities are the two most important considerations for tenants in Santa Clara. Indeed, the 57 properties that are within one mile of a transit stop have a vacancy rate of 7.1% – 2.5 percentage points lower than the submarket average. Likewise, the 42 properties with at least one of the top amenities have a vacancy rate of 7.0%, which is 2.6 percentage points lower than the submarket average. Silicon Valley's technology-centric tenant base has a large proportion of Millennials who require the unique amenities and convenient transit access these successful properties can offer.

While no properties in Santa Clara fit the ideal range for all six metrics, the three properties that could check the box for five out of six metrics are all 100% leased. While it is rare to see a property that meets the acceptable criteria on every metric, it is clear that demand for those buildings that meet Santa Clara tenants' ideal requirements exceeds the current supply.

Interestingly, in Santa Clara, building size has a great effect on vacancy and asking rents. The 36 properties that fall within the ideal range for building size in the submarket (75,000-200,000 square feet) had a vacancy rate of only 2.4% – a full 7.2 percentage points below the submarket average. At \$33.24 per square foot per year, this set of properties also commands a \$4.67 per square foot asking rent premium over the submarket average. Meanwhile, the 103 properties that were deemed either too large or too small have a vacancy rate of 13.3% – 3.7 percentage points higher than the submarket overall. It is clear that building size is an important factor for tenants in Santa Clara. With the submarket's vacancy rate below 10%, options for large tenants are few. Those buildings that can accommodate large contiguous blocks while maintaining an acceptable floor plate size have proven to be the first off the market.

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BY THE NUMBERS

ONLY
36 PROPERTIES
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75,000 -200,000 SF

THEY HAVE A

2.4%

VACANCY RATE

HOWEVER

103 PROPERTIES
HAVE A BUILDING SIZE

less than 75,000 or
greater than 200,000 SF

THEY HAVE A

13.3%

VACANCY RATE

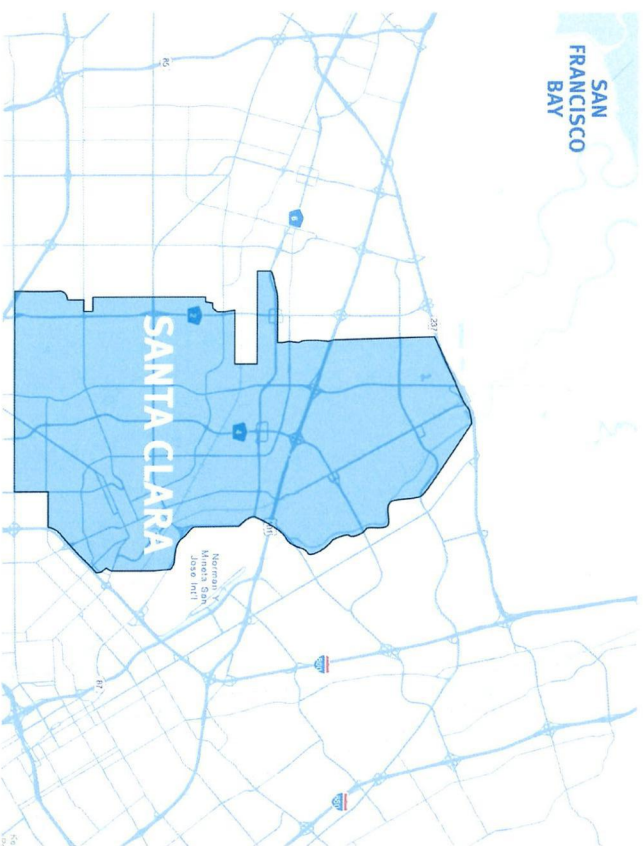
QUANTIFYING SANTA CLARA'S OBSELESCENCE AND IDENTIFYING THE PATH FORWARD

According to our analysis, as much as 2.3 million square feet or 22% of Santa Clara's inventory is obsolete (meaning the space fits within either zero or just one of the ideal ranges for our six metrics). If the obsolescence challenge in Santa Clara is reflective of the rest of the San Francisco Bay Area's suburban office market, this would suggest that approximately 39.5 million square feet of the San Francisco Bay Area's 179.7 million square feet of suburban office inventory is obsolete by the same standards.

With over a fifth of Santa Clara's inventory less than ideal for today's tenants' needs, Santa Clara has a higher share of obsolete product than the other metro markets we studied. However, the market fundamentals throughout Silicon Valley are so strong that obsolete space does not have the same fate as it might in a higher vacancy market. With fewer options available to tenants, some of the obsolescence metrics will hold less weight when a tenant considers its options. This is not to say that it is unnecessary to

remedy the curable obsolescence factors. The construction boom that is taking place in the greater Silicon Valley area will bring additional product to market and those properties that do not meet the needs of tenants in the market will need to be upgraded, razed, or converted to another use.

SAN FRANCISCO BAY AREA, CALIFORNIA: SANTA CLARA SUBMARKET



DENVER, COLORADO: SOUTHEAST SUBURBAN SUBMARKET

OVERVIEW: SOUTHEAST SUBURBAN'S OBSOLESCENCE PROBLEM

The Southeast Suburban (SES) submarket is one of Denver's premier suburban submarkets and is in fact larger in geography and inventory than Denver's Central Business District. The submarket is home to the well-known Denver Tech Center and many financial and professional/business services tenants. These industries took a hit during the Great Recession but are now growing during the recovery, which has been a boon for the submarket. Another driver of growth in SES is the relatively new light rail system which runs directly through the submarket. In general, the transit-oriented developments on either side of I-75 are well leased and commanding above-market rental rates. Meanwhile, some properties that do not offer transit access and have not upgraded to keep up with the changing needs of Denver's tenant base have taken years to lease up.

WHAT MATTERS TO SOUTHEAST SUBURBAN'S TENANT BASE?

According to local market experts, access to transit and parking are the two most important metrics for tenants in SES. Accordingly, the seven properties that are within a quarter-mile of a transit stop and have a parking ratio of 4.5/1,000 square feet or higher have an average vacancy rate of only 1.7% – a full nine percentage points lower than the submarket average. This set of properties also commands an average asking rent of \$35.09 per square foot – \$4.77 per square foot premium over the submarket as a whole. While it may seem counterintuitive, both parking and transit access are important requirements for SES tenants. Many of the executives and decision-makers who work in SES live to the south and drive to work, thus requiring generous parking ratios. Meanwhile, the same companies want to attract and retain the Millennial talent that favors transit access.

In SES, there were eight properties that met the ideal range for six out of six metrics and 27 that qualified for at least five out of the

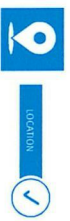
six. The properties that meet at least five out of six metrics have a vacancy rate of 8.9% – 1.8 percentage points lower than the submarket average. Asking rents for this set of properties average \$22.24 per square foot – \$1.92 per square foot higher than the submarket as a whole. Meanwhile, the 23 properties that meet zero out of the six metrics have an average asking rent of only \$15.56 per square foot – \$4.76 per square foot lower than the overall submarket. As in Santa Clara, properties that check the box on all or most of tenants' ideals are rewarded with lower vacancy, tenants are willing to pay more for properties that meet their needs and clearly the SES market supports rent premiums for properties that can provide that value.

Buildings that have checked the box on parking and location and that go a step further to provide top amenities (such as a fitness center and food service in the building) can generally outpace the competition. According to the data, the 14 properties that meet the requirements on location, parking and amenities have a vacancy rate of 8.4% – 2.3 percentage points lower than the submarket average. These properties also command average asking rents of \$24.08 per square foot – a \$3.76 per square foot premium over the submarket as a whole. Since properties within the ideal range for parking and transit access have already proven to be top of the line for SES tenants, those that can adequately meet these requirements and also provide top amenities are rewarded with even lower vacancy and higher rents.

"THE 23 PROPERTIES THAT MEET ZERO OUT OF THE SIX METRICS HAVE AN AVERAGE ASKING RENT OF ONLY \$15.56 PER SQUARE FOOT – \$4.76 PER SQUARE FOOT LOWER THAN THE OVERALL SUBMARKET."

BY THE NUMBERS

ONLY
14 PROPERTIES
CHECK THE BOX ON



THEY HAVE A

VACANCY RATE
THAT IS

2.3
PERCENTAGE
POINTS
LOWER

AND

ASKING RENTS
\$3.76 /SF
HIGHER
THAN THE OVERALL SUBMARKET

QUANTIFYING SOUTHEAST SUBURBAN'S OBSOLESCENCE AND IDENTIFYING THE PATH FORWARD

According to our analysis, as much as 4.5 million square feet or 14% of the SES inventory is obsolete to one degree or another (meaning the space fits within either zero or just one of the ideal ranges for our six metrics). If the obsolescence challenge in SES is reflective of the rest of Denver's suburban office market, this would suggest that approximately 9.3 million square feet of Denver's 66.6 million square feet of suburban office inventory is obsolete.

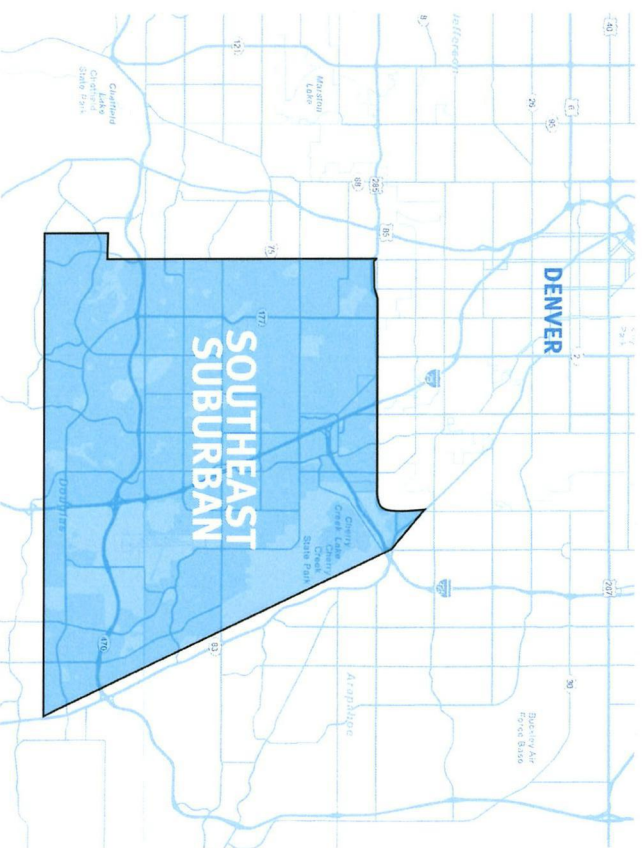
Many of SES's obsolete properties are well-leased as of today, and the collective vacancy

rate for these properties is slightly lower than the submarket average. However, a look at the average asking rents reveals these properties have asking rents a full \$3.32 per square foot lower than the submarket average. This suggests that owners are aware that these properties do not meet tenants' current requirements and are targeting tenants who are focused solely on occupancy cost.

Overall vacancy in SES has declined more than eight percentage points over the past six years. While SES still has a fair amount

of obsolete product as defined by this study, it becomes clear that when a submarket is successful overall, it is far more forgiving of obsolescence factors. With such outstanding market fundamentals and many properties that are ripe for redevelopment, the SES submarket is primed for a number of mixed-use and adaptive re-use developments in the near future.

DENVER, COLORADO: SOUTHEAST SUBURBAN SUBMARKET



**OVERVIEW: O'HARE'S
OBsolescence PROBLEM**

The O'Hare submarket is located northwest of Chicago and has been one of Chicago's most successful submarkets in this recovery cycle. It has direct access to mass transit, is near the region's largest airport, and is closer to the city than some of Chicago's other suburban submarkets. Its many successful properties are generally located closer to transit and have undergone renovations to modernize building features and systems. Those assets that are struggling with higher vacancy are dated buildings with a lack of highway and transit access.

**WHAT MATTERS TO
O'HARE'S TENANT BASE?**

According to local market experts, access to transit and age of the building are the two most important metrics for tenants in the O'Hare submarket. Indeed, the 10 properties that are within a half-mile of a transit stop and were built or renovated since the year 2000 have an average vacancy rate of 19.5% — two percentage points lower than the submarket average. Interestingly, the asking rents for these properties are comparable to the submarket average. Where we really see a difference in vacancy and rents is in properties that are close to transit. In looking at that metric only and not accounting for year built or renovated, the 31 properties that are located within a half-mile of a transit stop have an average vacancy rate of 15.9% — 5.6 percentage points lower than the submarket average. This set of properties also commands an average asking rent of \$18.72 per square foot — a \$1.80 per square foot asking rent premium over the submarket as a whole. This suggests that while age (and consequently the condition) of the building may be something tenants in O'Hare consider, access to transit is really the deciding factor in where they ultimately sign a lease and spend rent dollars.

As in the other submarkets in this study, properties that could check at least five out of the six ideal characteristics had lower vacancy and higher

asking rents than the overall market. The eight properties that met five out of six metrics have an average vacancy rate of 19.1% — 2.4 percentage points lower than the submarket average. These properties had an average asking rent of \$17.88 per square foot — a \$0.96 per square foot premium over the submarket as a whole. In O'Hare, as in most other submarkets, the properties that can meet tenants' needs across the majority of these important metrics are rewarded with lower vacancy and higher rents.

O'Hare has a large concentration of major corporate tenants. For many of these tenants, having a headquarters address that is within Chicago's city limits is important. Chicago mayor Rahm Emanuel recognizes this and has begun a campaign to lure businesses inside the city limits with economic incentives.

For those properties that are in the O'Hare submarket but have a Chicago address, the average vacancy rate registered 14.8% — a full 6.7 percentage points lower than the overall submarket average. Accordingly, asking rents averaged \$18.70 per square foot — a \$1.78 per square foot asking rent premium over the submarket as a whole. This demonstrates that factors related to corporate identity such as signage and physical address are important to tenants. While they were not metrics we were able to study across all the submarkets due to the varied nature of their locations, this trend is likely present in other close-in suburban markets with a high concentration of major corporate tenants.

"FOR THOSE PROPERTIES THAT ARE IN THE O'HARE SUBMARKET BUT HAVE A CHICAGO ADDRESS, THE AVERAGE VACANCY RATE REGISTERED 14.8% — A FULL 6.7 PERCENTAGE POINTS LOWER THAN THE OVERALL SUBMARKET AVERAGE."

**BY THE
NUMBERS**

31 PROPERTIES

—CHECK THE BOX ON—



—THEY HAVE A—

VACANCY RATE THAT IS

5.6 PERCENTAGE POINTS LOWER

—AND—

ASKING RENTS

\$1.80 /SF HIGHER THAN THE OVERALL SUBMARKET

—FOR THOSE PROPERTIES THAT ARE IN THE O'HARE SUBMARKET BUT HAVE A CHICAGO ADDRESS, THE AVERAGE VACANCY RATE REGISTERED 14.8% — A FULL 6.7 PERCENTAGE POINTS LOWER THAN THE OVERALL SUBMARKET AVERAGE."

QUANTIFYING O'HARE'S OBsolescence AND IDENTIFYING THE PATH FORWARD

According to our analysis, up to 2.3 million square feet or 16% of O'Hare's inventory is obsolete to some degree (meaning the space fits within either zero or just one of the ideal ranges for our six metrics). If the obsolescence challenge in O'Hare is reflective of the rest of Chicago's suburban office market, this would suggest that approximately 18.9 million square feet of Chicago's 117.9 million square feet of suburban office inventory is obsolete.

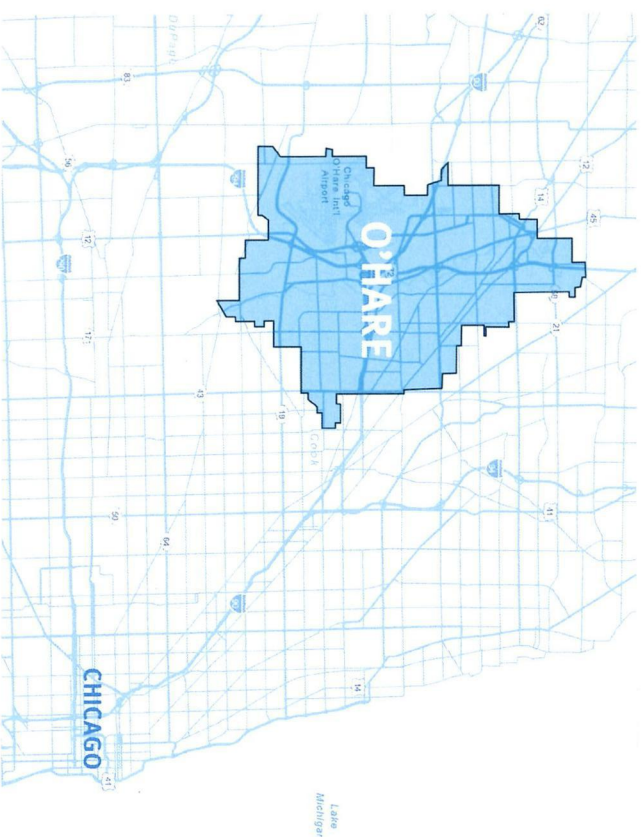
While many of O'Hare's obsolete properties are well-leased at present and the set of obsolete properties has a lower vacancy rate than the

submarket as a whole, much of this product is leased to long-term tenants and will face significant challenges when those leases roll. Additionally, asking rents for these properties average \$15.85 per square foot, \$1.07 lower than the submarket average. Even if these properties targeted only cost-driven tenants, the overall vacancy rate in the submarket is greater than 20%, so it is unlikely these properties will fare well with so much competition.

As O'Hare is an infill market with little room for new construction, the renovation and demolition of existing properties is the logical

next step in O'Hare's obsolescence cycle. This has already begun in a few cases with a pair of buildings that were not walkable to transit demolished and repurposed into airport parking. Interestingly, in O'Hare the vacancy and asking rent deltas between properties that meet the various metrics and the overall set tended to be narrower than in other markets. With further redevelopment, we expect the vacancy and rent gaps between the prime and obsolete properties will widen.

CHICAGO, ILLINOIS: O'HARE SUBMARKET



WASHINGTON DISTRICT OF COLUMBIA: RESTON/HERNDON (VIRGINIA) SUBMARKET

OVERVIEW: RESTON/HERNDON'S OBsolescence PROBLEM

The Reston/Herndon submarket is located in the Northern Virginia suburbs of Washington, DC. It is a prime suburban submarket that has gained favor with many tenants seeking suburban space due to its direct (and expanding) transit and highway access and its plentiful amenity base. The submarket is well known for the amenity-rich, mixed-use Reston Town Center. Generally speaking, properties located in the immediate area of the Town Center are very competitive while those on the outskirts of the submarket, not proximate to planned Metro rail stations, are less so.

WHAT MATTERS TO RESTON/HERNDON'S TENANT BASE?

Based on conversations with local brokers who represent tenants in this submarket, proximity to Metro rail and in-building amenities are the two most important metrics for tenants in Reston/Herndon. Indeed, the 12 properties with a fitness center, conference center and food service in the building have an average vacancy rate of 6.2% – a full 7.2 percentage points lower than the submarket average. These properties have an average asking rent of \$33.33 per square foot – an \$8.33 per square foot premium over the submarket as a whole. Add in being within a half-mile of a current or planned rail station, and only six properties meet the requirements. Those properties have a vacancy rate of 6.6% – 7.3 percentage points lower than the submarket average. Asking rents for these properties average \$37.67 per square foot, which is \$12.67 per square foot higher than the overall submarket average. In Reston/Herndon more so than in the other submarkets studied, the delta between the top-of-the-line product and the overall market was extremely pronounced. Tenants in this submarket have made their requirements clear and those owners who understand what tenants want (and are willing to pay for) are rewarded with lower vacancy and significantly higher rents. This large delta reflects the overall flight to quality trend in the Washington region.

Although Reston/Herndon has some very successful properties, there is only one that meets the acceptable conditions for all six metrics. When expanded to properties that meet at least five out of six metrics, 13 properties fit the bill and those properties have a vacancy rate of 7.9% – 6.0 percentage points lower than the submarket as a whole. The average asking rent for these properties is \$30.85 per square foot – a \$5.85 per square foot premium over the submarket average. While it is clear that properties that can check the box on most of tenants' requirements fare better than the overall market, the fact that only one property was able to meet all six ideal ranges illustrative of the obsolescence problem in Reston/Herndon and other Washington area submarkets like it.

Age of the building was another metric tenant brokers pointed to as a top consideration for tenants when evaluating options. The numbers drive this point home: Properties built or renovated since 2000 have a vacancy rate of 10.5% – 3.4 percentage points lower than the submarket average. Averaging \$28.78 per square foot, these properties command a \$3.78 per square foot asking rent premium over the submarket as a whole. While it is not always feasible or cost-effective for owners to make the investment to overhaul a building, it is clear that for properties that already have a desirable location and amenities, a full renovation and modernization can make the difference in securing above-average rents.

"PROPERTIES WITH IDEAL AMENITIES AND LOCATION HAVE ASKING RENTS THAT AVERAGE \$37.67 PER SQUARE FOOT, WHICH IS \$12.67 PER SQUARE FOOT HIGHER THAN THE OVERALL SUBMARKET AVERAGE."

BY THE NUMBERS

6 PROPERTIES CHECK THE BOX ON



THEY HAVE A

VACANCY RATE THAT IS

7.3 PERCENTAGE POINTS LOWER

AND

ASKING RENTS \$12.67 /SF HIGHER THAN THE OVERALL SUBMARKET

QUANTIFYING RESTON/HERNDON'S OBsolescence AND IDENTIFYING THE PATH FORWARD

According to our analysis, 4.4 million square feet or approximately 16% of Reston/Herndon's inventory is obsolete (meaning the space fits within either zero or just one of the ideal ranges for our six metrics). If the obsolescence challenge in Reston/Herndon is reflective of the rest of Washington's suburban office market, this would suggest that approximately 38.4 million square feet of Washington's 240.2 million square feet of suburban office inventory is obsolete.

While many of the obsolete properties in Reston/Herndon are well-leased at present, and the

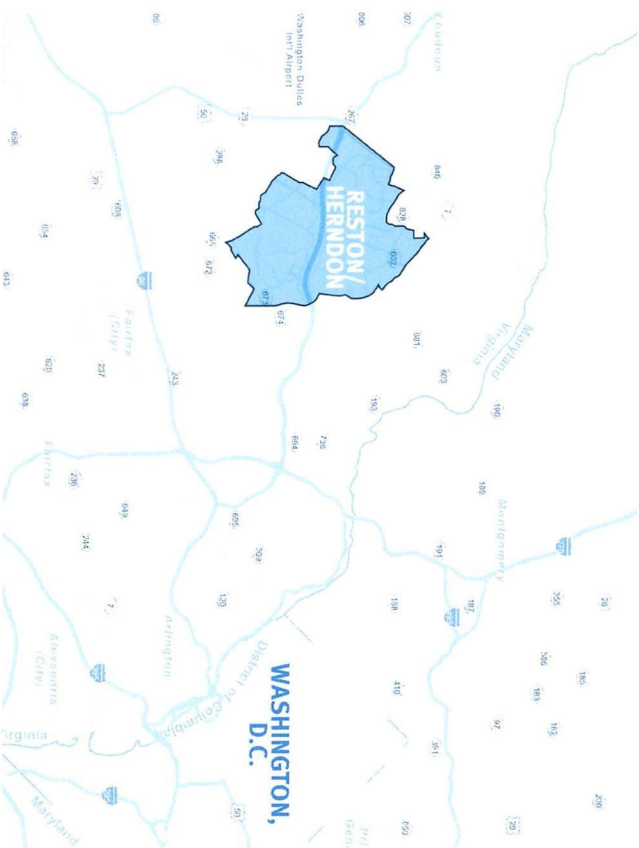
vacancy rate for these properties is on par with the market as a whole, the average asking rent for the set of obsolete properties is \$3.30 per square foot lower than the submarket average. This suggests that the market has responded to tenants' lack of interest in these properties by lowering the asking rents in hopes of capturing cost-focused tenants.

While there is some market share for this type of product, the question is how much? It is unlikely that a material share of Reston/Herndon's tenants use cost as their only consideration in evaluating space. This suggests that re-leasing much of the obsolete space will be an uphill battle once these long-term leases roll.

While there is indeed a significant amount of obsolete product in Reston/Herndon, the submarket's vacancy rate is still more than four percentage points below Northern Virginia's overall vacancy rate.

With the success of Reston Town Center and the planned expansion of Metro rail's Silver Line, more mixed-use, transit-oriented development in this submarket is imminent.

WASHINGTON, DC: RESTON/HERNDON (VIRGINIA) SUBMARKET



NEW YORK, NEW JERSEY: PARSIPPANY (NEW JERSEY) SUBMARKET

OVERVIEW: PARSIPPANY'S OBSOLESCENCE PROBLEM

ParsIPPany is a truly suburban submarket located in the Northern New Jersey suburbs of New York City. With an overall vacancy rate of 22.3%, the submarket is facing an oversupply problem. With value pricing and an abundance of land, the submarket has traditionally been an attractive destination for large corporate headquarters facilities. However, more recently, corporate mergers and consolidations have plagued the submarket, and many owners are finding the large suburban campuses that often were attractive to corporate tenants may not be ideal in today's market.

WHAT MATTERS TO PARSIPPANY'S TENANT BASE?

According to local market experts, in-building amenities and the age of buildings are the two most important factors for tenants in ParsIPPany. Accordingly, the 12 properties that were built or renovated in the past 20 years and which have a fitness center or food service in the building have an average vacancy rate of 18.0% – 9.3 percentage points lower than the submarket average. These same properties have an average asking rent of \$20.06 per square foot – \$0.99 per square foot higher than the submarket as a whole. While vacancy trends still illustrate tenants' affinity for amenitized and modern space, the excess of available options in ParsIPPany means owners are not able to command as significant a rent premium for ideal space as they are in tighter markets like Reston/Hendon and Santa Clara.

In ParsIPPany, there were three properties that could check the box on all six metrics. Those properties have a vacancy rate of 22.0% – 5.3 percentage points lower than the submarket as a whole. Likewise, those properties that met zero out of the six metrics had a vacancy rate of 29.5% – 2.2 percentage points higher than the overall submarket. (There was not enough rent data available in either set to confirm an asking rent trend.) Once again, properties

"TWELVE PROPERTIES THAT WERE BUILT OR RENOVATED IN THE PAST 20 YEARS AND WHICH HAVE A FITNESS CENTER OR FOOD SERVICE IN THE BUILDING HAVE AN AVERAGE VACANCY RATE OF 18.0% – 9.3 PERCENTAGE POINTS LOWER THAN THE SUBMARKET AVERAGE."

that can meet the greatest number of tenant priorities consistently achieve lower vacancy rates than the overall market.

Due to the corporate nature of many tenants in ParsIPPany and the fact that most commuters drive to work, properties that have large floor plates and are located immediately off a major highway tend to be the most successful. According to the data, the seven properties with floor plates in the range of 40,000-100,000 square feet that are located less than a quarter-mile off a major highway have a vacancy rate of 18.3% – 9.0 percentage points lower than the submarket average. These properties command an average asking rent of \$24.00 per square foot – a \$4.93 per square foot premium over the submarket as a whole.

"IN PARSIPPANY, THERE WERE THREE PROPERTIES THAT COULD CHECK THE BOX ON ALL SIX METRICS. THOSE PROPERTIES HAVE A VACANCY RATE OF 22.0% – 5.3 PERCENTAGE POINTS LOWER THAN THE SUBMARKET AS A WHOLE."

BY THE NUMBERS

7 PROPERTIES

ONLY CHECK THE BOX ON



AND ARE LOCATED



THEY HAVE A

VACANCY RATE THAT IS **9.0** PERCENTAGE POINTS LOWER

AND

ASKING RENTS **\$4.93**/SF HIGHER THAN THE OVERALL SUBMARKET

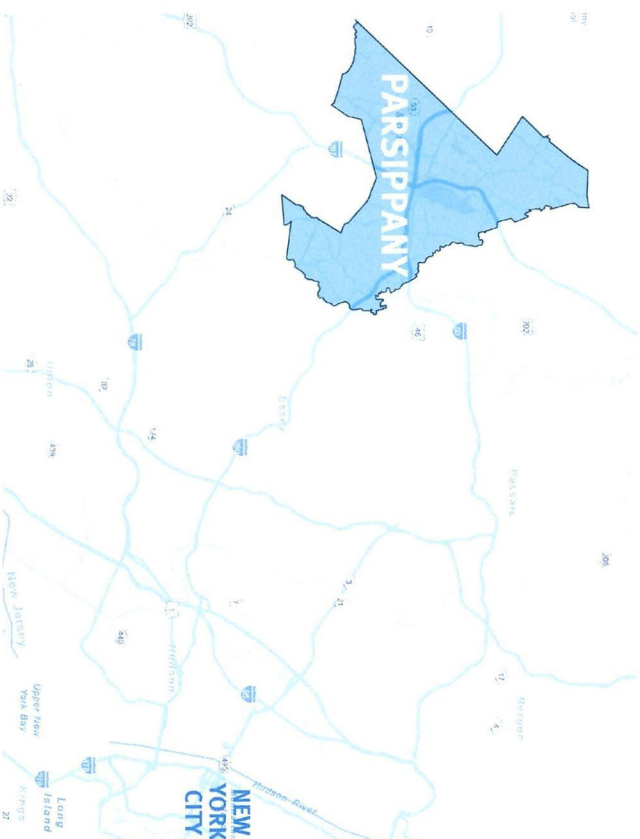
QUANTIFYING PARSIPPANY'S OBSOLESCENCE AND IDENTIFYING THE PATH FORWARD

According to our analysis, 1.4 million square feet or 8% of ParsIPPany's inventory is obsolete to one degree or another (meaning the space fits within either zero or just one of the ideal ranges for our six metrics). If the obsolescence challenge in ParsIPPany is reflective of the rest of the New York metro area's suburban office market, this would suggest that approximately 23.3 million square feet of the New York City metro area's 291 million square feet of suburban office inventory is obsolete.

While ParsIPPany's share of obsolete inventory may seem low in a market with elevated vacancy, this rate includes only the properties that meet zero or just one of the ideal ranges for our six metrics. Further analysis reveals that 77% of ParsIPPany's inventory has some incurable obsolescence factor. What this tells us is that much of ParsIPPany's inventory is no longer in line with what today's tenants are seeking. With nearly one-third of ParsIPPany's inventory available for lease, the submarket is facing a significant obsolescence challenge.

As tenants continue to insist on greater efficiency, the large suburban campuses that had proliferated in ParsIPPany in the past will face challenges in meeting current tenants' needs. There are many properties that are primed for redevelopment and, indeed, for many of them, this process has already begun. Build-to-suit and redevelopment opportunities abound in ParsIPPany and other similar submarkets across the country.

NEW YORK, NEW JERSEY: PARSIPPANY (NEW JERSEY) SUBMARKET



CONCLUSION: WHAT CAN SUBURBAN OFFICE OWNERS, PROSPECTIVE INVESTORS, AND TENANTS LEARN FROM THE OBSOLESCENCE CHALLENGE?

Suburban office building obsolescence has increasingly become a topic of discussion among those who have a stake in suburban office space. Largely absent from these discussions has been an assessment of the scale of obsolescence and what the potential solutions are in quantifying obsolescence. It is our hope to evaluate the root causes of obsolescence, determine what can be done to remedy it, and understand its impact on market statistics.

One notable finding of this study is that so few properties meet the ideal on every metric studied. Of over 1,000 properties analyzed across the five submarkets, only ten properties meet the acceptable range for all six of the metrics studied. This would suggest that 99% of properties in the suburban inventory have some feature that is not in line with what today's tenants desire, but this is not surprising; obsolescence begins as soon as a building is put into service since tenant preferences and requirements are always evolving and not every metric is changeable.

Across the five data sets, 297 properties or 29% of the buildings studied failed to meet the ideal range for all of the incurable obsolescence metrics (location, floor plate size, and building size). If these data sets are representative of other major U.S. suburban markets – and more research is needed but based on anecdotal evidence we believe they are – it becomes clear that obsolescence is a critical problem facing America's suburban office markets. **Having found that a significant share of the inventory in these representative markets is indeed obsolete by today's standards, the question becomes: What should office asset owners do to address this problem?**

While this study is primarily aimed to quantify the amount of obsolete space present in these markets, an equally important element is to determine which characteristics make a property most successful. It is valuable to quantify how much space is obsolete, but it is more constructive to look at what

can be done to improve competitiveness in those properties that are lacking key traits. Across all five of the submarkets examined, those properties that could check the box on at least five out of six metrics consistently outperformed the overall market; those that were lacking on a majority of the metrics consistently were consigned to have below-market rents. Though it will not pencil financially for every property in every market, remedying the curable obsolescence factors is a way to increase occupancy and rents in an overwhelming majority of properties.

“SUBURBAN OFFICE BUILDING OBSOLESCENCE HAS INCREASINGLY BECOME A TOPIC OF DISCUSSION AMONG THOSE WHO HAVE A STAKE IN SUBURBAN OFFICE SPACE. LARGELY ABSENT FROM THESE DISCUSSIONS HAS BEEN AN ASSESSMENT OF WHAT THE POTENTIAL SOLUTIONS ARE.”

In looking at these representative markets, it is important to note that every submarket and every tenant base is unique. The properties that record significantly lower vacancy rates and higher asking rents than the submarket averages consistently meet the ideal ranges for key metrics that are identified by local market experts as being most important to that submarket's tenant base. Indeed, the most important metrics are not the same in each market. In Denver SES, properties located close to transit consistently came in below the market's average vacancy rate. In Parsippany, the deciding factor for outperforming the market is being within a quarter-mile of a highway (not mass transit). In Reston/Hendron, modern properties with ample parking and amenities consistently

come out on top. Owners of the most successful properties are in tune with the tenant base they are targeting and the specific and unique needs of those tenants.

Though it is not possible to simply prescribe a set of building upgrades that will cure the obsolescence problem once and for all, owners who are struggling to gain or maintain market share in today's competitive suburban market have opportunities available that are proven to increase competitiveness.

Meanwhile, suburban tenants are an important part of this equation. While most discussions about suburban office obsolescence focus on the owners and managers of these properties, it is important for suburban tenants to be aware of the disconnect between what they and their peers are seeking and what is available in the market. **Tenants who are considering a move, a lease renewal, or a lease renegotiation can use the obsolescence problem to their advantage.**

And of course, there are opportunities for potential investors in office assets – and also potholes to avoid. The investor with capital to deploy and an appetite for leasing risk can find many leasing-challenged, obsolete properties to buy. The art of these deals is to select those opportunities with curable obsolescence in a strong market where the price and eventual value leave plenty of room for the upgrade cost. On the other hand, some deals for stale stock are best left alone – those with incurable obsolescence or where the cost to cure obsolescence cannot be rewarded with sufficient yield upon lease-up.

With this in mind, opportunities exist for owners of suburban office buildings. Investors searching for deals, and the tenants who occupy obsolete properties, as mentioned earlier, tenant preferences vary by location and the specific tenant makeup of that submarket. However, the following action steps apply to many tenant types and circumstances.

ACTION STEPS FOR OWNERS AND PROSPECTIVE INVESTORS

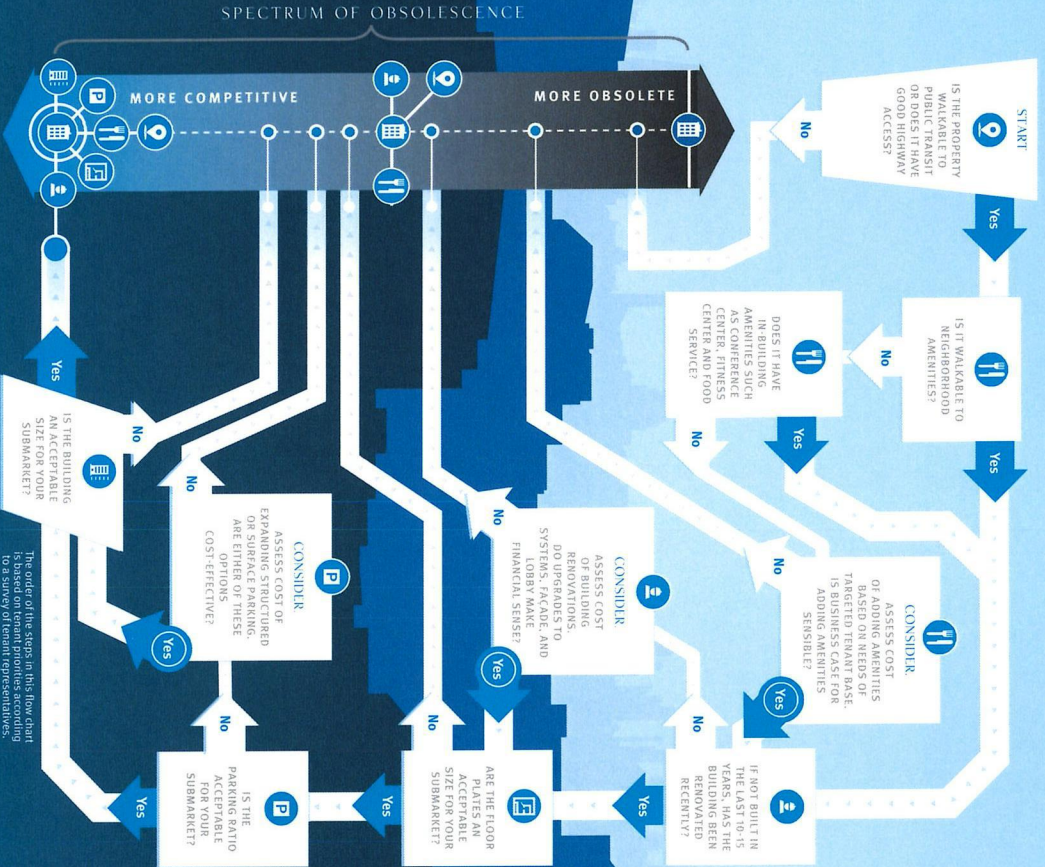
- Use our decision-making flow chart on the following page to determine where your property falls on the obsolescence spectrum. Is there a business case for making improvements to increase competitiveness? Of course, whether or not these improvements will be a worthwhile investment will depend on local market conditions and the extent of the changes needed.
- Be knowledgeable about your tenant base. If there is some feature of your property that is less than ideal for the broader market, is there a unique tenant type that might better fit the product you are offering?
- Assess how your property fares on the curable obsolescence metrics. Is there some amenity or improvement most tenants are seeking? Since it is generally less expensive to renew current tenants than to market space, negotiate new leases, and fund concessions, proactively determining what will retain current tenants and then following through on those improvements will often pay off in the long run.
- If your property is incurably obsolete, consider the highest and best use of the property. Do market fundamentals in your area support repurposing to residential or retail, or to some form of a mixed-use development? In some cases and in some markets, the land may be more valuable than the existing improved asset.
- Once you have determined there is a business case for completing a renovation, examine economic trends to determine ideal timing for delivery of the renovated building. Based on the office-using job cycle, NCFE forecasts an overall office tightening in coming years with a peak U.S. landlord market in 2017-2018. Individual markets will vary based on local conditions.

ACTION STEPS FOR TENANTS

- When assessing real estate needs, determine which of the six metrics (or others) are most important to your employees. If your lease is expiring in the near term, determine if your current building fits your employees' needs across all six metrics. If your current location is lacking, now may be an ideal time to take advantage of softer market conditions to either renegotiate your lease at more favorable terms or find a property that better meets your criteria within your price range.
- Re-evaluate your needs. Being outside the mainstream on one or more of these metrics can be a huge advantage. If sales employees are expected to lunch with clients or prospects most days of the week, you may not need a restaurant in the building. If your business functions best when all employees are on one floor, maybe a larger than average floor plate is ideal for you. If there is some type of product that is suitable for your needs but not for the broader market, leverage your firm's unique qualities.
- If you like your location but your building is lacking in some curable factor, initiate negotiations with your landlord for upgrades. In many cases, landlords may already be considering substantial renovations but need to be mindful not to disrupt the operations of existing tenants. Since it is in the best interests of the landlord to retain current tenants, you may be able to move to better space within the building and/or renegotiate terms of an existing lease to accommodate renovations.



DECISION-MAKING FLOW CHART: IS MY OFFICE BUILDING OBSOLETE?



221 | Newmark Grubb Knight Frank

QUANTIFIABLE OBSOLESCENCE: IDEAL RANGES BY SUBMARKET

The table below defines the ideal or minimum acceptable ranges for the various quantifiable metrics used in this study. This information is based on interviews with brokers who represent tenants within each market.

| | SANTA CLARA | SOUTHEAST SUBURBAN | O'HARE | RESTON/HERNDON | PARSIPPANY |
|--|---|------------------------------|---|---|------------------------------|
| Location (maximum acceptable distance) | 1 mile to transit | 1/2 mile to transit | 1/2 mile to transit | 1/2 mile to transit | 1 mile to highway access |
| Amenities (top 2-3 required—must meet at least one to fall in acceptable range) | Transportation access, usable outdoor space | Food service, fitness center | Food service, fitness center, conference facility | Food service, fitness center, conference facility | Food service, fitness center |
| Year Built/Renovated (in order to be considered modern) | 2005 or later | 2000 or later | 2000 or later | 2000 or later | 1995 or later |
| Floor Plates (ideal range) | 33,000-38,000 sf | 25,000-35,000 sf | 25,000-50,000 sf | 25,000-50,000 sf | 40,000-100,000 sf |
| Parking Ratio (minimum acceptable) | 3.5/1,000 sf | 3.5/1,000 sf | 3.5/1,000 sf | 3.5/1,000 sf | 4.0/1,000 sf |
| Building Size (ideal range) | 75,000-200,000 sf | 100,000-300,000 sf | 250,000-1,000,000 sf | 150,000-250,000 sf | 100,000-400,000 sf |

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- Lauren Douglas**, Denver
- Craig Hurvitz**, Chicago
- Clark Steele**, Santa Clara

SOURCES

In addition to consulting with market experts at NGKF and with other industry colleagues, sources include ArGIS, Bureau of Labor Statistics, CoStar, and NGKF Research.



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Stamford

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Miami
Orlando
Sarasota
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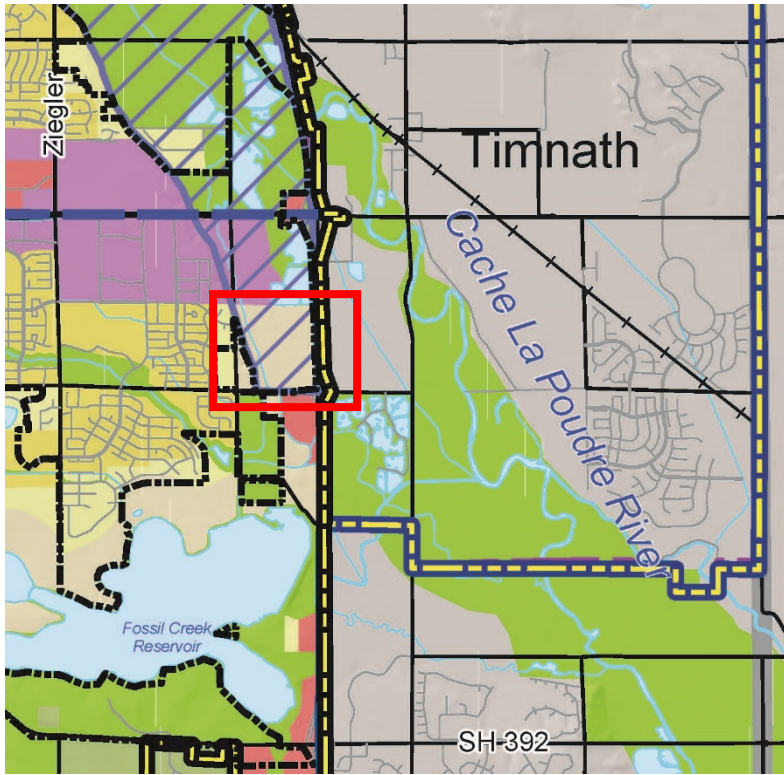
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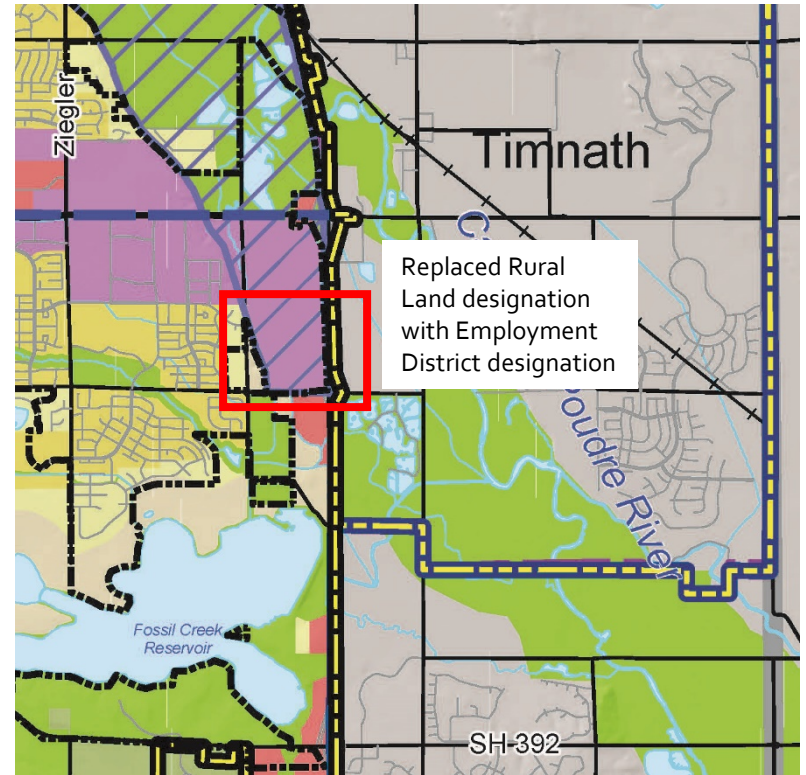
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Tab 4
Graphic Illustrations

H-25 CITY PLAN AMENDMENT

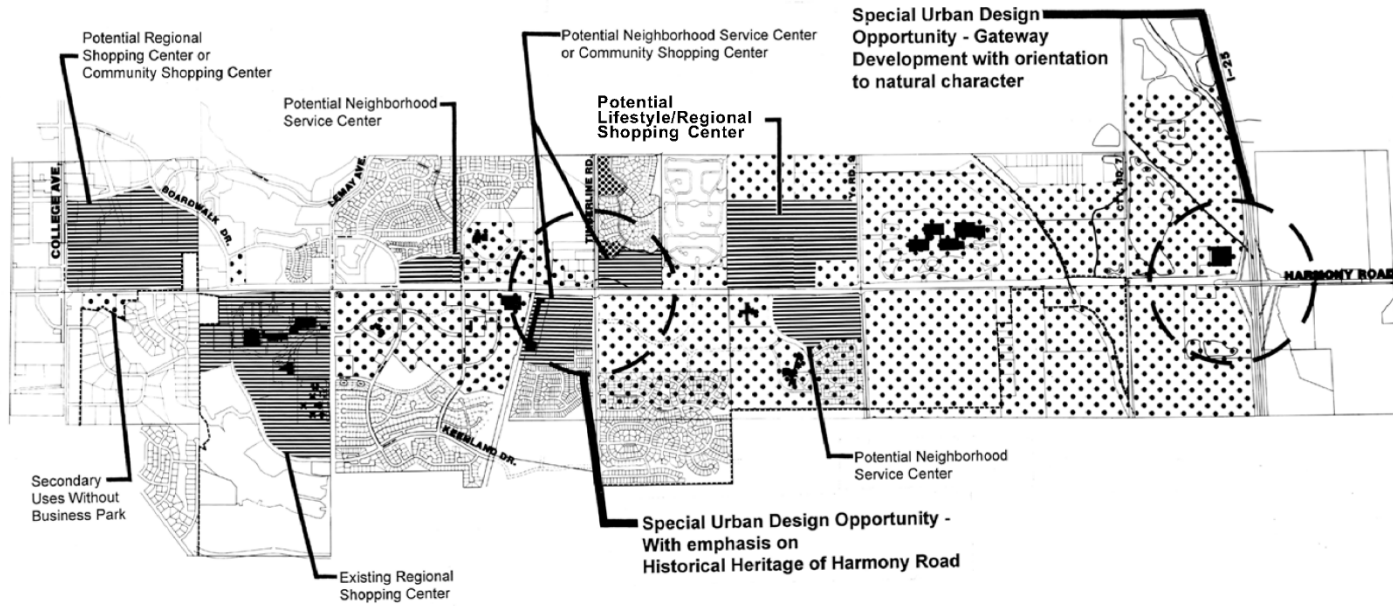


Existing Structure Plan





Proposed Change

3-10



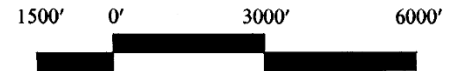
Harmony Activity Centers

-  Basic Industrial and Non-Retail Activity Center
-  Mixed Use Activity Center

Potential Shopping Center Locations Outside of Activity Center

-  Neighborhood Convenience Center

NORTH



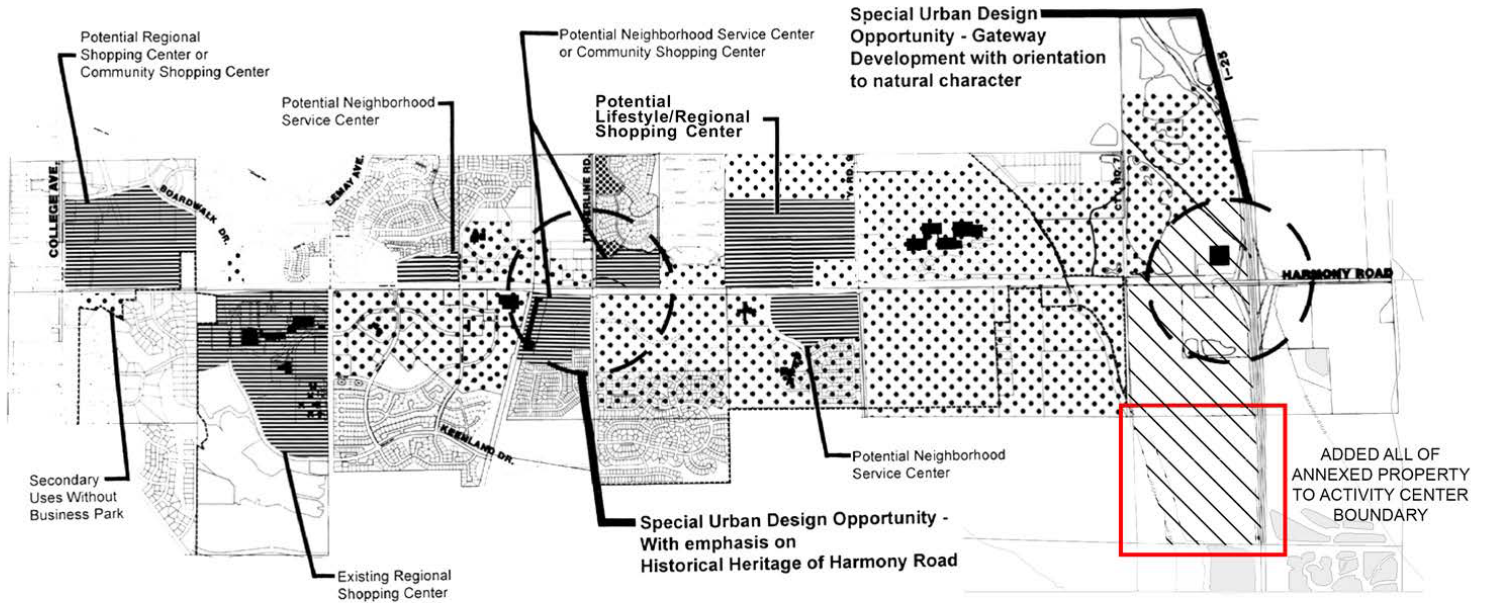
HARMONY CORRIDOR PLAN

LAND USE PLAN




MAP 10

Existing Land Use Plan

3-10



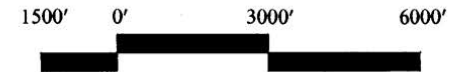
Harmony Activity Centers

-  Basic Industrial and Non-Retail Activity Center
-  Mixed Use Activity Center
-  Gateway Activity Center

Potential Shopping Center Locations Outside of Activity Center

-  Neighborhood Convenience Center

NORTH



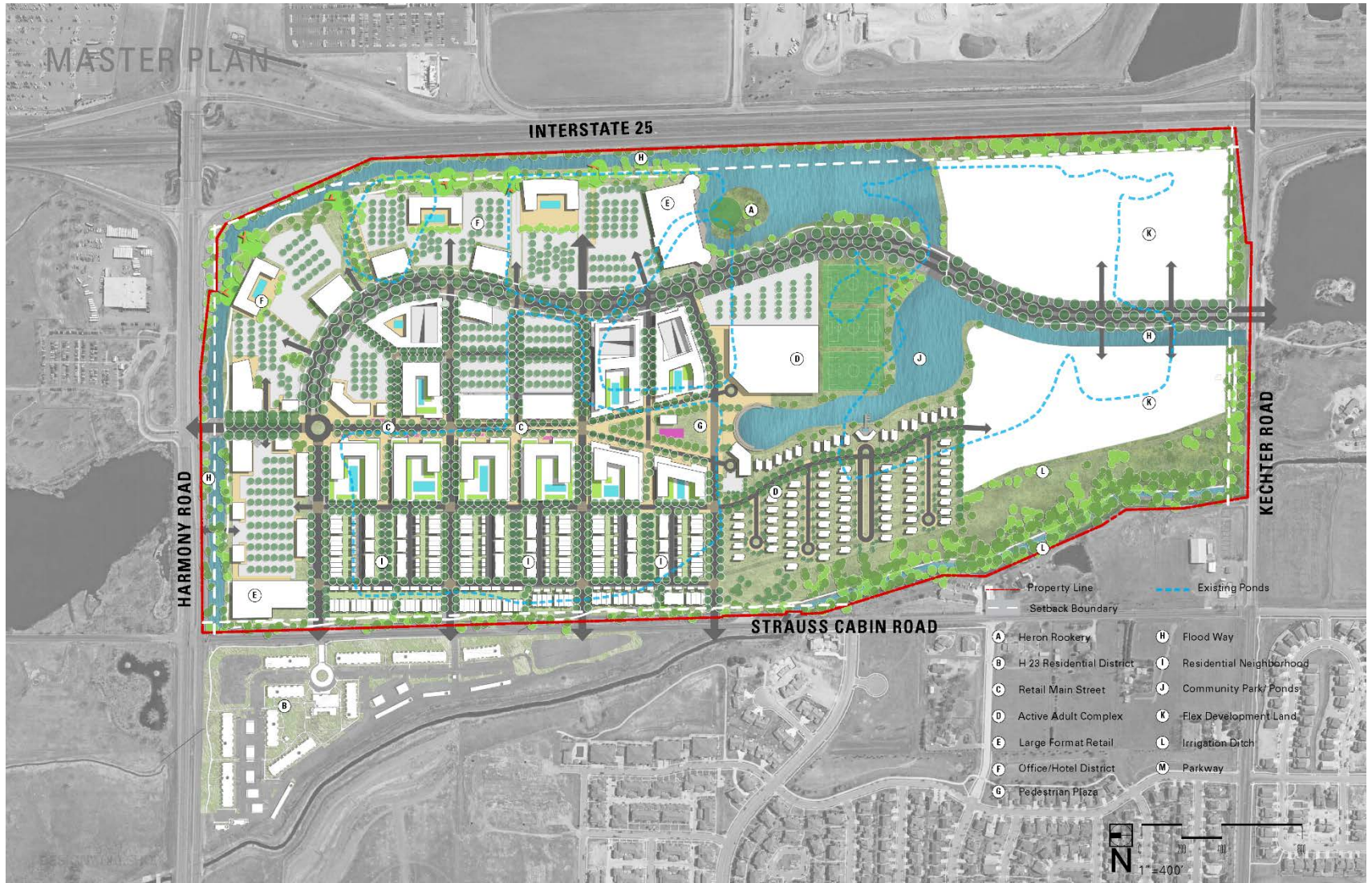
HARMONY CORRIDOR PLAN

LAND USE PLAN

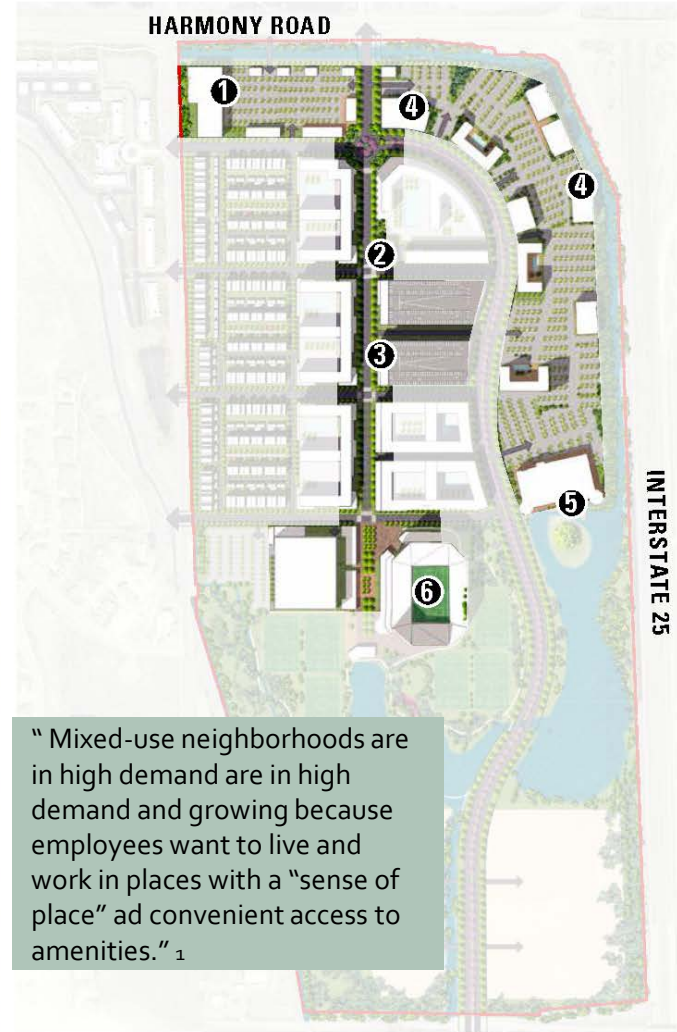
MAP 10

DRAFT AUGUST 15, 2017

Proposed Change

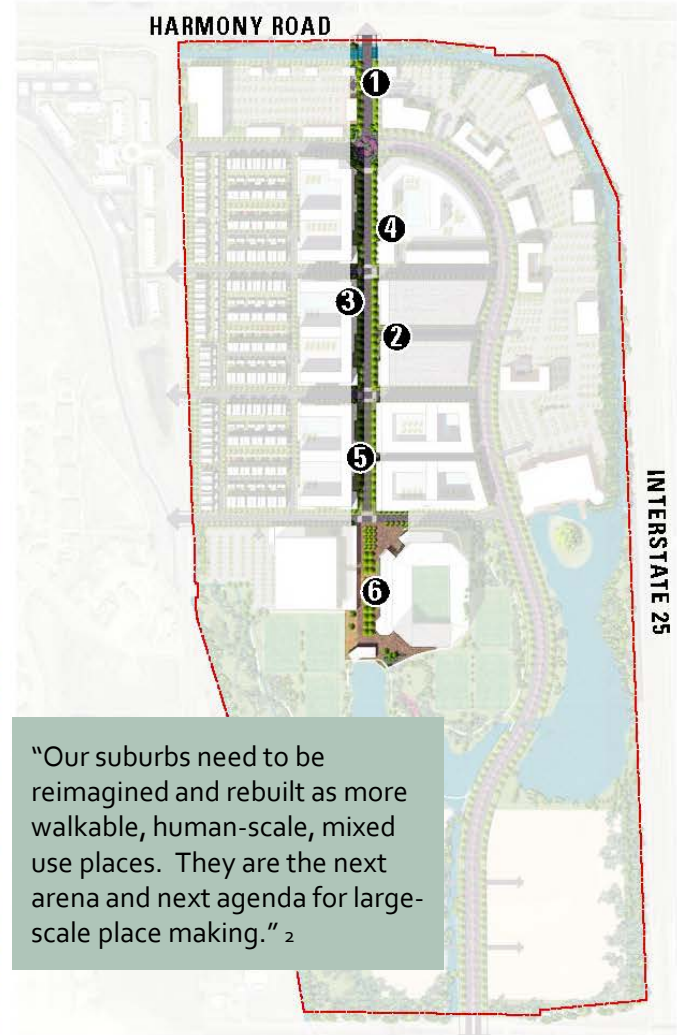


COMMERCIAL + CIVIC CHARACTER



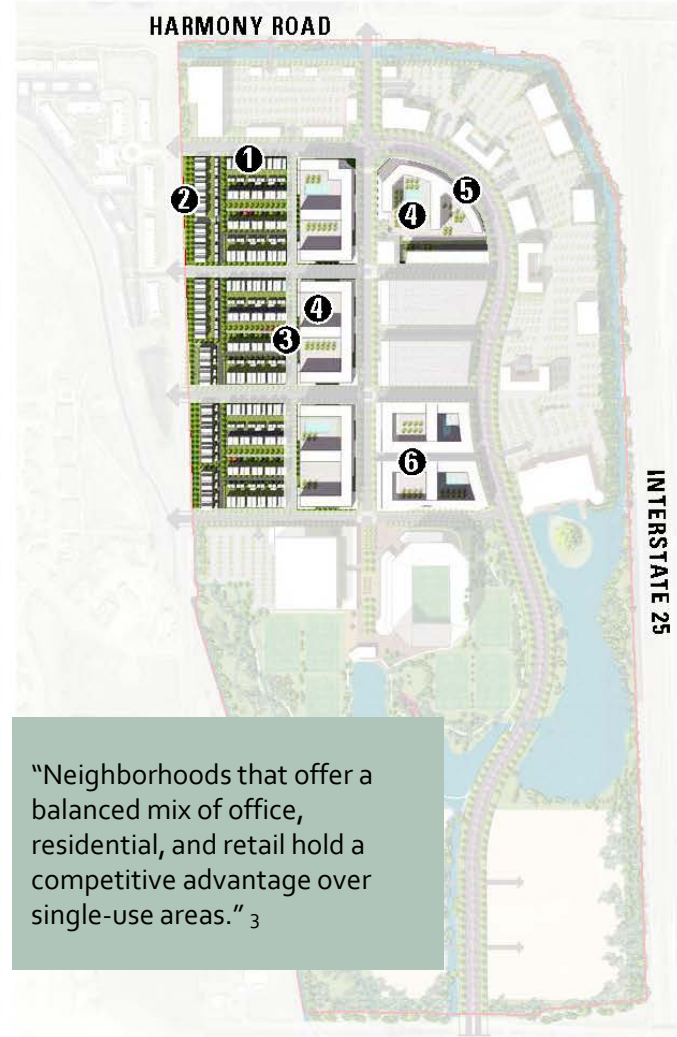
“ Mixed-use neighborhoods are in high demand and growing because employees want to live and work in places with a “sense of place” and convenient access to amenities.”¹

MAIN STREET CHARACTER



“Our suburbs need to be reimagined and rebuilt as more walkable, human-scale, mixed use places. They are the next arena and next agenda for large-scale place making.” ²

RESIDENTIAL CHARACTER



OPEN SPACE CHARACTER



1 HR&A, Growing Trend: Advantages of Locating Office Product in Mixed-Use Projects and Neighborhoods (2016), p.1.

2 CBRE (Global Investors), U.S. Urbanization Trends: Investment Implications for Commercial Real Estate (Summer 2016), p.5.

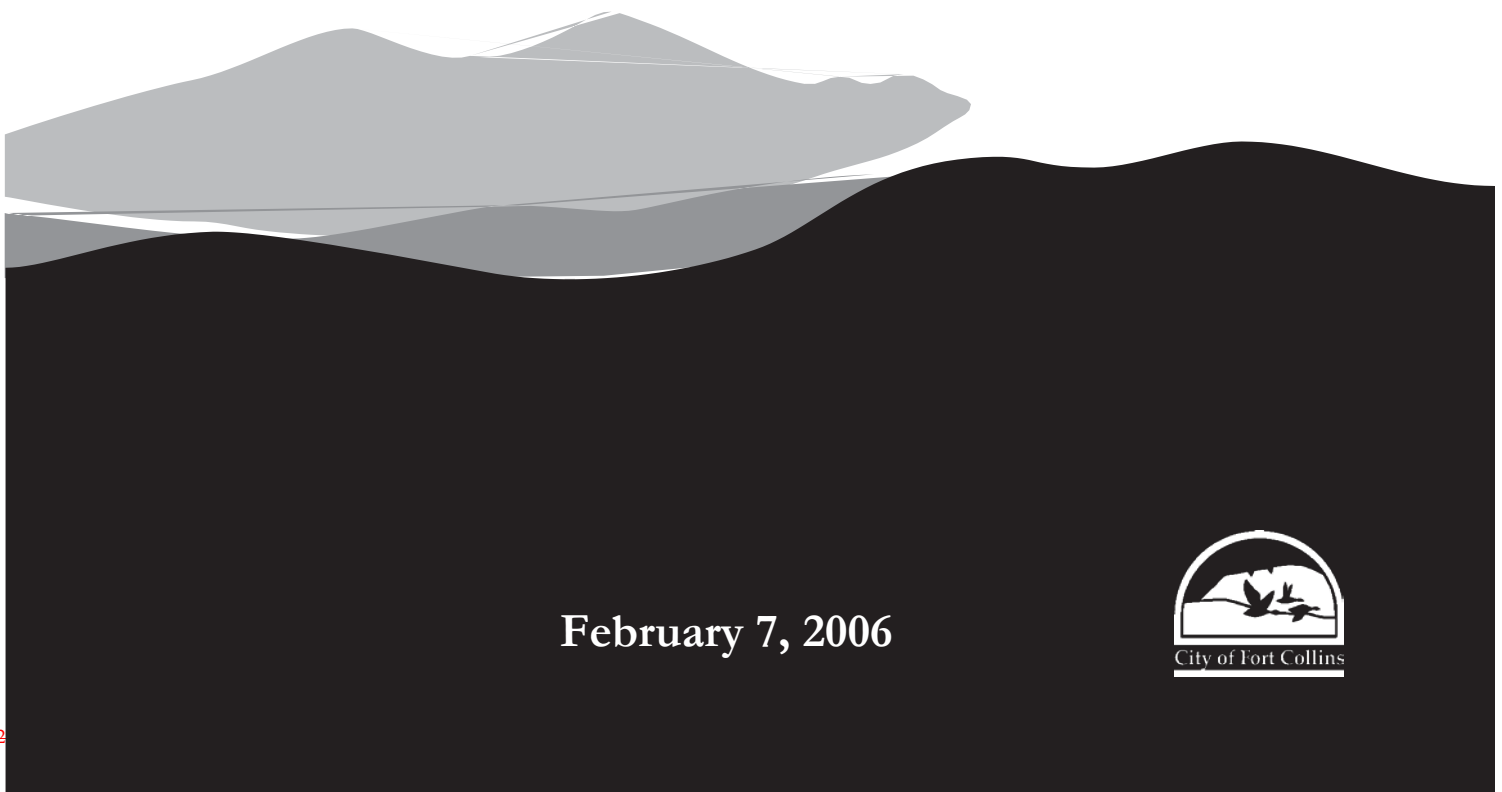
1 HR&A, Growing Trend: Advantages of Locating Office Product in Mixed-Use Projects and Neighborhoods (2016), p.14.

Tab 5

Redlined Harmony Corridor Plan Document

Harmony Corridor Plan

An Element of the City of Fort Collins Comprehensive Plan



February 7, 2006



HARMONY CORRIDOR PLAN

An Element of the City of Fort Collins
Comprehensive Plan

February 7, 2006



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*The first step in adequate
planning is to make a fresh
cavass of human ideals
and human purposes.*

LEWIS MUMFORD

TABLE OF CONTENTS

| | |
|---|-----------------|
| CHAPTER 1: INTRODUCTION | 1-1 |
| CHAPTER 2: EXISTING CONDITIONS & OPPORTUNITIES | 2-1 |
| <i>LANDFORM AND NATURAL RESOURCES</i> | 2-2 |
| <i>PUBLIC UTILITIES</i> | 2-5 |
| <i>TRANSPORTATION</i> | 2-7 |
| <i>LAND USE/ZONING</i> | 2-10 |
| <i>RECREATION SERVICES</i> | 2-13 |
| <i>HISTORICAL RESOURCES</i> | 2-15 |
| <i>VISUAL ANALYSIS</i> | 2-18 |
| <i>HARMONY CORRIDOR: THE PLAN</i> | 2-20 |
| CHAPTER 3: LAND USE | 3-1 |
| <i>ISSUES</i> | 3-2 |
| <i>CURRENT LAND USE POLICIES AND REGULATIONS</i> | 3-2 |
| <i>PLANNING FOR THE FUTURE</i> | 3-4 |
| <i>LAND USE PLAN</i> | 3-6 |
| <i>IMPLEMENTATION ACTIONS</i> | 3-11 |
| CHAPTER 4: URBAN DESIGN | 4-1 |
| <i>ISSUES</i> | 4-2 |
| <i>ALTERNATIVE DESIGN CONCEPTS</i> | 4-5 |
| <i>EVALUATING THE DESIGN CONCEPTS</i> | 4-8 |
| <i>URBAN DESIGN PLAN</i> | 4-10 |
| <i>IMPLEMENTATION ACTIONS</i> | 4-11 |
| CHAPTER 5: ALTERNATIVE GATEWAY CONCEPTS | 5-1 |
| <i>ISSUES</i> | 5-3 |
| <i>WHAT THE FUTURE HOLDS</i> | 5-8 |
| <i>THE GATEWAY PLAN</i> | 5-13 |
| <i>IMPLEMENTATION ACTIONS</i> | 5-13 |

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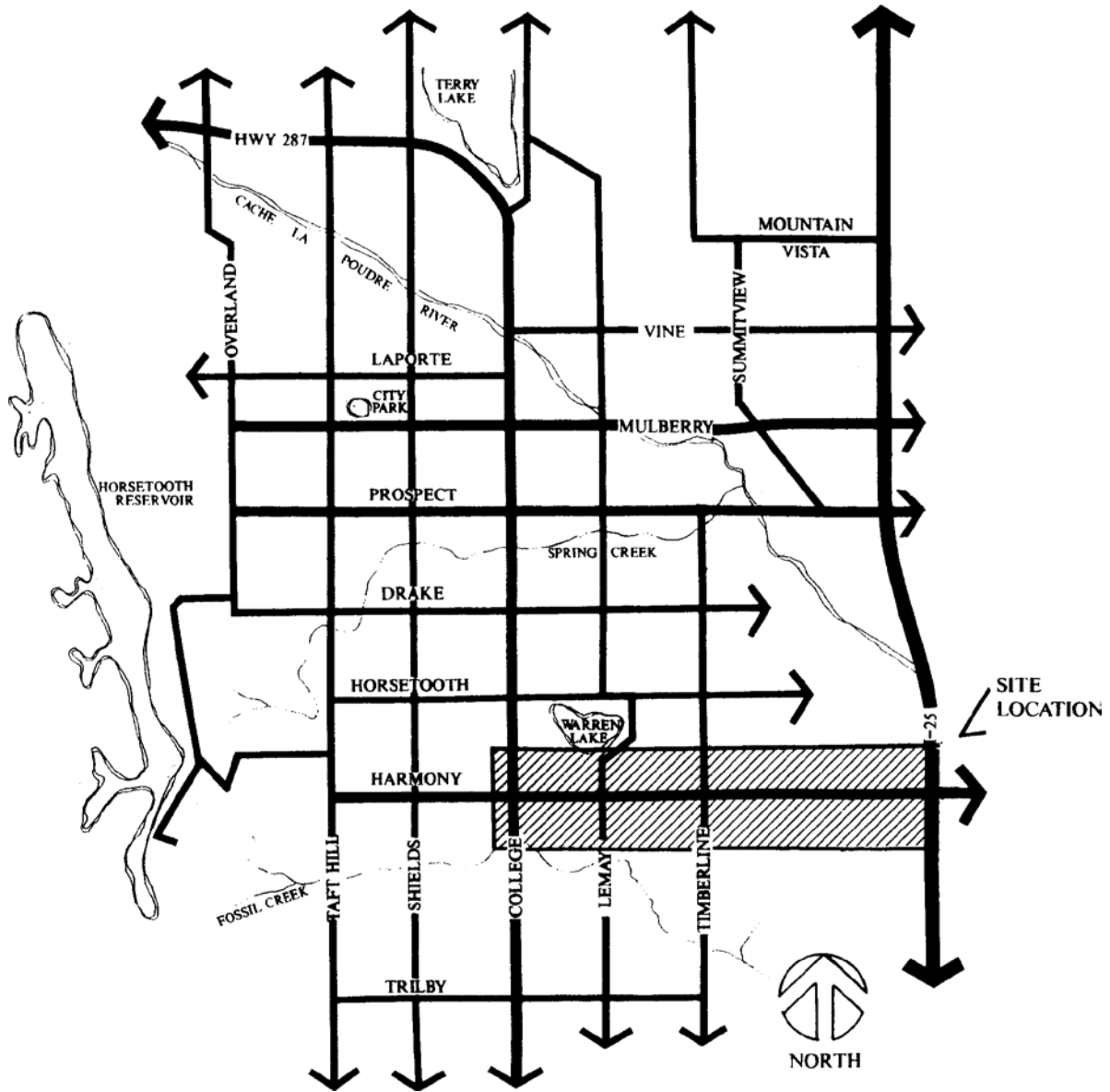
1

INTRODUCTION

*Genuine planning is an attempt,
not arbitrarily to displace reality,
but to clarify it and to grasp firmly
all the elements necessary to bring
the geographic and economic facts
in harmony with human purpose.*

LEWIS MUMFORD

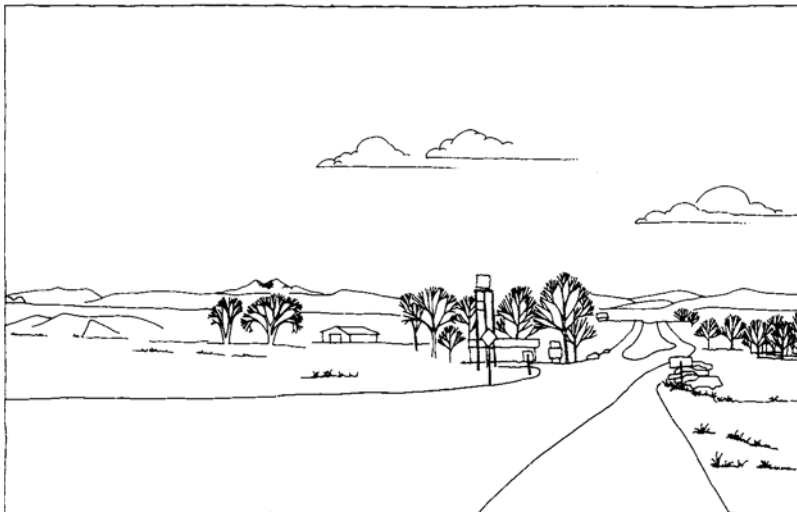
City of Fort Collins Orientation Map



THE HARMONY CORRIDOR

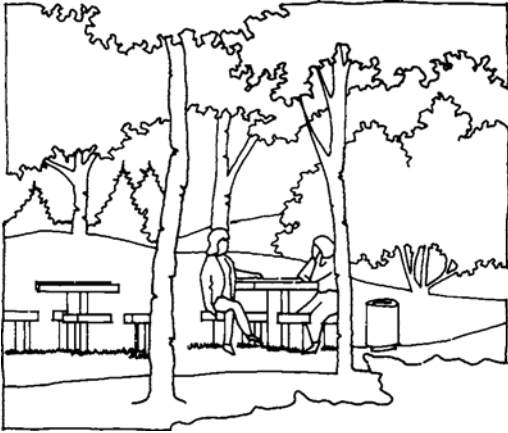
The Harmony Corridor planning area extends for five miles, from the I-25 interchange to the Burlington-Northern railroad tracks located west of College Avenue. The area extends approximately one-half mile north and south of Harmony Road. Over 7,000 people live and work in the corridor. Linking I-25 to U.S. Highway 287, Harmony Road carries approximately 28,000 vehicles to and from Fort Collins each day. It is anticipated that this figure will grow to 35,000 by the time the corridor is fully developed. The I-25/Harmony Road interchange is the most southerly entrance point to Fort Collins and a primary route for commuters and travelers going to and from the Denver metropolitan area. Most of the people visiting Fort Collins for the first time enter the city through this corridor.

Key physical features of the corridor include: close proximity to the Poudre River, lakes wetlands and associated wildlife habitat as well as spectacular views of Longs Peak and the Front Range. With approximately one-half of the corridor already developed, the visual quality of the area is exceptional. An unusually wide right-of-way and spacious median provide an excellent opportunity to develop a well landscaped parkway. Harmony Road has the potential to become one of the most attractive entryway corridors in northern Colorado.



View from the I-25 interchange looking west.

*Hewlett-Packard employees
relax in a shaded
courtyard.*



In terms of development potential, the Harmony Corridor is unrivaled in the Fort Collins area. The corridor has nearly 2000 acres of land available for business, industrial, and residential development, with relatively few development constraints. Uniquely situated between I-25 and U.S. Highway 287, the corridor has excellent community and regional access. Close proximity to housing, schools, shopping and recreation facilities makes the corridor an obvious choice for business or industry seeking to locate in northern Colorado. The fact that most of the developable land has not been subdivided into small parcels is an additional advantage for attracting large scale business/industrial land uses. Highly respected companies like Hewlett-Packard, Comlinear, ESAB and Mountain Crest Hospital have chosen to locate and/or expand their facilities in the corridor.

Along with its attractive physical features and tremendous development potential, the corridor has another vital attribute — the dedication and creative energies of its residents and business people. Property owners in the corridor have been instrumental in organizing this planning effort and have been closely involved throughout the planning process.

THE PURPOSE OF THE STUDY

With one-half of the corridor already developed and another one fourth planned, Harmony Corridor faces a turning point. While continued business and industrial development looks promising, the corridor and the community are facing many challenges. How can we attract the kinds of business and industry that will provide a strong economic base and be compatible with community values? How do we ensure a continuation of wide setbacks, attractive landscaping and other amenities that enhance the quality of life for people who live and work in the corridor? The Cache la Poudre River floodplain, numerous lakes, wetlands and spectacular mountain views combine to create an impressive and scenic gateway at the I-25 interchange. The gateway area offers unique opportunities and challenges the community to discover creative ways to balance development potential with natural resource assets. The Harmony Corridor Plan is a response to these community wide issues. Since the corridor is currently a very healthy and vital segment of our community, the Plan emphasizes the need to take advantage of its assets for our future.

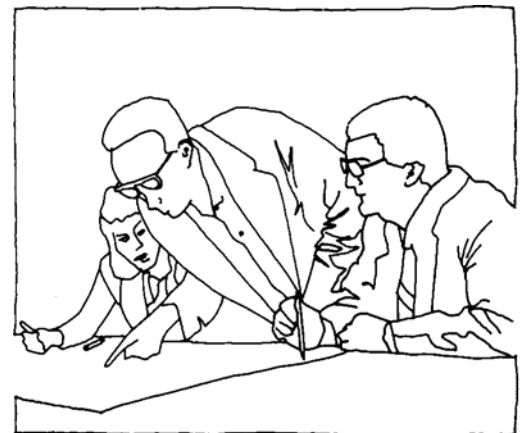
The Plan focuses on encouraging a land use pattern and urban design framework that protects community values and at the same time recognizes the need for flexibility in response to market demand. Taking advantage of the corridor's unique physical and cultural features, the Plan seeks to create a "vision" for Harmony Corridor that is dynamic, diverse, economically successful, environmentally sound and uniquely attractive.

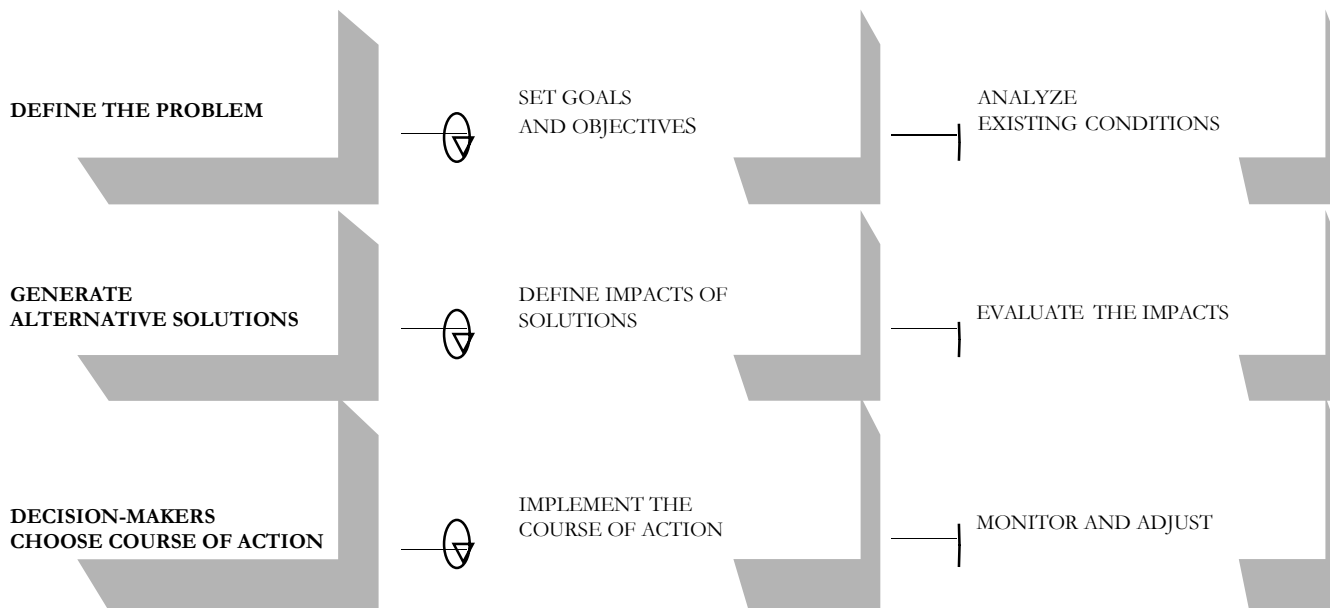
THE PLANNING PROCESS

The Harmony Corridor planning process involved two parallel work efforts – a technical planning effort and a public participation process. The technical planning effort analyzed existing conditions and opportunities, defined focus areas and generated alternative approaches which led to the planning and urban design recommendations of the Plan. At the same time, a public participation process attempted to identify all potentially affected interests and work with them using a number of different techniques designed to inform as well as solicit ideas. Advisory committees, public open houses, presentations to boards and commissions, as well as numerous meetings with special interest groups and individuals have all been used to get comments and ideas, many of which have helped shape the Plan.

A group deserving special recognition is the steering committee, a group of volunteers representing people owning property frontage along Harmony Road. Staff has welcomed the interest and enthusiasm demonstrated by this group throughout the process. The role of the steering committee was to help staff understand the values and concerns of the landowners that will be most directly affected by the Plan. The Plan is richer as a result of their dedication and responsiveness.

Citizen values, ideas and concerns were recorded at public open houses.





Technical Planning Process Diagram

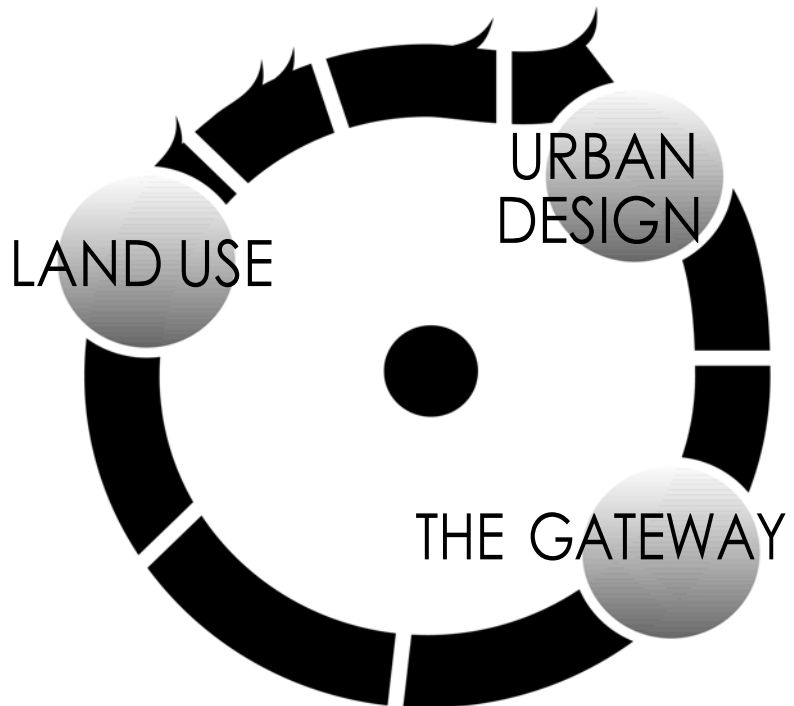
PLAN REVISION PROCESS

On July 5, 1994, City Council directed City Staff to review the Plan and identify and suggest needed amendments that would strengthen the “vision” of the Corridor that it become a major employment center in northern Colorado attracting a variety of businesses and industries serving local as well as regional markets. City staff and the Planning and Zoning Board, aided by an ad hoc advisory committee, intensively reviewed the document and recommended changes to the *Harmony Corridor Plan*, together with implementation regulations. These changes were adopted by City Council on January 3, 1995 and the changes have been incorporated herein.

THE PLAN

The next chapter describes physical and cultural existing conditions in the corridor. Analysis of existing conditions helped define the three focus areas of the Plan – LAND USE, URBAN DESIGN and THE GATEWAY. Each focus area is elaborated on independently. Issues are described, problems and opportunities defined and alternative directions for the future are analyzed. The discussion of each focus area concludes with a plan in the form of a goal statement, policies and implementation actions. Maps and graphic illustrations are used to supplement the text and clarify its intent. Design guidelines for new development in the corridor, one of the primary implementation mechanisms proposed in the Plan, have been developed and are available under separate cover.

The three focus areas together create a comprehensive “vision” for the Harmony Corridor of the future. In order for the full potential of the corridor to be realized, both the City and the private sector need to make a commitment to implementation. It is envisioned that the implementation actions spelled out in this Plan will be underway within the next five years.



IMPLEMENTATION

A series of recommended implementation actions are contained at the conclusion of each focus area discussion. Actions include several public improvement projects that require additional planning and design work. Sources of funding for construction and maintenance need to be identified. Strategies for attracting targeted industries need to be developed.

Coordination efforts with other City departments, Larimer County, the Town of Timnath and the State Division of Highways should be continued. Phase two planning of the I-25 interchange area is critical if we want to maximize the potential of this scenic gateway before development pressures eliminate options for the future. Important opportunities may be missed if the City does not play an active role in intergovernmental coordination and master planning this scenic and environmentally sensitive area.

This Plan recommends that the City assign staff to work on implementation tasks, giving priority to opportunities that may be missed if action is delayed. The *Harmony Corridor Plan* is a starting point. Effective implementation actions can turn the “vision” created by this Plan into reality for residents in the community now and for future generations. The majesty of Longs Peak and the Front Range depicted on the cover is one of the few elements of the corridor that is not expected to change in the foreseeable future. With this spectacular view as an inspiration, how can we do less than strive for excellence?

2

EXISTING CONDITIONS AND OPPORTUNITIES

All good planning must begin with a survey of actual resources: the landscape, the people, the work-a-day activities in a community. Good planning does not begin with an abstract and arbitrary scheme that it seeks to impose on a community; it begins with a knowledge of existing conditions and opportunities.

LEWIS MUMFORD

INTRODUCTION

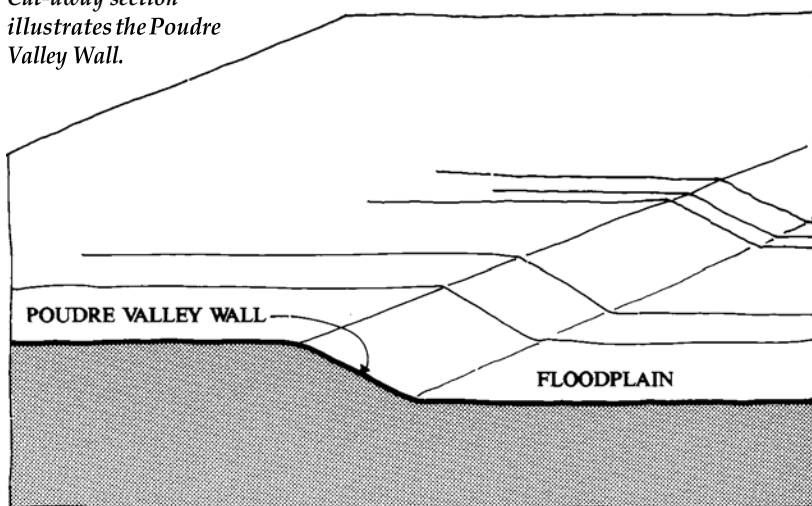
The technical portion of the planning process began by documenting physical and cultural existing conditions. This chapter provides information about the corridor and highlights special opportunities. Maps located at the end of the chapter provide graphic illustration.

LANDFORM AND NATURAL RESOURCES

LANDFORM

The Harmony Corridor contains three dominant topographic features: the floodplain of the Cache la Poudre River, bluffs known as the Poudre River Valley Wall at the edge of the floodplain and rolling plains beyond. Longs Peak, the Front Range and the foothills are highly visible and constitute a dramatic backdrop for the corridor landscape.

Cut-away section illustrates the Poudre Valley Wall.



The elevation of the study area ranges from approximately 4,850 feet at the top of the bluffs located west of I-25 to approximately 5,025 feet near College Avenue. Formed by down-cutting action of the Poudre River as it meandered within its floodplain, the bluffs represent the only dramatic change in elevation within the study area. The elevation drops 50 feet in 550 feet resulting in an average 9% slope. At the bottom of the slope the topography levels out on to the Cache la Poudre River floodplain. See Map 1.

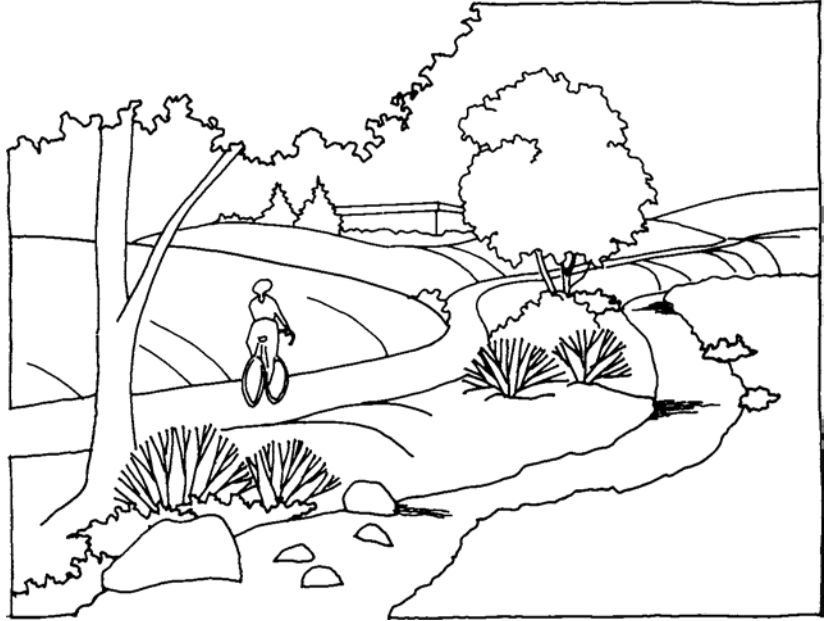
Draining approximately 1,900 square miles, the Cache la Poudre River is the largest river on the northern Colorado Front Range. The river and its associate vegetation and wildlife habitat is a valuable natural resource that offers unique recreational and educational opportunities. Along with these assets the river poses some development constraints. Generally speaking, no development is allowed within the designated floodway. Land area between the floodway and the 100-year floodplain offers some development potential if flood proofing is addressed.

DRAINAGE BASINS AND IRRIGATION CANALS

Three drainage basins occur within the study area. The Mail Creek and McClelland Drainage basins drain the western and southern portions of the study area to Mail Creek and McClelland Creek respectively. See Map 1. The Fox Meadows Basin is located in

the northeast portion of the study area and drains to the Fossil Creek Reservoir Inlet Ditch and then to the Cache la Poudre River. As development occurs, surface run-off increases, resulting in stormwater being diverted into a series of swales, detention ponds, channels, irrigation ditches and/or streams until ultimately the flows reach the Cache la Poudre River. The study area is laced with this network of drainageways and irrigation canals. Stream bank erosion and water quality issues are concerns in all three basins, but are especially critical in the McClelland and Mail Creek Basins, since both Mail Creek and Fossil Creek have experienced flooding, bank erosion and stream degradation.

Four major irrigation canals intersect the study area. Water in these irrigation canals has been diverted from the Cache la Poudre River at some point upstream from the corridor. Historically the water has been used for agricultural purposes and is allotted to area farmers through a complex system of water rights. As Fort Collins becomes more urbanized the need for irrigation canals will diminish, however, the major irrigation canals in the study area are likely to remain viable for a number of years. While the canals and their associated laterals can represent development constraints, they also can become recreational and visual amenities.



Irrigation canals and drainageways provide opportunities for recreational amenities.

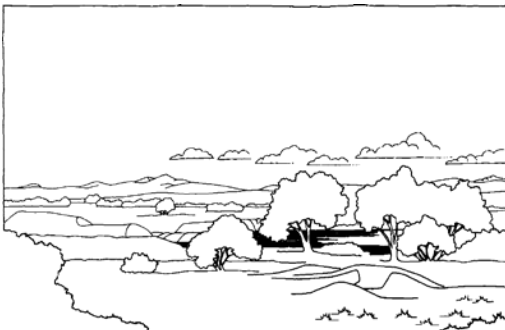
NATURAL RESOURCES

Fort Collins has always valued local natural environments as evidenced in the City's GOALS AND OBJECTIVES (1977), the LAND USE POLICIES PLAN (1979) and the LAND DEVELOPMENT GUIDANCE SYSTEM (1982). All of these documents contain directives pertaining to the conservation and protection of natural environments. In 1988, the City Council endorsed wetland and wildlife habitat maps that define the location and relative importance of natural areas within the city's urban growth area. See Maps 2 and 3. By increasing awareness of these areas, the maps reaffirmed the City's commitment to conserving important wetland and wildlife habitats for their economic, social, and aesthetic benefits.

THE GATEWAY

The most significant natural areas in the Harmony Corridor are associated with the Cache la Poudre River and located near I-25. This area has been termed the “gateway” because it is the first point of entry to Fort Collins from the south. Several lakes, wetlands and associated riparian vegetation are found on both sides of I-25 in the floodplain of the river. Most of the lakes and wetlands are a result of gravel mining operations that have and continue to alter the natural environment. With creative management and appropriate reclamation practices, these areas have the potential to become recreational, educational and scenic resources for the community. In addition, wetland areas like these may act as filtering systems for stormwater run off, preventing pollutants from entering the river. The potential value of these natural areas should not be underestimated. The fact that the area is located at the gateway to Fort Collins intensifies its importance.

Gateway view showing cottonwood trees and gravel mining operations.



In 1989, Fort Collins completed a feasibility study regarding the possibility of designating a National Recreation Area along the Cache la Poudre River. Although City Council chose not to pursue NRA designation it did make a commitment to implementing an exemplary and comprehensive river management program. This river management program may affect the future of the gateway area.

[In addition to preserving the natural and scenic resources of the gateway, development of a variety of uses is encouraged in strategic areas to support community-employment objectives and grow business and industry in the Harmony Corridor](#)

GRAVEL RESOURCES

The land area between the Cache la Poudre River and the Poudre Valley Wall located just east of Hewlett-Packard is underlain with gravel deposits classified as F1 by the Department of Natural Resources, Colorado Geologic Survey. This classification means that the resource is a floodplain deposit and is composed of relatively clean and sound gravel. The overburden ranges from 2-9 feet and the depth of gravel ranges from 8-24 feet. Roughly one-third of the area has been or is in the process of being mined.

MATURE TREES

Mature trees, both evergreen and deciduous, are important natural resources throughout the study area. Besides their importance as wildlife habitat, tree masses provide scale, frame views and add visual interest to the landscape. The corridor is fortunate to have significant numbers of mature trees. Most of them are visible from Harmony Road.

ENVIRONMENTAL ISSUES

Air quality and water quality are two critical environmental questions which affect the Harmony Corridor. In 1989, the community took important steps toward addressing these issues comprehensively. The City's Natural Resource Division began working on a comprehensive environmental management plan that will focus on a variety of environmental concerns, including air quality. At the same time the City's Transportation Division started work on a comprehensive transportation plan that relates directly to air quality issues. These two divisions and the community are working together in a participatory process to establish the best way to balance the trade-offs and address the air quality problem in this community. At the same time the Stormwater Utility is studying the issue of stormwater runoff and water quality.



Mature trees along Harmony Road frame views and add visual interest to the corridor.

PUBLIC UTILITIES

ELECTRICAL

The City provides electrical service within the incorporated city limits. As areas are annexed the City assumes service. Portions of the corridor still in the county receive electrical service from either the Public Service Company of Colorado (PSCO) or the Poudre Valley Rural Electric Association (REA). Conversion from an existing electric utility to City electric utility service is done at no cost to the customer. The City is committed to providing electrical service underground rather than through overhead power lines.

Street lighting along Harmony Road will be installed as development and street improvements occur. Standard lighting for arterial streets uses 30 foot poles, with extended arm, cobra-head type fixtures. It is anticipated that in general, light poles along Harmony Road will be placed at the edge of the roadway in an alternating pattern, approximately 175 feet on center. The light source will be 400 watt high pressure sodium bulbs.

Funding for standard lighting comes from development fees and lighting district assessments. Lighting is installed along entire improvement areas, and costs are recaptured from undeveloped areas at the time of development.

WATER AND WASTEWATER

It is anticipated that most of the Harmony Corridor will be serviced by the City's Water and Wastewater Utility, although the Fort Collin/Loveland Water District will continue to provide service to developed areas near College Avenue. The City's system of existing and proposed water and sanitary sewer mains is shown on Maps 4 and 5. Currently water service is provided through a series of relatively small water lines. As growth in the corridor continues, a major transmission line will be needed to provide service. The City Water Utility has completed the conceptual design and route selection for the Harmony Transmission Main, which extends between Shields Street and County Road 9.

Currently, wastewater service at the extreme eastern edge of the corridor would require a force main and pump station. However, the Wastewater Treatment Master Plan completed in 1990 calls for construction of a new wastewater treatment plant downstream. This would allow the eastern part of the Harmony Corridor to be served by gravity flow. The new wastewater treatment facility would not be on line before 1999.

The extension of water mains and sanitary sewers which are in or near the existing water distribution and wastewater collection systems is dependent upon many factors. In most cases, new development and the associated increases in water demand and wastewater flows are the primary reasons for these improvements. The installation and the cost of water mains and sanitary sewers to serve new developments are the responsibility of the developer. When the City requires improvements to serve areas beyond the immediate development, the City pays for oversizing.

STORMWATER UTILITY

The City's Stormwater Utility is a special purpose division within the City that protects the public's health, safety and welfare through effective stormwater management. Its responsibilities include flood control, development plan review, construction, operation and maintenance of stormwater facilities and long range

planning. Regional drainage facilities identified in the master storm drainage plans for the Harmony Corridor include a major drainage channel to carry flows from the Fossil Creek Reservoir Inlet to the old quarry just east of County Road 7. The concept plan indicates that the channel would be visible from Harmony Road.

Although the Stormwater Utility currently does not regulate stormwater quality, it is moving in that direction. The Environmental Protection Agency (EPA), an agency of the Federal government, published regulations in 1990. These regulations emphasize best management practices to control the pollutant source and apply to all municipalities in the United States. Fort Collins has already initiated activities in regard to these regulations.

The Stormwater Utility has started to inform the public about stormwater quality, inventory the City's storm drainage system and monitor water quality in local streams and major outfalls. In addition, the utility is conducting research at two recently developed commercial projects in Fort Collins. The two pilot projects use state of the art technology to monitor and improve the quality of stormwater runoff before it leaves the site. The utility is in the process of developing erosion control criteria for construction activities in the Fort Collins area and is collecting information to initiate a water quality management plan for the Mail Creek and Fossil Creek drainage basins.

All of these advance planning measures combined will enable the utility to determine the magnitude of the problem and the best way to effectively manage stormwater quality in Fort Collins.

TRANSPORTATION

TRAFFIC AND ACCESS

Harmony Road's importance as a transportation corridor for the City of Fort Collins cannot be overestimated. Carrying in excess of 28,000 vehicles to and from Fort Collins each day, Harmony Road is one of the community's major transportation links to Denver and other communities along the Front Range. In response to increasing development pressure and in recognition of the importance of Harmony Road as a gateway corridor and major arterial street, the Harmony Road Access Plan was adopted in 1989. In this intergovernmental agreement the City, the State Division Highways and Larimer County agreed to access points and future signal locations between Boardwalk Drive and I-25. Future access for development along Harmony Road must be in conformance with the Access Plan. See Map 6. Any change to access location or access type from those identified in the Access Plan requires an amendment.

Traffic counts for Harmony Road were taken in the fall of 1989. Currently all intersections operate at level of service "C" or better, meaning that the highway is operating below its maximum capacity and is providing acceptable levels of service. It is anticipated that when the corridor is built out, traffic volumes on Harmony Road will approach 30,000 vehicles a day. It is anticipated that Harmony Road will eventually be widened to three travel lanes in each direction to maintain acceptable levels of service.

At the present time the State Division of Highways controls the speed limit along Harmony Road. It varies from 55 MPH near I-25 to 40 MPH closer to College Avenue. It is expected that when the corridor is fully developed, the speed limit will be reduced to 40-45 MPH. How and when the speed limit will change is dependent on a variety of factors, including traffic volume and safety.

STATE VERSUS LOCAL CONTROL

Since Harmony Road is a state highway, decisions regarding roadway improvements, future widening, landscaping in the right-of-way and maintenance are decisions made by the State Division of Highways. The goals and objectives of the State may not always parallel those of the community. In recent years, City staff has maintained a good working relationship with the Division of Highways, and has been able to negotiate acceptable solutions when State and local goals

have varied. A good example of this cooperative spirit is the Harmony Road Access Plan.

While the Access Plan will provide a basis for agreement on transportation issues for years to come, it is likely that as the corridor continues to urbanize, the State and City will differ on issues relating to the visual quality of the roadway. Although plans for future widening of Harmony Road are not finalized, indications are that the State plans to widen the roadway to the center rather than to the outside and greatly reduce or eliminate the median. In regard to landscaping, the Division of Highways has a policy that discourages planting trees in the right-of-way and/or the median.

In recent years Harmony Road has functioned more as a local arterial street and less as a state highway. Recognizing this trend, the State has indicated a desire to work toward placing Harmony Road under local control.

LAND USE PLANNING

For the past ten years, the City has promoted a mixed land use concept in Fort Collins because of the associated social, economic and environmental benefits. One of the most important reasons for mixing land uses relates to transportation. Locating employment centers, shopping centers, recreational opportunities and residential areas in close proximity to each other shortens the distance people need to drive to

work, shop and play. It also encourages alternative modes to transportation such as walking and bicycling. Besides the convenience and associated lifestyle benefits, mixed land use, by shortening trip length and eliminating some trips altogether, can have a positive effect on air quality.

The present trend of large employers to develop in “campus-like” settings is evident along Harmony Road. While these settings are visually attractive and offer recreational benefits for employees, this kind of low density development makes efficient transit service difficult.

ALTERNATIVE MODES

While land use planning attempts to provide opportunities to work, shop and play close to home, the lack of pedestrian linkages, bikeways and safe crossings along Harmony Road make it difficult to walk or use a bicycle as an alternative mode of transportation. Sidewalks are built as development occurs. Signalized intersections and crosswalks are added as traffic volumes increase. As the corridor gets closer to complete build out, pedestrian linkages will be more complete and useful.

At the present time, Harmony Road does not have a designated bike lane. Some bicycle commuters use the road shoulder; however, the shoulder does not exist in all locations. The speed and proximity of passing vehicles can be dangerous for bicyclists.

Public transit does not serve the corridor now but may be available in the future, as employment opportunities increase. Low density development makes it difficult to provide transit service cost effectively. The Transit Development Program, a 5-year strategic plan adopted by City Council in 1990, focuses on serving transit dependent populations, including the elderly, people with low incomes, the disabled and students. Demographics show that the highest concentrations of transit dependent people live in the northwest portion of the city. Focusing of limited resources has resulted in the elimination of transit service along Harmony Road east of College Avenue for the short term future.

Mixed land uses encourage alternative modes of transportation such as walking and bicycling.



Some commuters that use I-25 to travel to other cities to work have started car pooling. Currently, people park their cars on the north side of Harmony Road just west of the I-25 interchange and travel with other people commuting to the same location. Commuter Pool is a ride share/ car pool program operated by the City which currently serves this area and could provide service to local employees as well as those who drive to Denver.

LONG RANGE PLANNING

Another factor affecting the future of transportation in the Harmony Corridor will be the Fort Collins Area Transportation Plan expected to be complete in 1991. The Plan will identify all transportation systems needs and evaluate the social, economic and environmental impacts of alternative land use and transportation models. The goal of the Plan is to establish transportation policies, facilities and implementation schedules that will guide the future development of this community through the year 2010. The Plan will identify future street needs, identify new street locations, create opportunities for bicycle and pedestrian travel and determine the role of transit in our community.

LAND USE/ZONING

EXISTING LAND USE

Harmony Corridor contains approximately 3,090 acres and is 37% developed. It already contains a wide variety of land uses. See Maps 7A and 7B. The Chart on the next page summarizes some land use statistics that help describe the corridor.

Residential land uses occupy the largest amount of developed property. There are approximately 2,322 dwelling units in the planning area for a total population of approximately 6,150 residents. Although the residential areas are single family oriented, there is significant multi-family development. The corridor also contains two large mobile home parks. Single family lots range from approximately 6,300 square feet to nearly an acre in size and home prices vary considerably from \$55,000, to over \$350,000 in current dollars. Almost all of the residential areas were constructed within the last decade, with the exception of Fairway Estates located south of Harmony Road near College Avenue, which has existed for more than twenty-five years.

Industrial uses occur at dispersed locations in the corridor area. The uses are predominantly research, manufacturing and office/warehouse. With the exception of Hewlett-Packard, the major users are located in Golden Meadows and Oakridge industrial parks. Collectively these industrial developments represent a significant portion of the community's employment base.

Only a small portion of the corridor is currently developed as retail and is found clustered near College Avenue, in the vicinity of Boardwalk Drive and near the I-25 interchange. A community/regional shopping center at Boardwalk Drive includes a PACE Membership Club Warehouse. A grocery store and a builders supply store are planned to be part of the same center. There is a scattering of office space occurring mainly between Boardwalk Drive and Timberline Road in two major centers: Boardwalk Office Park and Oakridge Business Park.

Other notable land uses include: Mountain Crest Hospital, a private psychiatric hospital; several churches; Harmony Cemetery; Werner Elementary School; as well as Landings and Golden Meadows Parks.

The variety of land uses and amenities already existing in the corridor, combined with the fact that the corridor has large, vacant, fully-serviced tracts of land for development, makes it unique in Fort Collins.

ANNEXATION

Only 60% of the study area is currently within the city limits. See Map 8. Properties adjacent to city limits and eligible for annexation are required to annex prior to development, while properties located within the Urban Growth Area (UGA) and not eligible for annexation are required to go through a City-County joint review process. Both the City and the County encourage developers to annex

HARMONY CORRIDOR LAND USE STATISTICS

| Land Use | Acres | Percent of Total |
|-----------------|--------------|-------------------------|
| Residential | 481 | 16% |
| Industrial | 190 | 6% |
| Institutional | 53 | 2% |
| Retail/Office | 69 | 2% |
| Right-of-Way | 341 | 11% |
| Undeveloped | 1,956 | 63% |
| <hr/> | | |
| Total Land Area | 3,090 | 100% |

prior to development to ensure that urban level development standards are maintained. Properties located east of I-25 are outside of the UGA and would develop under County regulations.

ZONING

Of the property located within city limits; 43% is zoned residential; 25% is zoned industrial; 16% is zoned for retail/office; 5% is zoned for mobile homes; and 11% is zoned transitional. See Map 8. Properties located in unincorporated Larimer County have a combination of farming, commercial and industrial zoning designations.

It is important to note that most of the properties within the city limits and currently undeveloped have a PUD condition attached to the zoning designation. This does two things: 1) Properties will be developed as planned unit developments (PUD) and reviewed under the criteria of the LAND DEVELOPMENT GUIDANCE SYSTEM (LDGS). 2) Developers will be allowed to propose a wider range of land uses than otherwise permitted under the zoning classification. When properties are annexed into the city, the City Council has typically attached a PUD condition to the zoning. In effect, most of the currently undeveloped property within the corridor will eventually be planned and developed under the criteria of the LDGS. The guidance system gives landowners considerable flexibility in developing their property as long as the project conforms to certain criteria designed to protect and improve the health, safety, convenience and general welfare of the people of Fort Collins.

The City's GOALS AND OBJECTIVES and the LAND USE POLICIES PLAN encourage mixed land use for the social, economic and environmental benefits associated with it. Locating employment centers, shopping centers, recreational opportunities and residential areas in close proximity to each other encourages people to drive less and walk or use bicycles more. The LAND DEVELOPMENT GUIDANCE SYSTEM is a development review system designed to implement the City's land use goals, objectives and policies. Under this system,

the development potential of any particular site is evaluated on its own merits – size, shape, location, natural features, site development concept and its effect on surrounding land uses – rather than according to a predetermined zoning district classification. This performance zoning system, developed and used extensively in Fort Collins for the past decade, has achieved national recognition as a creative and effective land use management tool.

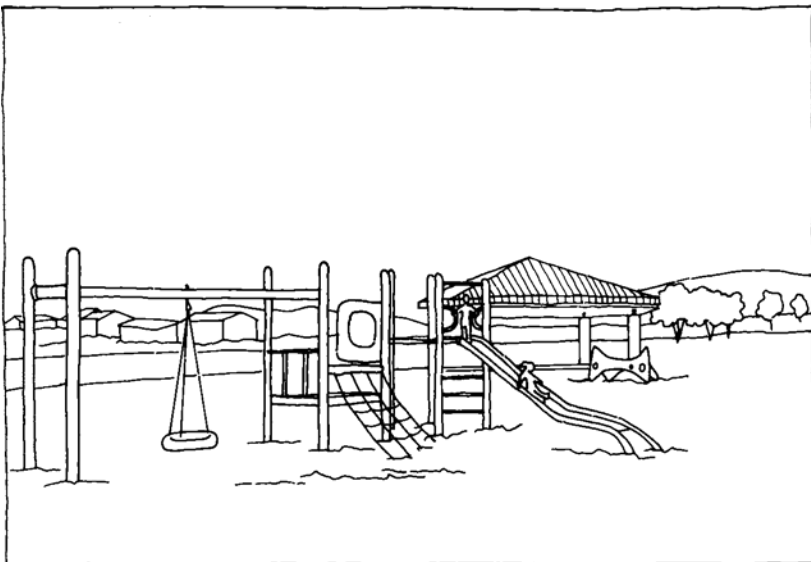
LARIMER COUNTY

Larimer County adopted a comprehensive land use plan in 1988. Land areas in the Harmony Corridor, but outside of the Fort Collins city limits are categorized in the plan. Properties west of I-25 are designated “Municipal Expansion Area/Urban Development Area” meaning that future municipal boundaries are expected to expand to include these areas. Properties east of I-25 are designated “Rural” meaning that “these areas are protected for agricultural uses and other low intensity uses requiring large land areas and low service needs.” The Larimer County Zoning Ordinance, however, indicates that these areas (east of I-25), are zoned C-Commercial and I-Industrial. These zoning district designations allow a much wider array of land uses.

PLANNED RECREATION FACILITIES

The City has already purchased 100 acres of land including Portner Reservoir, to develop Fossil Creek Community Park. In addition, the City's 1989 PARKS AND RECREATION MASTER PLAN recommends that a community park be developed to serve the southeast portion of the community. A tentative location for this park is near the Cache la Poudre River northeast of the study area. The historic Strauss Cabin, combined with the natural setting of the Cache la Poudre River, make this area an ideal location. The master plan also projects that an additional 18-hole golf course will be needed by the community by the year 2000. The natural features of this site would provide an attractive setting for a golf course.

Landing's Park provides recreational opportunities for neighborhood residents.



The City's proposed recreational trail system intersects and surrounds the study area. At this time only a general location for the trail has been defined. As development occurs, more specific trail locations will be selected and easements for the trail will be acquired through dedication and/or purchase. Acquisition of open space in the foothills, along the Cache la Poudre River and in the Fossil Creek floodplain is emphasized in the City's PARKS AND RECREATION MASTER PLAN. Since part of the study area lies within the floodplain of the Cache la Poudre River, there may be potential for open space acquisition as well as park and trail development in this scenic corridor.

Neighborhood parks are acquired and developed when funds become available through parkland fees paid by residential development. Community parks are usually funded through bond issues or special sales taxes, after population in the vicinity grows and demand for the facility increases. The City uses Colorado lottery funds for acquiring and developing trails and open space. The City is committed to completing as much open space and trail development as lottery funds will finance.

CULTURAL SERVICES

Currently all cultural services offered by the City – Lincoln Center, the museum and the public library, are located near downtown. It is likely that additional facilities, such as a branch library to serve the south part of Fort Collins, will be needed at some point in the future.

HISTORICAL RESOURCES

Before there was a Harmony Road there was a small agricultural community named “Harmony”. The Settlement was established as early as 1870. Farming was the mainstay of the community with over 4000 acres being cultivated in 1881. Crops included fruit trees, small fruits, grasses, wheat, corn, barley, oats, and timothy. Names of local farmers such as McNally, Brown, Preston, Baxter, Brockway and Webster suggest predominantly English and Scottish heritage.

The “Harmony Store”, a grocery store, post office and eventually a gas station, was the center of town. Located at the northwest corner where Timberline Road and Harmony Road intersect, the building still exists today. The original school, located west of Harmony Cemetery, was eventually replaced by a newer school which still exists at the northeast corner of the same intersection. There was a stockyard north of Harmony Road along the Union Pacific railroad tracks and a grain elevator on the south side. Several historic residences still exist.

Some of the historic buildings and sites in the corridor are potentially eligible for the National Register by virtue of their architecture, the people who lived in them, or because of their association with events that have made a significant contribution to the broad patterns of our history. See Map 9. Some of the more significant buildings and sites are depicted on the following pages.

Harmony Store-Located at the northwest corner of Timberline Road and Harmony Road, the old Harmony Store served as a grocery store, post office and town center for early residents of Harmony.



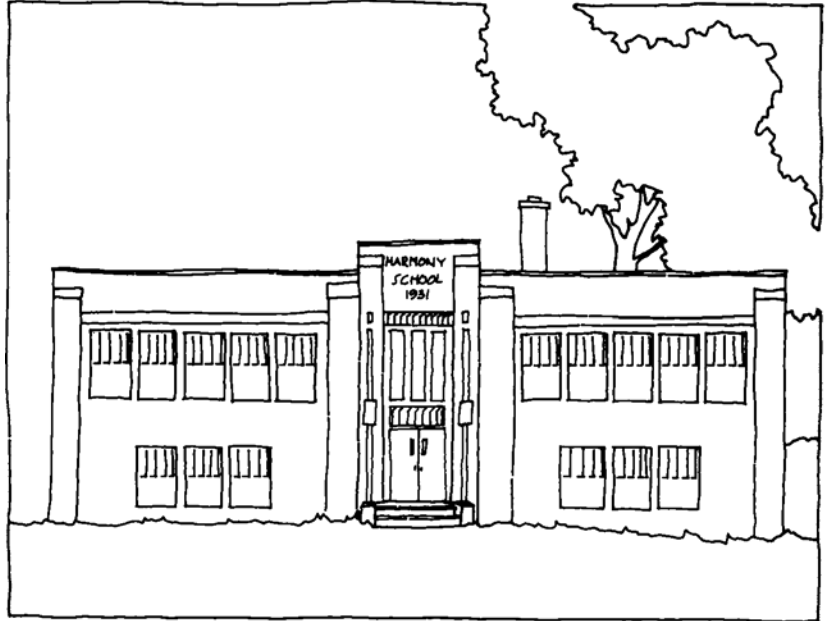


Brownell House-Built circa 1890, this two-story brick house located at 3105 East Harmony Road is architecturally significant because it is distinctively characteristic of the type, period and method of construction of the American Queen Anne Style.

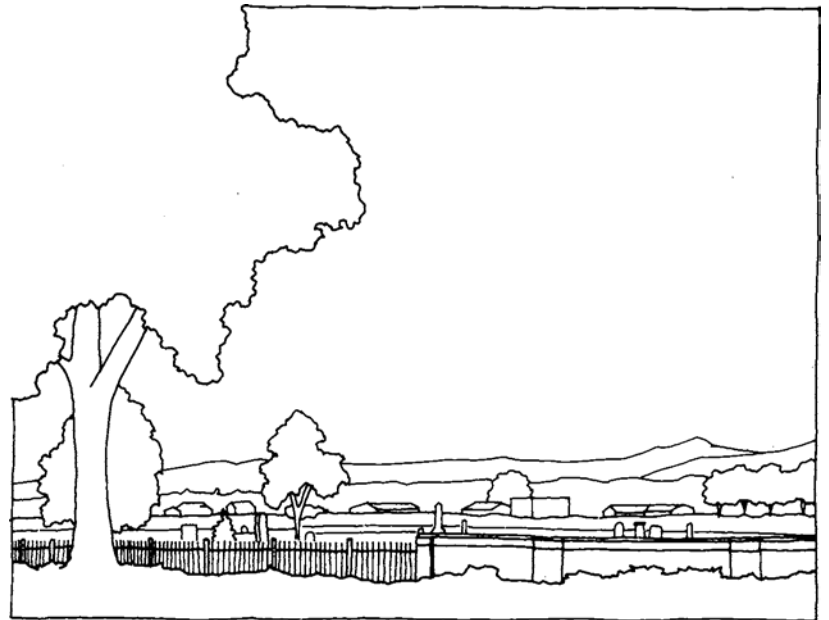


Preston Farm-Benjamin Preston, Jr. was an immigrant who came to the area in the 1860's, started with very little and eventually became a respected farmer and somewhat of an agricultural innovator. The Preston Farm is significant because of Mr. Preston's prominent role in local history, the elaborate and essentially unaltered Victorian frame house and because it is a complete working farm associated with the history of this area.

Harmony School-Built in 1931 during the depression, this building is a good example of art moderne.



Harmony Road Cemetery- This original cemetery is an important part of the community's heritage. It has been tastefully renovated and is maintained by Oakridge, the business/industrial park located adjacent to it.



VISUAL ANALYSIS

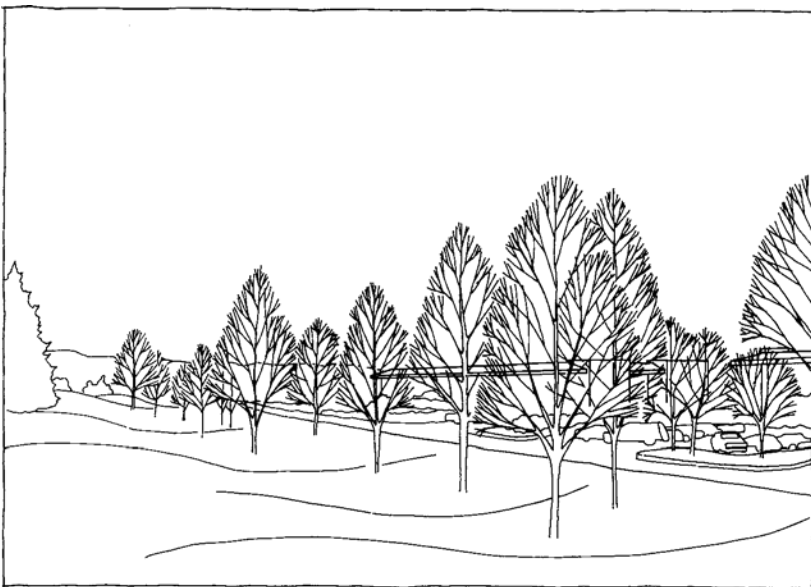
Visual analysis is a complex concept. Photography and field investigations were used to analyze the visual quality of the Harmony Corridor as perceived by a motorist driving along Harmony Road from I-25 to College Avenue. Three factors combine to create the perceived visual quality of the corridor: quality and maintenance of the built environment, visual orderliness and vegetation. Long range views to Longs Peak and the Front Range are evident throughout the corridor and also play an important role in the overall visual quality.

The gateway to the corridor at the I-25 interchange has many positive visual attributes. Riparian vegetation identifies the river's meandering path. The natural scenic qualities of the river, the floodplain, wetlands and associated vegetation

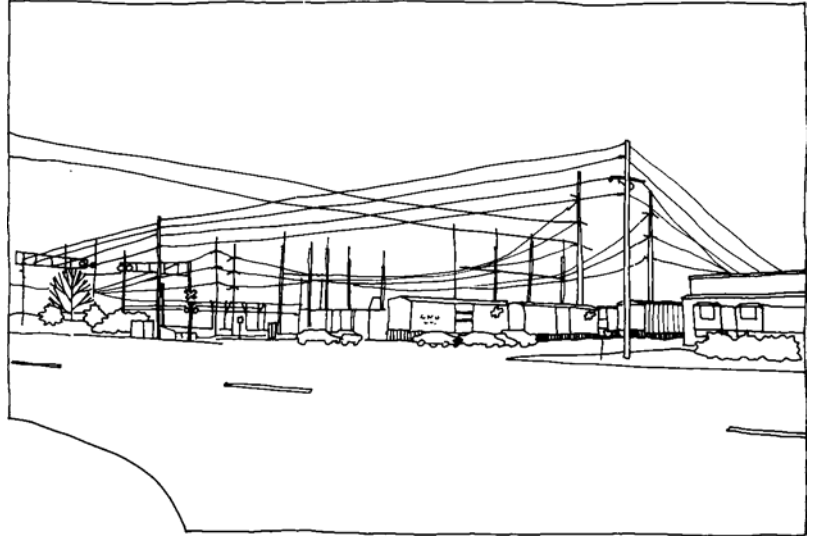
is enhanced by the dramatic backdrop of Longs Peak and the Front Range. Existing development located immediately west of I-25 detracts from the scenic qualities of this entry. The commercial buildings rate low in both architectural quality and visual orderliness. Significant vegetation helps soften the general appearance.

Masses of cottonwood trees and lakes located along the north side of the road add to the visual richness of the gateway area. Traveling to the top of the ridge and out of the floodplain, the landscape character of the corridor changes to a mixture of agricultural fields and high quality business/industrial development. The Hewlett-Packard facility located just at the top of the ridge is particularly impressive with its wide setback and handsomely landscaped grounds. This development along with several others in the corridor have set a precedent of wide setbacks and naturalistic berming along Harmony Road. The overall effect is spacious, uncluttered and very attractive. Masses of mature trees are interspersed throughout the corridor framing views and providing visual diversity. Overhead power lines are noticeable along most of Harmony Road, predominantly on the north side. It is anticipated that most of these lines will go underground as land is annexed and the area is served by City of Fort Collins Light and Power.

Hewlett-Packard facility located at the top of the ridge.



Traveling further west, development increases, the type of development becomes more diverse and the overall visual quality decreases. The area around the Union Pacific railroad tracks located at about the midpoint of the study area is problematic because of visual clutter created by warehouse-type structures, railroad and traffic control devices, overhead power lines and signage. On the positive side, Oakridge and Golden Meadows business parks located just west of the railroad tracks are further examples of high quality business/industrial development and landscape sophistication, helping to set the tone for future development in the corridor.



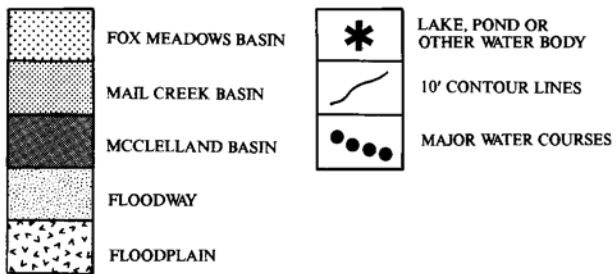
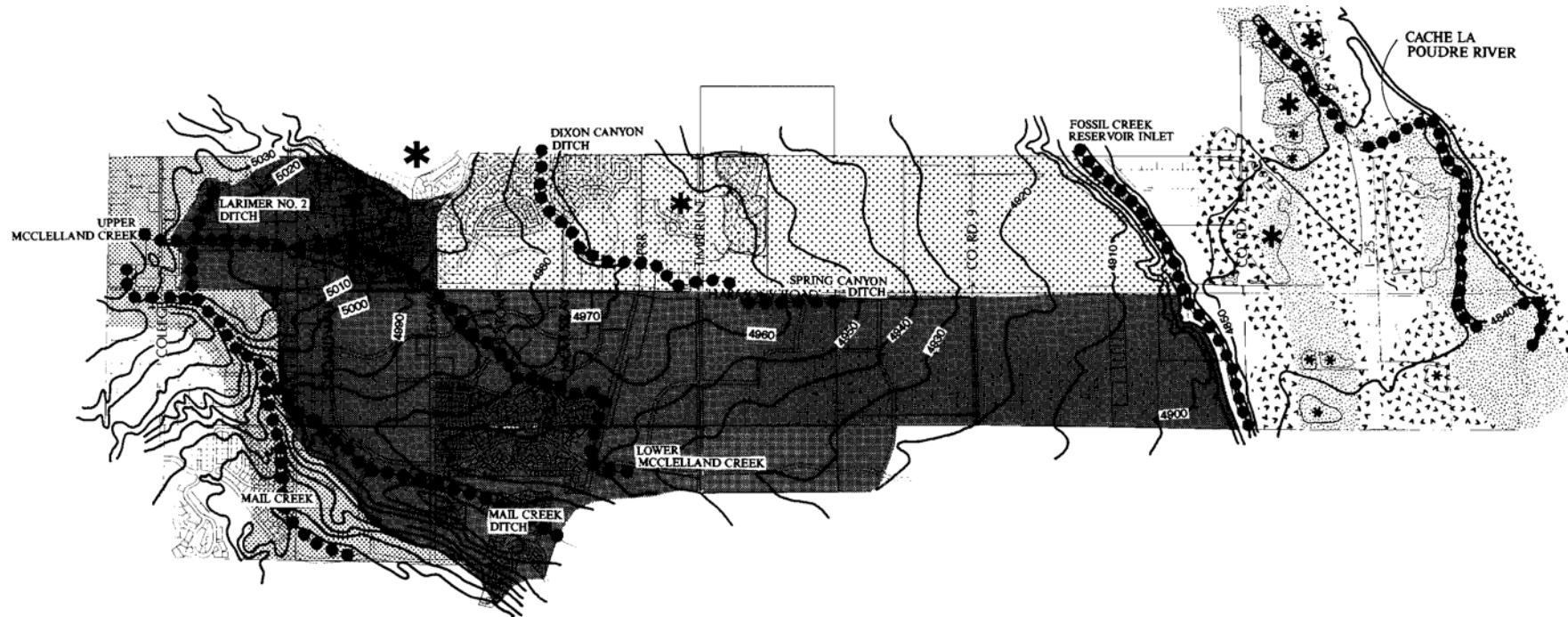
Visual clutter near the Union Pacific railroad tracks detracts from the attractiveness of the corridor.

As one approaches College Avenue, setbacks become much narrower and are nonexistent in some areas, the quality of development decreases, the median ends and there is less vegetation at eye level to soften the visual clutter and intense development. This area is however, not without positive aspects. Recent developments located on the west side of the College Avenue intersection have provided wider setbacks and generous amounts of plant material to help soften the appearance of the intersection. Riparian vegetation along Mail Creek and an abundance of mature trees associated with the Pioneer Mobile Home Park are significant natural amenities which will become even more valuable as this area redevelops over time.

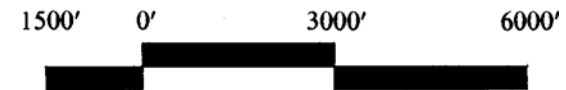
***HARMONY CORRIDOR:
THE PLAN***

Analyzing existing conditions in the corridor led to the identification of potential problems and also revealed a myriad of opportunities. The corridor has large tracts of fully serviced land available for development. We have an opportunity to attract the kinds of business and industry we want for the corridor, instead of just reacting to what comes. The visual appearance of the corridor is linked to its livability and is also important economically. We have an opportunity to affect how the corridor will look in the future. The gateway area, located in the floodplain of the Cache la Poudre River is largely undeveloped. We have an opportunity to successfully balance natural resource assets and economic development at this important gateway entrance.

Three focus areas are defined in the Plan – LAND USE, URBAN DESIGN and THE GATEWAY. In each focus area issues are delineated and potential problems are identified. Alternative approaches for solving the problems and for taking advantage of the opportunities were generated and analyzed, resulting in recommended courses of action. The *Harmony Corridor Plan* is a projection of the corridor's future, indicating ways to resolve conflicts and take advantage of unique opportunities.



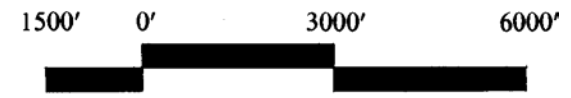
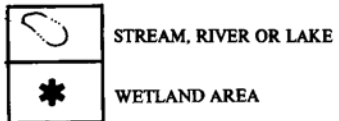
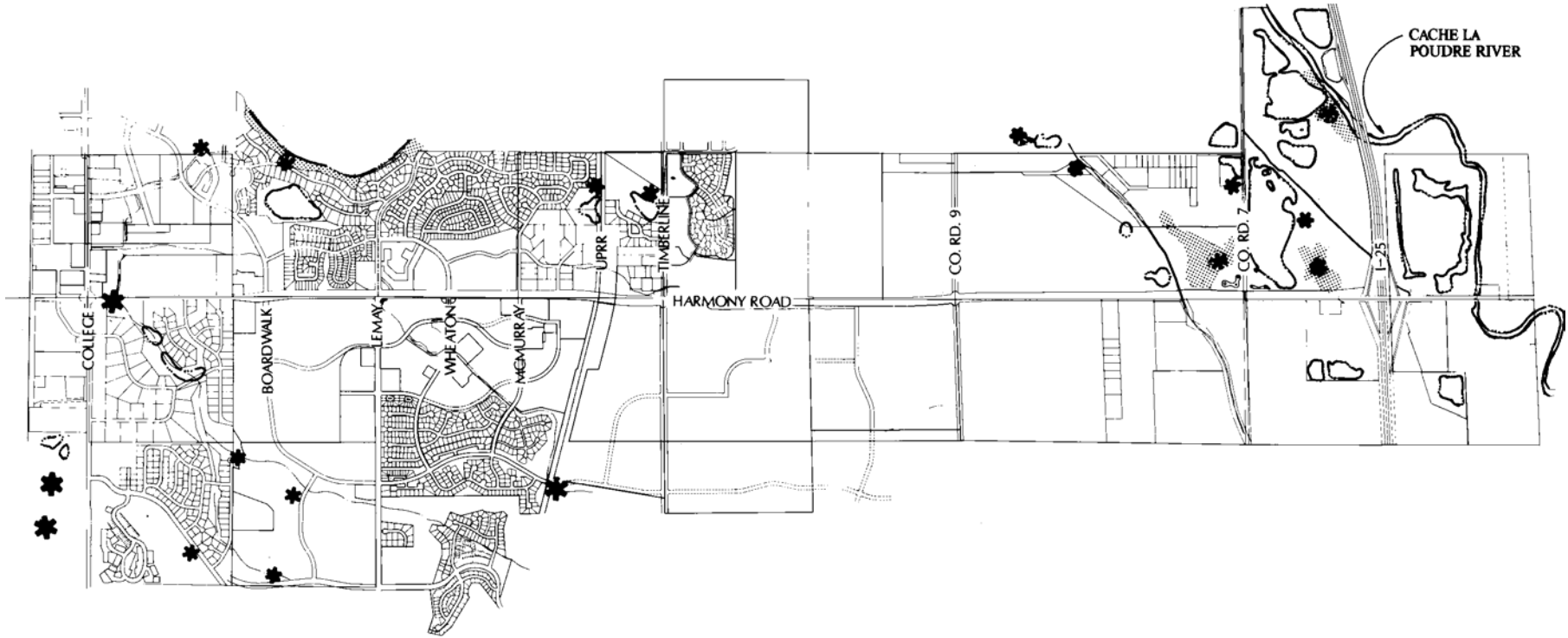
NORTH



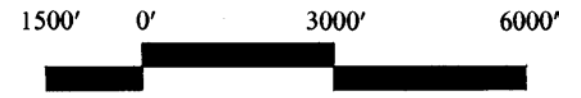
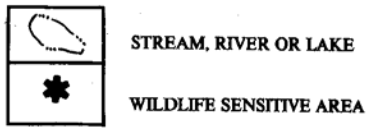
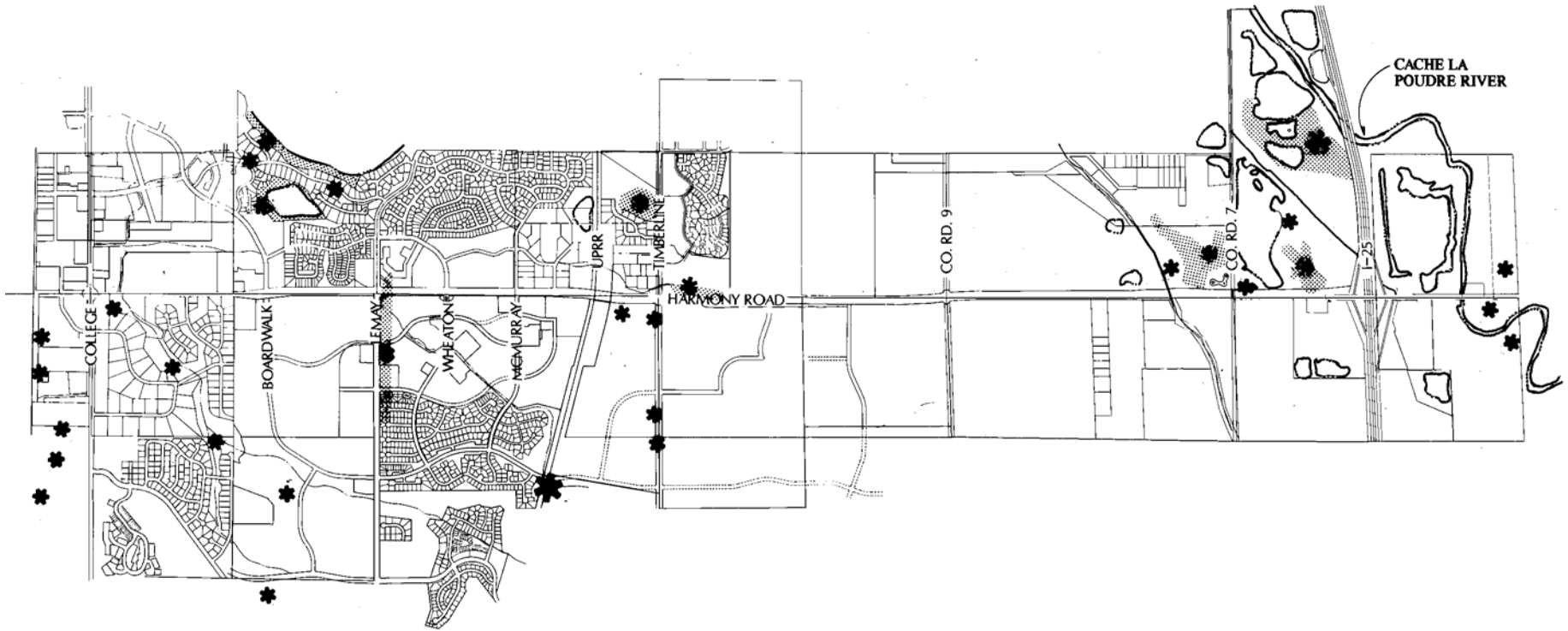
HARMONY CORRIDOR PLAN

LANDFORM/ DRAINAGE

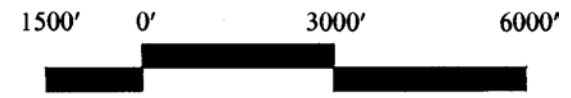
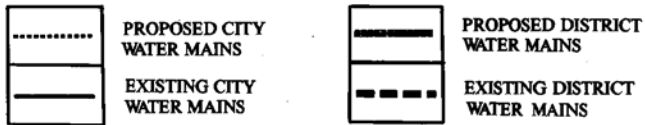
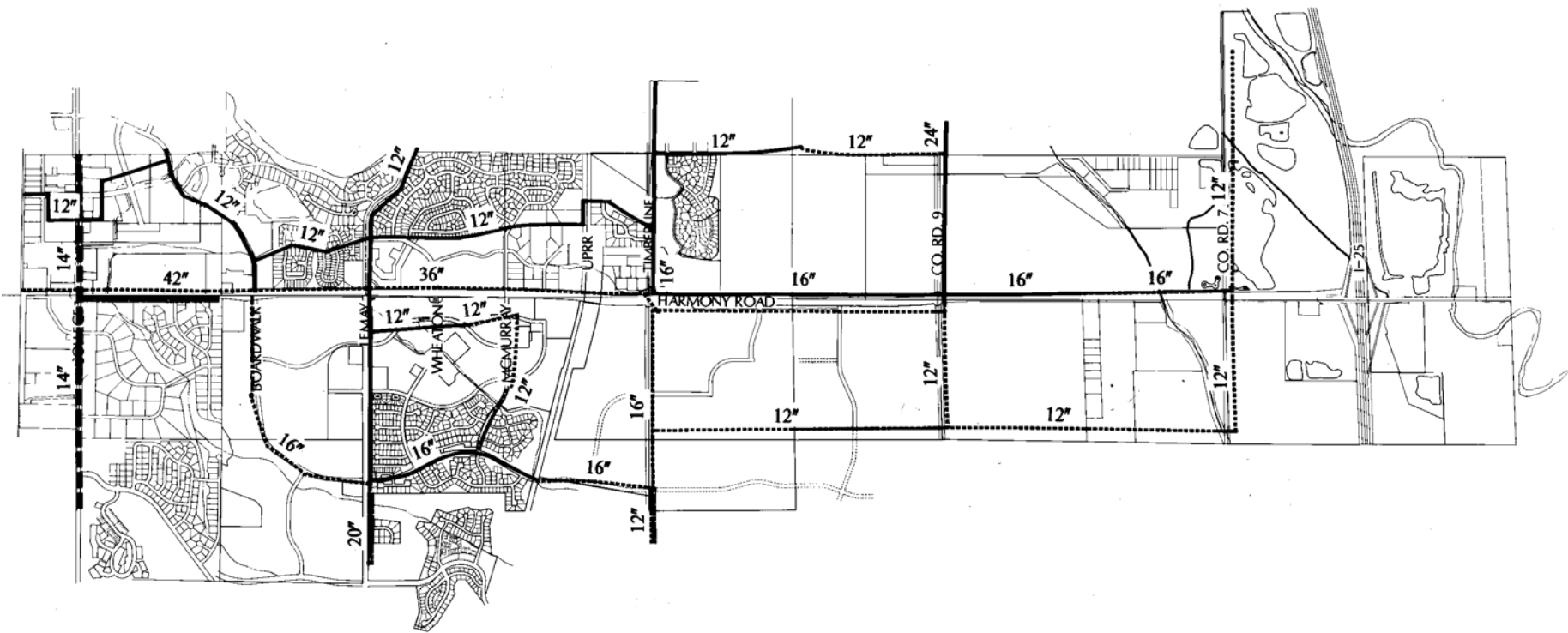
MAP 1



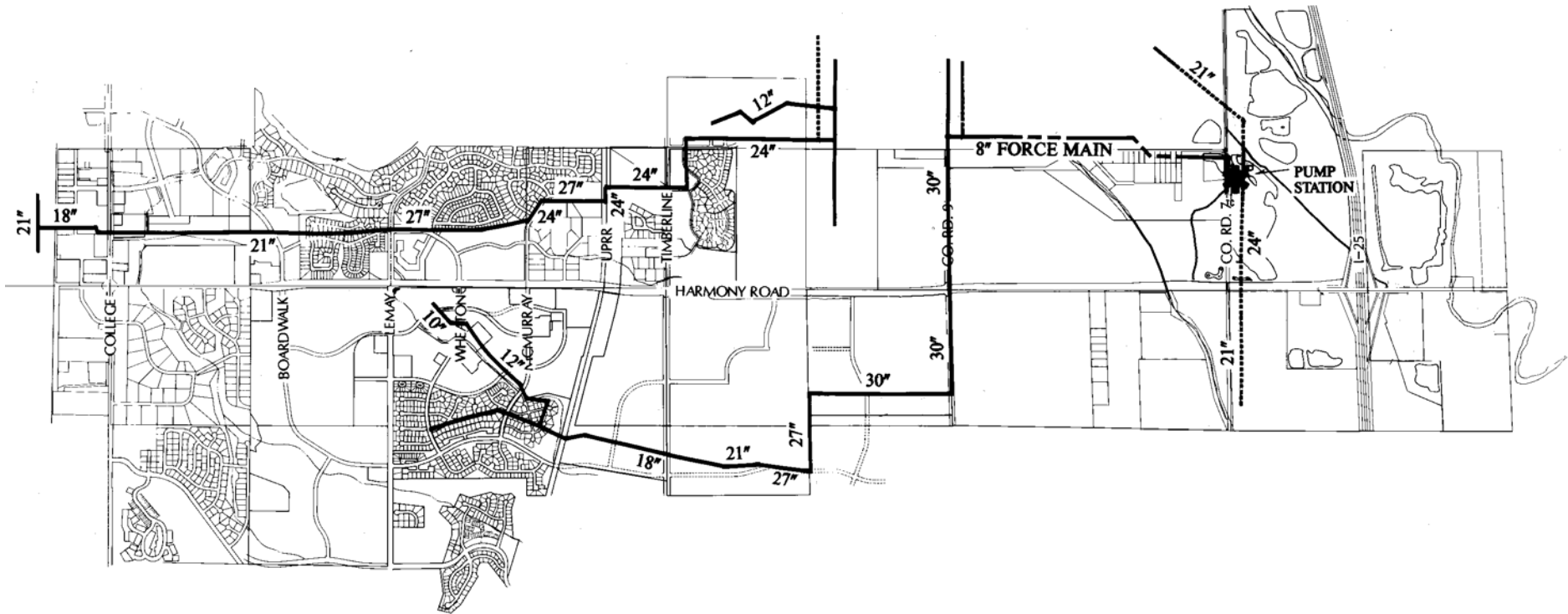
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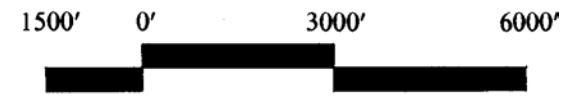
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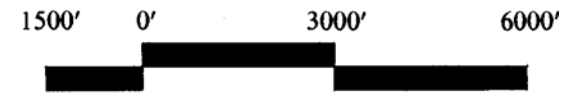
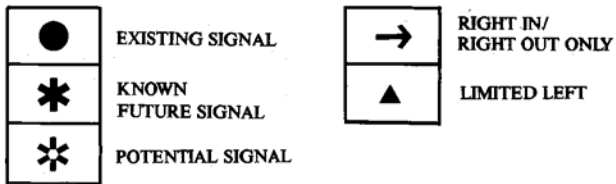
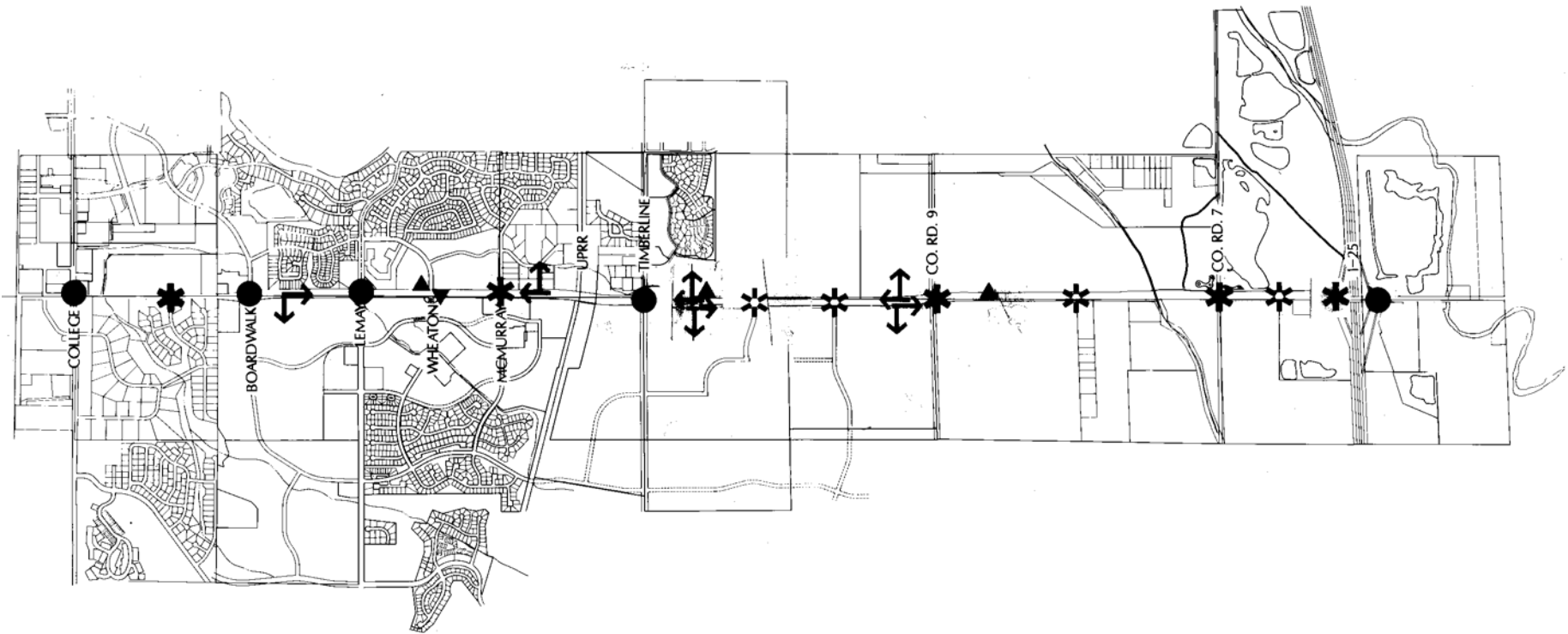
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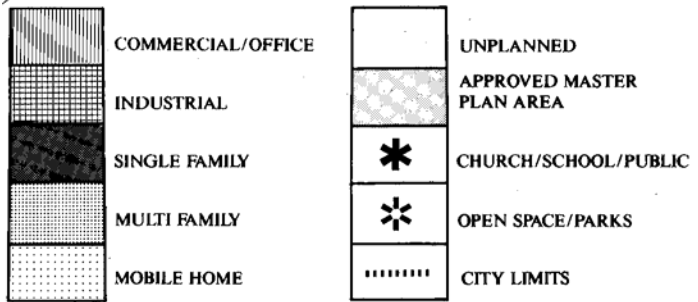
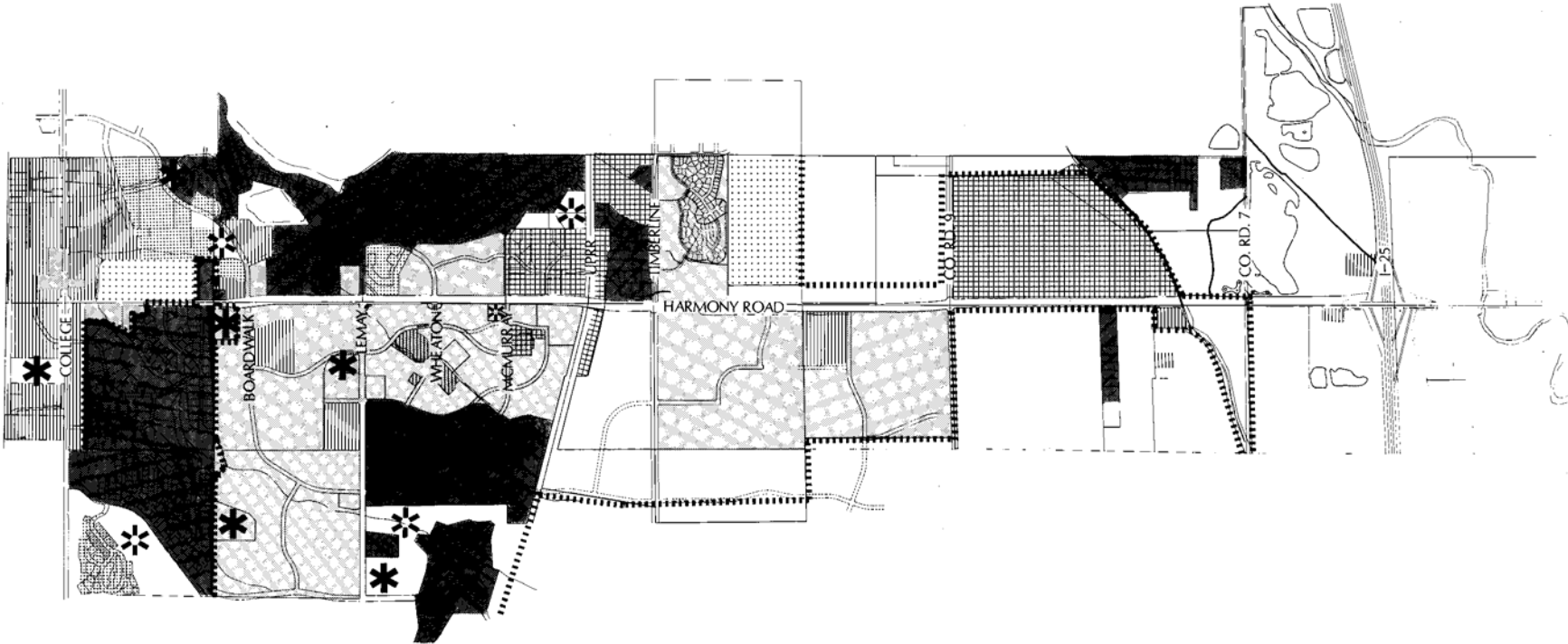
-  EXISTING CITY SEWER LINES
-  PROPOSED CITY SEWER LINES
-  FORCE MAINLINE



HARMONY CORRIDOR PLAN

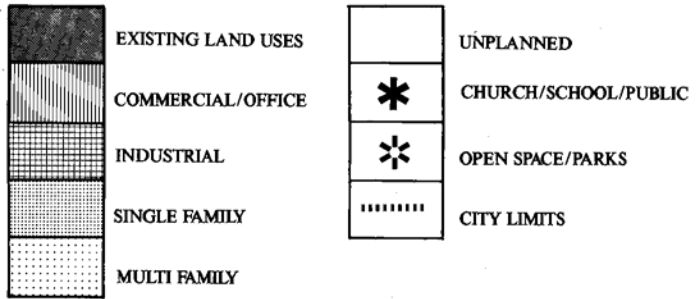
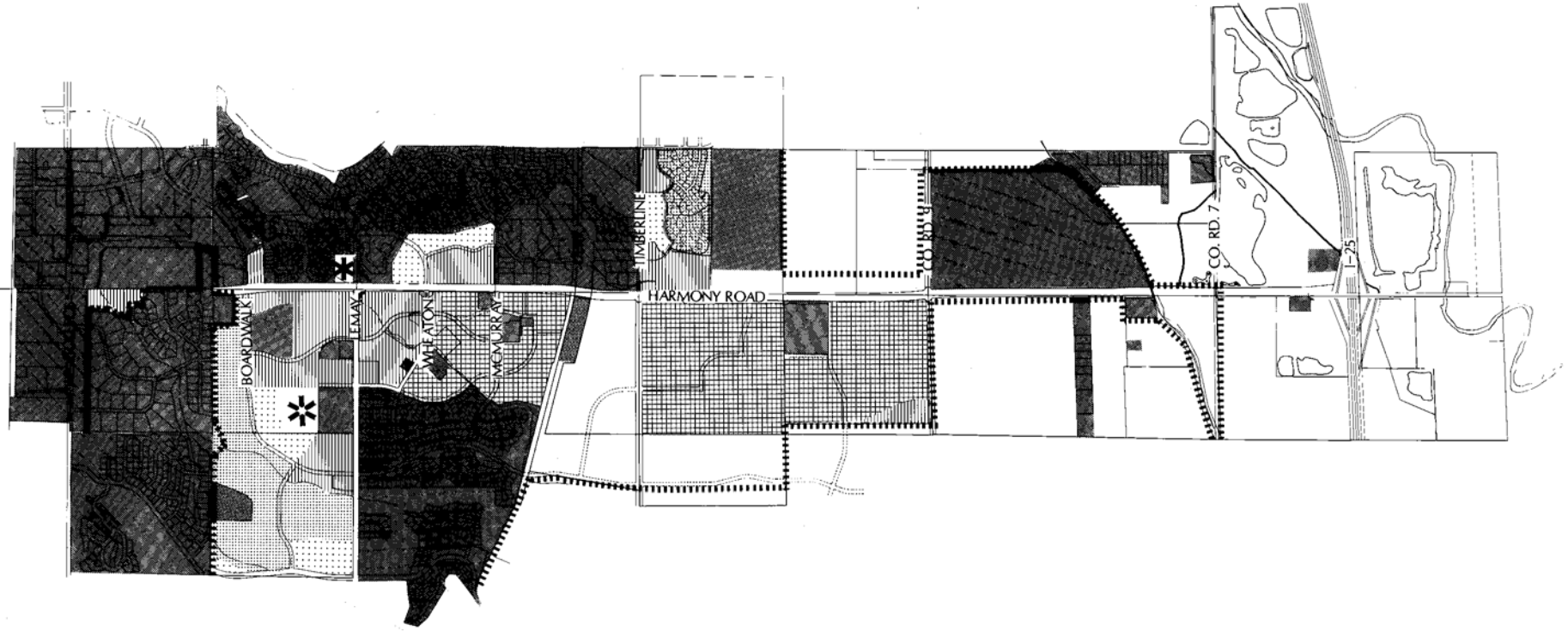


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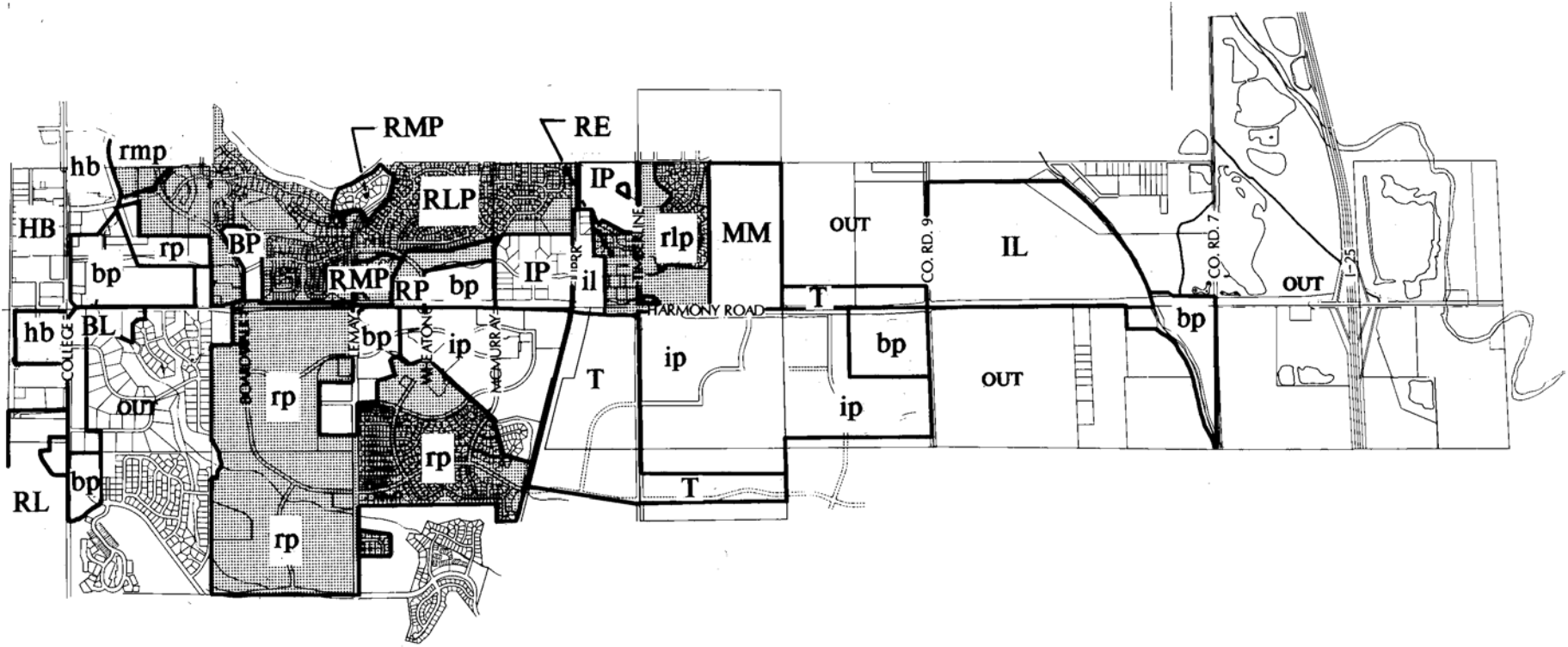
HARMONY CORRIDOR PLAN

LAND USE - EXISTING MAP 7A



HARMONY CORRIDOR PLAN

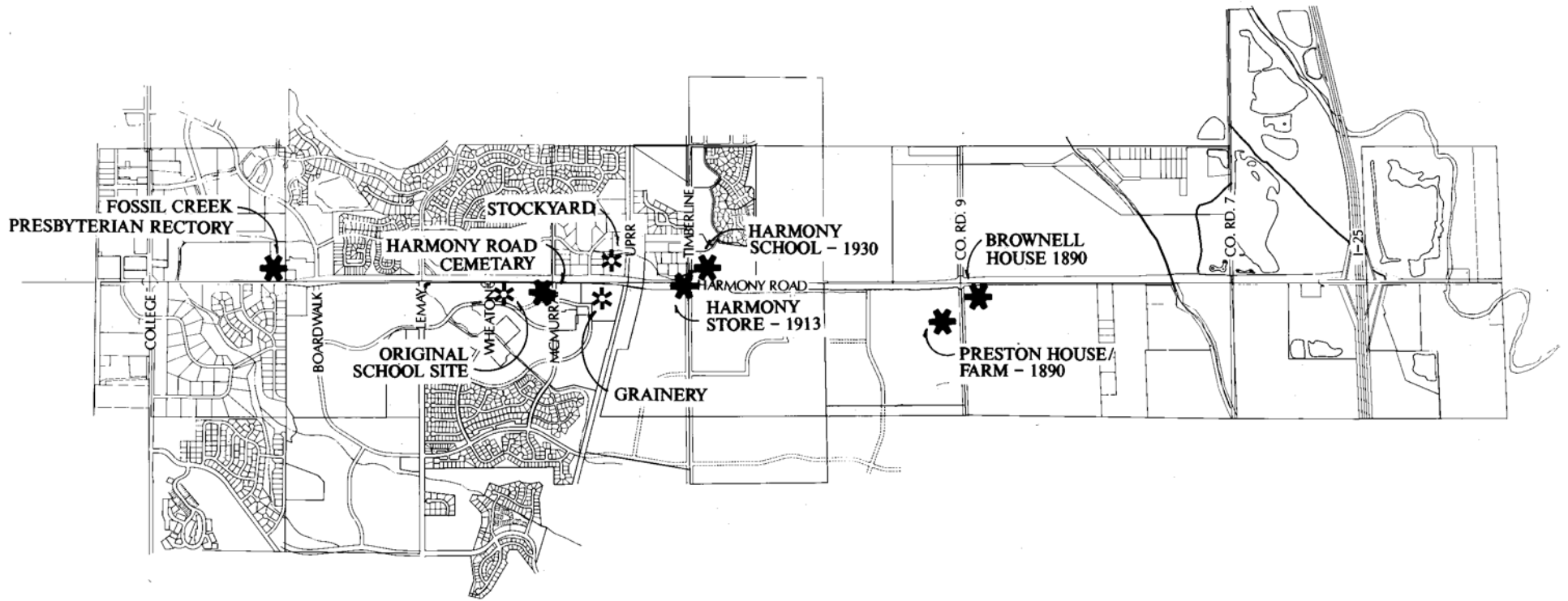
LAND USE - APPROVED MASTER PLAN AREAS MAP 7B





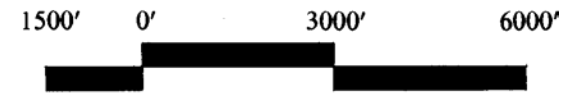
| | | | |
|----|--------------------|-----|------------------------------------|
| HB | HIGHWAY BUSINESS | RP | PLANNED RESIDENTIAL |
| BP | PLANNED BUSINESS | RL | LOW DENSITY RESIDENTIAL |
| IL | LIMITED INDUSTRIAL | RLP | LOW DENSITY PLANNED RESIDENTIAL |
| IP | INDUSTRIAL PARK | RMP | MEDIUM DENSITY PLANNED RESIDENTIAL |
| T | TRANSITION | RE | ESTATE RESIDENTIAL |



HARMONY CORRIDOR PLAN



-  EXISTING HISTORIC STRUCTURE
-  HISTORIC SITES WHERE TRAIL MARKERS MIGHT BE APPROPRIATE



HARMONY CORRIDOR PLAN

3

LAND USE

The final test of an economic system is not the tons of iron, the tanks of oil, or miles of textiles it produces. The final test lies in its ultimate products—the sort of men and women it nurtures and the order and beauty and sanity of their communities.

LEWIS MUMFORD

INTRODUCTION

The national image enjoyed by Fort Collins as an excellent place to live and do business is well deserved. Few cities in the nation have a more spectacular setting, a more qualified work force, or a more pleasing climate. The Harmony Corridor represents a key opportunity to maintain and enhance the community's positive image and quality of life.

As the Harmony Corridor emerges as a focus of development activity in southeast Fort Collins, this is an opportune time to look at current development trends and determine what specific future land uses would be most desirable to complement other development in the area.

ISSUES

The issues surrounding future land use in the Harmony Corridor appear to focus on the need to manage development to achieve a level of quality consistent with the economic, environmental, visual and other "quality of life" objectives of the community; while guiding the corridor to become a major business center in northern Colorado that attracts desirable industries and businesses and, at the same time, provides effective transitions from residential neighborhoods.

Another important issue is the concern that the Harmony Corridor should not develop as a typical commercial "strip" with frequent curb cuts, inadequate landscaping, and highly fragmented development lacking coordinated site planning.

Finally, the corridor offers unique opportunities to attract desirable industries and uses that can provide long-term economic stability for the community. Fort Collins has the opportunity to choose which industries are important for its future. These choices will set the direction for the community's economy for the next forty years. In this regard, the issue appears to focus on the need for more predictability in guiding industries and businesses choosing to locate in the corridor area.

CURRENT LAND USE ~~POLICIES~~POLICIES AND REGULATIONS

The City's LAND USE POLICIES PLAN and LAND DEVELOPMENT GUIDANCE SYSTEM (LDGS) are the two documents which have been used most frequently to guide the planning and development of the corridor for the past ten years. The LAND USE ~~POLICIES~~POLICIES PLAN (1979), an element of the City's COMPREHENSIVE PLAN, is the official statement of long range planning policy regarding a broad variety of land use planning issues including growth management,

environmental protection, and locational policies for specific land use classifications. The LAND USE POLICIES PLAN does not dictate specific kinds or specific locations of land uses that could occur in the community, but does provide general guidance, with special emphasis that development be well-designed and mitigate any negative impacts before they be allowed to develop.

Once the *Harmony Corridor Plan* is adopted, it will serve as an element of the COMPREHENSIVE PLAN and will supplement the LAND USE POLICIES PLAN for this section of the community.

The LDGS, on the other hand, is not a Plan. It is a land use regulatory mechanism, like zoning, which is used to implement the goals, objectives and policies of the LAND USE POLICIES PLAN and the COMPREHENSIVE PLAN.

The LAND USE POLICIES PLAN promotes the maximum utilization of land within the corridor, higher density development, phased growth, a mix of uses and concentrated building activity. The availability of public facilities, including streets, sewer, water, natural gas, and electricity, establishes the corridor as a preferred location for intense urban activity including a mix of residential, industrial, commercial and recreational uses. Properly designed, multiple use developments make sense from both a public and private standpoint. People can and should have the opportunity to live near where they work, where they shop where they

go out to eat, and where they find recreation. The auto becomes less necessary, thereby relieving the transportation system and reducing air pollution. Directing growth to those areas of the community where utilities are already in place, saves money and makes more efficient use of the existing public investment in infrastructure improvements.

The adopted LAND USE POLICIES PLAN also encourages a variety of retail activity in the corridor, including community and regional shopping centers. ~~Only neighborhood scale shopping centers are allowed in residential areas. Strip commercial~~ Strip commercial development is discouraged in the LAND USE POLICIES PLAN ~~in favor of compact shopping centers.~~

Transitional land uses or areas are also provided for in the Plan to be located between residential and commercial ~~areas~~ areas except in specified areas where a mix of residential and commercial uses are encouraged in a live-work environment. All residential areas are encouraged to include a mix of single family and multi-family dwelling units of differing types and densities. Other uses such as parks and schools are also expected to develop in the future to serve the ~~expanding~~ expanding residential areas.

Since the late 1970's, development in the Harmony Corridor has been especially attractive and sensitive to the unique characteristics and importance of the area. The decision by Hewlett-Packard to locate in this corridor has had the positive effect of attracting other light industries and office users. The quality of recent commercial and

residential development in the area has also been very good. The challenge at hand is to determine if any additional land use policies are needed which could improve upon, reinforce and enhance the pattern of land use occurring within the corridor.

PLANNING FOR THE FUTURE

INTRODUCTION

Both the City Council and the Planning and Zoning Board have the responsibility and the authority to undertake the preparation of long range plans and policies. This planning effort offers an opportunity to establish a refined vision for the corridor. It includes creating a desirable living and working environment for future inhabitants, an exciting gateway into the community, as well as an important center for business and commerce.

The land use plan for the Harmony Corridor is intended to improve upon, reinforce and enhance the City's COMPREHENSIVE PLAN. It offers a vision of a future that many people and interests can identify with and seek to implement.

THE PROCESS

Several different land use alternatives were considered before finally arriving at the recommended one. These alternatives ranged considerably in intensity of

development, character and practicality. They were reviewed by the property owners in the study area and the general public. The recommended land use plan was synthesized by staff based on several months of public review and comment at a variety of forums.

The land use plan is depicted on Map 10. The intent of the land use plan and map is to provide for an orderly, efficient and attractive transition of vacant rural land to urban use; and to:

- (a) Maximize the use of existing services and facilities (streets and utilities).
- (b) Promote the development of the corridor as a high quality, self-contained and compact business center.
- (c) Provide for the location of industry and business in the city by identifying prime locations for such uses.
- (d) Provide shopping and service areas convenient to both residents and employees of the corridor.
- (e) Provide for a variety of housing types.
- (f) Preserve and protect existing residential neighborhoods from intrusive or disruptive development.

THE VISION

The vision for the corridor area is that it become a major business center in northern Colorado attracting a variety of businesses and industries serving local as well as regional markets. It should also include a mixture of land uses including open space, residential, office, recreational, and retail activities.

The focus of most development activity, especially commercial, should be at the major street intersections. The intensity of land use should decrease as distance from Harmony Road increases and as the distance from the major intersections increases. To promote pedestrian, bicycle and transit use, development in the area should be compact. Buildings, spaces and street frontages should be well-designed and of high quality materials and workmanship.

Business and industry provide the major economic focus of the corridor area. The land use mix also includes a variety of commercial uses to meet tenant and neighborhood resident needs.

Community and regional commercial activities are introduced in well-planned shopping centers ~~or~~, industrial parks, de-signed and mixed used areas, designed to draw shoppers from the ~~surrounding~~ surrounding community and region.

Free-standing highway related commercial (convenience stores, ~~fast-food restaurants~~, gas stations and the like) are not permitted to locate outside of planned shopping centers or industrial parks. Only neighborhood scale shopping centers are allowed in residential areas, although this restriction does not apply in certain mixed use areas.

Hotels to serve business tenants within the park will grow in importance. These hotels will be sited near major ~~industrial parks~~ employment hubs, and in most cases be visible from Harmony Road.

Low intensity retail, restaurants, day care facilities, health clubs, personal service shops, business services (print shops, office supply, etc.), banks and other similar commercial activity is concentrated in attractively designed centers ~~and~~, integrated into planned industrial parks and integrated into mixed use areas.

Buffer areas (transitional land uses, linear greenbelts, or other urban design ~~elements~~ elements) are provided to serve as cushions between the adjacent residential ~~neighbor-hoods~~ neighborhoods and the commercial areas. The existing, low density residential uses in the surrounding neighborhoods are ~~main-tained~~ maintained and enhanced. As business ~~activ-ity~~ activity expands, new housing stock of a mix of types and densities is introduced as integral parts of the business and ~~indus-trial~~ industrial parks and mixed use areas.

LAND USE PLAN

GOAL STATEMENT

Encourage and support mixed land use development in the Harmony Corridor while discouraging “strip commercial” development and promoting the vitality and livability of existing residential neighborhoods.

POLICIES

LU-1 Strive for excellence and high quality in the design and construction of buildings, open spaces, pedestrian and bicycle facilities, and streetscapes by establishing and enforcing design guidelines specific to the corridor area.

An important part of the *Harmony Corridor Plan* is the desire to continue the high standard of quality established by recent development projects in the corridor area. One way that this can be accomplished is through the development and implementation of design guidelines specific to the corridor itself. These guidelines should be adopted as a part of the criteria that the City uses to review development of the corridor area. These guidelines should address the following issues:

- Streetscapes, including fencing and screening.
- Landscaping.
- Street and parking lot lighting.
- Building setbacks.
- Architectural design and materials. Pedestrian and bicycle access and circulation.

LU-2 Locate all industries and businesses in the “Basic Industrial and Non-Retail Employment Activity Centers” in the areas of the Harmony Corridor designated for such uses on Map 10. Secondary supporting uses will also be permitted in these Activity Centers, but shall occupy no more than 25 percent (25%) of the total gross area of the Overall Development Plan or Planned Unit Development, as applicable.

The Harmony Corridor offers an opportunity for creating a major business and industrial center in northern Colorado, due to its desirable location, accessibility, available infrastructure, and land ownership pattern. Attracting desirable industries and businesses into the community, and in particular, the Harmony Corridor, achieves an important public purpose because it promotes primary and secondary jobs and generally enhances the local economy.

Basic Industrial and Non-Retail Employment Activity Centers are locations where industrial uses and/or office or institutional type land uses are planned to locate in the future in business park settings. Base industries are firms that produce goods and services which are produced for export outside the city, and thereby import income into the city. Typical business functions include research facilities, testing laboratories, offices and other facilities for research and development; industrial uses; hospitals, clinics, nursing and personal care facilities; regional, vocational, business or private schools and universities; finance, insurance and real estate services; professional offices; and other uses of similar character, as determined by the Planning and Zoning Board.

Secondary uses include hotels/motels; sit-down restaurants; neighborhood convenience shopping centers; childcare centers; athletic clubs; and, a mix of single family and multi-family housing. If single family housing is provided, at least a generally equivalent number of multi-family dwelling units must also be provided. "Multi-family" shall mean attached single family dwellings, 2-family dwellings or multi-family dwellings.

Secondary uses shall be integrated both in function and in appearance with an office (or business) park, unless a special exemption is granted by the Planning and Zoning Board. In order for such an exemption to be granted, the applicant must demonstrate to the satisfaction of the Board that the granting of the exemption would neither be detrimental to the public good nor impact the intent and purposes of the foregoing requirement and that by reason of exceptional narrowness, small parcel size, or other special condition peculiar to a site, undue hardship would be caused by the strict application of this requirement.

The essence of the Basic Industrial and Non-Retail Employment Activity Center is a combination of different types of land uses along with urban design elements that reduce dependence on the private automobile, encourage the utilization of alternative transportation modes, and ensure an attractive appearance.

LU-3 Support business and industry growth by encouraging development designed to attract elite employers within the area of the Harmony Corridor known as the "Gateway Activity Center" as shown on Map 10.

The Harmony Corridor Gateway Activity Center area is intended to support catalytic growth of new businesses and industries by encouraging mixed use, amenity-driven development with residential components. This development format is targeted to provide the type of working environment that highly skilled employees and their employers demand. Development within this area is intended to help the City achieve community-wide employment objectives, and it may become a model for future planning initiatives in other areas of the City.

The Gateway Activity Center permits a broad range of uses, including all uses allowed in "Basic Industrial and Non-Retail Employment Activity Center" as described above in LU-2, retail and commercial uses, and residential uses. Unlike the "Basic Industrial and Non-Retail

Employment Activity Center,” it is intended that secondary uses in the Gateway Activity Center would be greater than 25 percent (25%). As used in this section LU-3, “secondary uses” means all of the uses listed in Section 4.26(D)(2) of the City’s Land Use Code. Within the Gateway Activity Center, secondary supporting uses may occupy up to 75 percent (75%) of the total gross area of the Overall Development Plan or Planned Unit Development, as applicable. “Primary” or “permitted” uses may occupy any portion of a proposed development. In contrast to a Mixed Use Activity Center, retail and commercial uses are allowed to occur throughout the areas of the Harmony Corridor designated as the Gateway Activity Center, and not just in shopping centers.

The focus within the Gateway Activity Center will be is a combination of different types of land uses along with urban design elements that reduce dependence on the private automobile, encourage the utilization of alternative transportation modes, and ensure an attractive appearance.

LU-4 Provide for the advance planning of large, undeveloped properties in the corridor area.

Coordinated planning of large parcels of land in the corridor area can generally provide greater opportunity for more innovation and variation in design, increase efficiency in utility services, and accomplish many more of the policies and objectives of the community than does a more piecemeal approach to development planning.

LU-45 Locate a broader range of land uses in the areas of the Harmony Corridor known as Mixed-Use Activity Centers as shown on Map 10.

Mixed-Use Activity Centers are areas where a broader range of land uses may locate. The Mixed-Use Activity Center permits, in addition to the uses listed in the “Basic Industrial and Non-Retail Employment Activity Center,” a range of retail and commercial uses to occur in shopping centers. If single-family housing is provided, at least a generally equivalent number of multi-family dwelling units must also be provided. Neighborhood service centers, community shopping centers, and regional shopping centers, and a lifestyle shopping center shall be limited to those locations shown on Map 10.

The essence of the Mixed-Use Activity Center is a combination of different types of land uses along with urban design elements that reduce dependence on the private automobile, encourage the utilization of alternative transportation modes, and ensure an attractive appearance.

~~LU-5 All retail~~ **6 Retail** and commercial land uses, ~~except those permitted as secondary uses in the Basic Industrial and Non-Retail Employment Activity Centers, shall be located~~ are intended to be concentrated in shopping centers in most areas. ~~All shopping centers, except neighborhood convenience shopping centers, shall be limited to the locations show on Map 10.~~ Neighborhood convenience shopping centers shall also be permitted in the Basic Industrial and Non-Retail Employment Activity Center as described in LU-2. Retail and commercial land uses will be allowed in the Gateway Activity Center both within shopping centers and as components of mixed use development.

The Plan allows for a broad range of retail uses to occur in shopping centers which satisfy the consumer demands of residents and employees who live and work in adjacent neighborhoods, as well as from the community or region. Coordinated planning of a “center” rather than isolated individual uses is the most effective means of avoiding the “strip” type of development.

The scale and design of the shopping centers should be compatible with neighboring uses. Shopping centers can and should play an important role in the identity, character and social interaction of surrounding neighborhoods. They should be easily accessible to existing or planned segments of public transit. Adequate auto accessibility, especially for community and regional shopping centers, is important. Shopping centers should have a physical environment that is conducive to pedestrian and bicycle travel.

Commercial and retail uses are allowed both inside of and outside of shopping centers in the Gateway Activity Center because development in this area will be coordinated to minimize impacts of commercial activities on sensitive uses, such as residential uses.

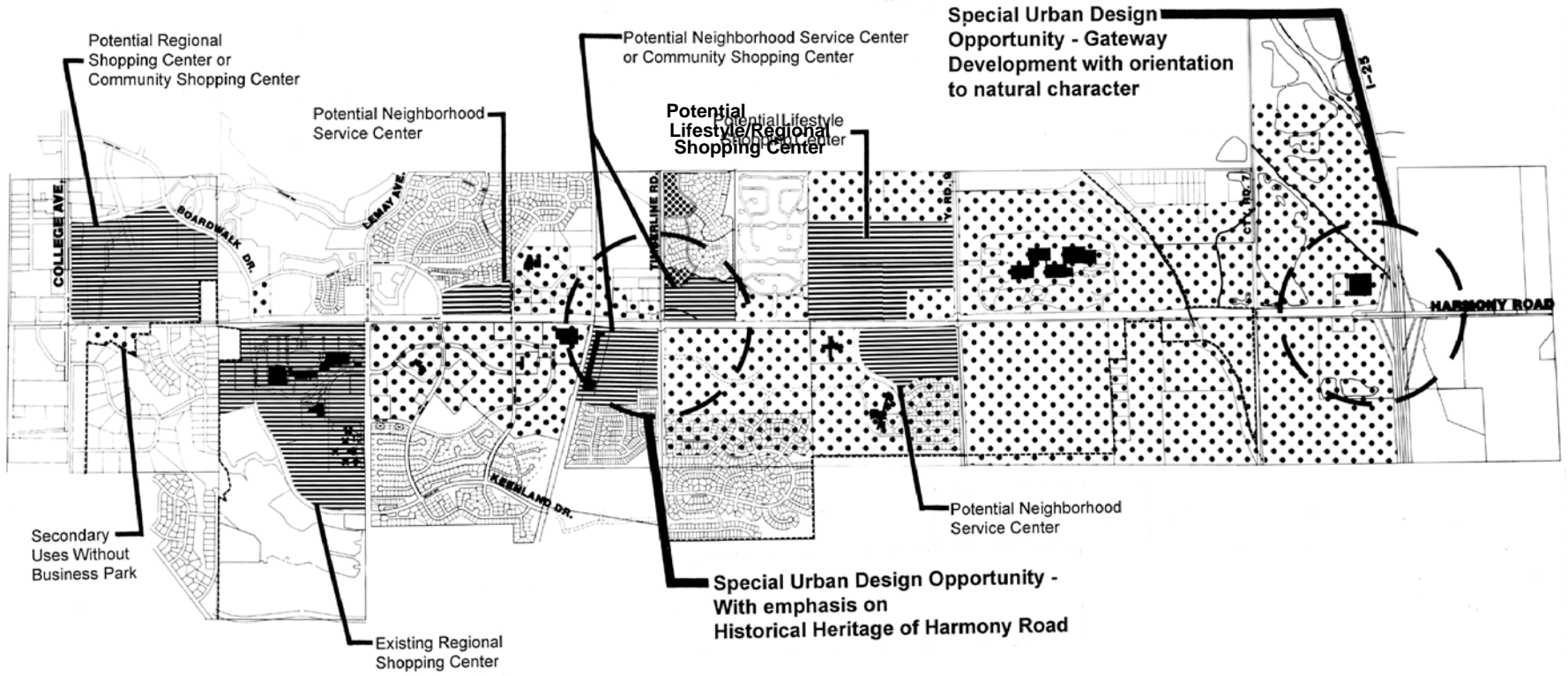
LU-67 Recognize the importance of the continued livability and stability of existing residential neighborhoods as a means to expanding future economic opportunities in the corridor.

The corridor area contains existing residential areas whose existence contributes to the future economic health of the corridor area. Future development in the corridor should be sensitive to these areas.

LU-78 Preserve a transition or cushion of lower intensity uses or open space between existing residential neighborhoods and the more intense industrial/commercial areas.

An important goal of the *Harmony Corridor Plan* is to provide a harmonious relationship between land uses and to protect the character of new and existing residential neighborhoods against intrusive and disruptive development. Open space, setbacks, landscaping, physical barriers and appropriate land use transitions can be effective ways to provide a cushion between different uses. The following are generally considered to be appropriate transitional land uses:

- low intensity professional offices
- multi-family housing
- churches
- childcare centers; and
- nursing homes and/or elderly retirement homes.



Harmony Activity Centers



Basic Industrial and Non-Retail Activity Center

Mixed Use Activity Center

Potential Shopping Center Locations Outside of Activity Center



Neighborhood Convenience Center

NORTH



1500' 0' 3000' 6000'



HARMONY CORRIDOR PLAN

LAND USE PLAN

MAP 10

IMPLEMENTATION ACTIONS

The following actions need to be taken by the City to ensure that the land use section of the Plan is implemented over the years to come.

1. The City Council and the Planning and Zoning Board should adopt the Plan.
2. The City should annex all unincorporated areas within the Harmony Corridor, in accordance with the parameters of the Urban Growth Agreement.
3. The City should adopt design standards and guidelines which reinforce the distinctiveness and quality of the corridor area.
4. When reviewing new development proposals in the corridor, the City shall evaluate such proposals according to the standards and guidelines adopted as part of the *Harmony Corridor Plan*. The *Harmony Corridor Standards and Guidelines* are in addition to existing development regulations that apply to specific development proposals.
5. The City should prepare design guidelines which further elaborate on the effective use of design measures for buffering between residential and non-residential land uses.
6. The City should establish means of effectively encouraging industries and businesses to locate in the Harmony Corridor.
7. The City should consider adopting a “superblock” planning requirement which assures the coordinated planning of large parcels of land.
8. The City should explore local landmark district designation of existing historic structures.
9. The City should study the distribution of basic industrial and non-retail jobs as part of the update of the Comprehensive Plan. The planning effort should also determine the relative importance of the Harmony Corridor in achieving community-wide employment objectives. And, based on the results of the study, the City should prepare incentives and/or regulations to assure implementation of the employment objectives in the Harmony Corridor. Revise policies of the Plan as needed.

10. The City of Fort Collins, Larimer County and the Town of Timnath should join efforts to plan for the appropriate development of Harmony Road east of I-25 compatible with the ***Harmony Corridor Plan***.
11. Pioneer Mobile Home Park, located on the northeast corner of Harmony Road and College Avenue, is home for many low-income families and elderly persons on fixed incomes. Although the Plan indicates future redevelopment of the site, the displacement of persons in the neighborhood should be carefully planned and sensitive to the particular needs of the residents.
12. The “Harmony Bikeway Study” (currently underway) should be prepared to reinforce the goals and vision of the *Harmony Corridor Plan*, as well as the City’s overall transportation objectives.

4

URBAN DESIGN

The success of a work of design may be soundly evaluated only by its overall long-term effect on the healthy, happy survival of humans. Any other evaluation of architecture, landscape architecture, or city planning makes little if any sense.

NORMAN NEWTON

INTRODUCTION

Urban design encompasses a wide variety of topics having to do with the physical environment in an urban setting. Existing development, open space, pedestrian and vehicular linkages, historic buildings and places, trees and other natural features all combine to create a sense of place. The challenge for the *Harmony Corridor Plan* is to take all of these diverse urban design elements and shape them, so that the resulting sense of place enhances the quality of life for people who live and work in the corridor.

ISSUES

VISUAL CONSIDERATIONS

As one enters the corridor from the east, the landscape character along Harmony Road is a unique blend of rural scenery and high quality, campus-like office and industrial development. Moving further west and closer to fully urbanized areas, the variety of land uses becomes more diverse and includes commercial businesses. The landscape character changes from a wide floodplain, dominated by spectacular views of the Front Range to a predominantly paved urban environment near College Avenue. It is probable that the diversity of land uses and architectural styles will continue to increase.

As Harmony Road continues to develop, an urban design character will be established. It can become like many other communities and be visually cluttered with a wide variety of land uses, architectural styles and landscapes or it can be a well-planned corridor with a cohesive landscape design theme that capitalizes on its strengths and down plays its weaknesses. One purpose of the *Harmony Corridor Plan* is to create an urban design framework that can unify the visual diversity into a cohesive whole. Building on the area's natural scenic qualities, the Plan seeks to create a vision of what the Harmony Road of the future will looklike.

ECONOMIC DEVELOPMENT CONSIDERATIONS

Harmony Corridor represents an opportunity for this community to make a positive first impression and demonstrate that Fort Collins is a great place to live, work and play. Harmony Corridor already has many positive locational and site development characteristics, such as good community/regional access and large fully serviced tracts of undeveloped land. A uniquely attractive and well-planned landscape character can reinforce these positive qualities and give Fort Collins an edge when competing against other communities for quality business and industrial development.

This vision for Harmony Corridor goes beyond establishing an attractive landscape and attempts to create an image for the corridor that is consistent with the progressive and dynamic development occurring there. Changing the name of Harmony Road to Harmony Parkway is one example. Specially designed and well-coordinated public signage, lighting and other visible infrastructure can further enhance a quality image for the corridor.

LANDSCAPE DESIGN ISSUES

In order for the Harmony Corridor urban design concept to be successful, it needs to overcome constraints and take advantage of opportunities. The biggest challenge is to develop and implement a landscape plan that can successfully integrate the many different existing landscape characters into a cohesive whole.

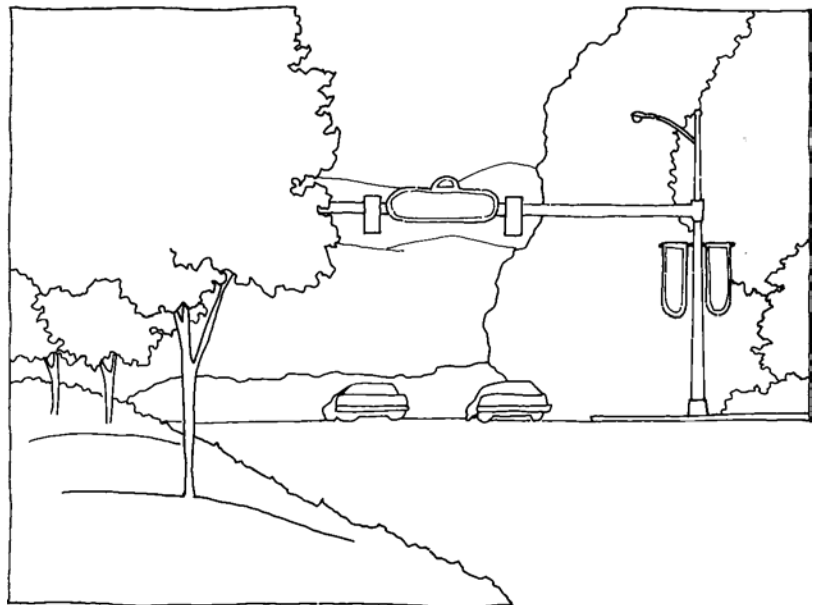
Several existing developments have already set high standards for landscape design. The wide setbacks, rolling berms and groves of trees that typify the landscape frontage at Hewlett-Packard, Mountain Crest Hospital and Oakridge create a sense of spaciousness and environmental quality. The urban design plan for the corridor should complement these successful landscapes.

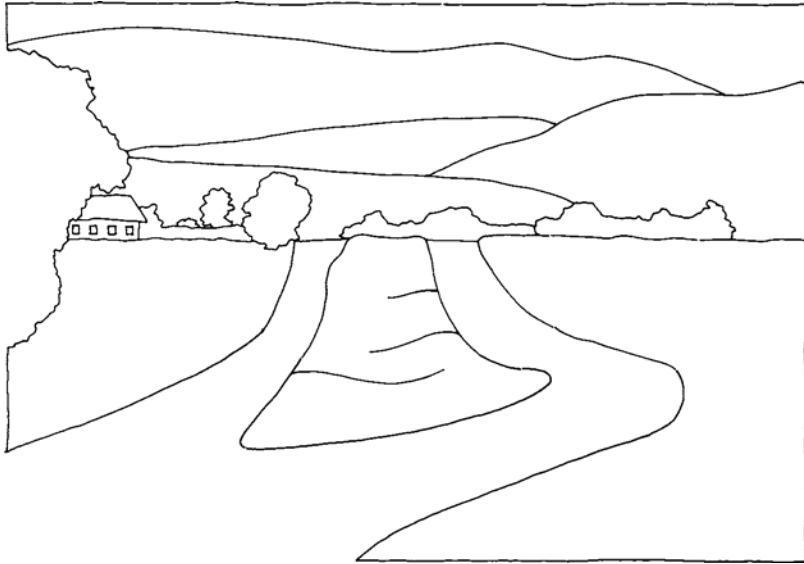
Specially designed and well coordinated public signage can contribute to a quality image for the corridor.

While landscape continuity is essential, other landscape characteristics are also important. Selecting plant material that is hardy, disease resistant and relatively easy to maintain increases the chances for success. Plant materials that create visual interest and seasonal variety make the landscape more appealing and should be emphasized in the plan. Existing trees should be preserved for the spatial character they establish and the historical heritage they represent.

WATER CONSERVATION

Water conservation is an environmental issue which will become increasingly important in the future. The landscape design concept for Harmony Road needs to recognize this trend and respond by utilizing xeriscape techniques.





The spacious median is important to the visual quality of the corridor.

PEDESTRIAN AND VEHICULAR LINKAGES

Other factors that contribute to the urban design character of the corridor include the design of streets, sidewalks and trail systems. Roadway geometrics and design detail influence the visual appearance of a streetscape. In the Harmony Corridor it is especially important to consider future roadway geometrics for Harmony Road.

The fact that Harmony Road is a state highway complicates the issue. The City and State agree that eventually Harmony Road will need to be widened to accommodate three travel lanes in each direction. Indications are that the State intends to widen the roadway to the inside, greatly reducing the width of the median or, in some cases, eliminating it entirely. Landscaping in the median also must be coordinated with the State Division of

Highways and designed to their standards. At the present time, these standards do not allow planing trees in the median. The need for curb, gutter, and splash blocks in the future also needs to be examined. In order to successfully implement a meaningful urban design concept, the City must work with the State toward a common vision for the future.

Transportation planning in the corridor should respond to the needs of motorists, commuters, bicyclists and pedestrians. Well-planned and sensitively designed trail systems serving bicyclists and pedestrians can contribute to the visual attractiveness of the area, help create a sense of place and enhance the quality of life for people who live and work in the Harmony Corridor.

HISTORICAL HERITAGE

The historical heritage associated with the original community of Harmony is one of the interesting facts that make the Harmony Corridor unique. The colorful personalities associated with that era and their labor which created irrigated farmland, built charming Victorian houses, established a church, school and cemetery should not be forgotten. The persistence and hard work of these early pioneers played an important role in the evolution of the corridor.

Even though historic farmhouses and other buildings in the corridor may eventually be replaced by more modern structures, the historical heritage they represent can be preserved in a variety of ways. Encouraging property owners

to have the historical significance of their structures documented is important. One of the future neighborhood parks in the corridor could be named “Harmony Park” and emphasize a historical theme. Historical markers along trail systems could enhance this concept. The Harmony Corridor urban design plan should capitalize on these opportunities to preserve the past for the benefit of future generations.

COORDINATION WITH UTILITIES

Utility systems in the corridor can affect the visual quality of the corridor in a variety of ways. The City’s Water and Wastewater Utility has completed the conceptual design and route selection for a major water transmission main in the corridor. Utility engineers and planners will need to balance the needs of the utility with the aesthetic purposes of the urban design plan. A 40-foot wide drainage channel designed to carry stormwater flows from the Hewlett-Packard site to the lake east of County Road 7 is another example of utility systems affecting the visual appearance of the streetscape. Communication and coordination are key factors in resolving conflicts before they become problems. In most cases the needs of the utility can be met without sacrificing visual aesthetics if the systems are carefully planned with the corridor landscape design objectives in mind.

ALTERNATIVE DESIGN CONCEPTS

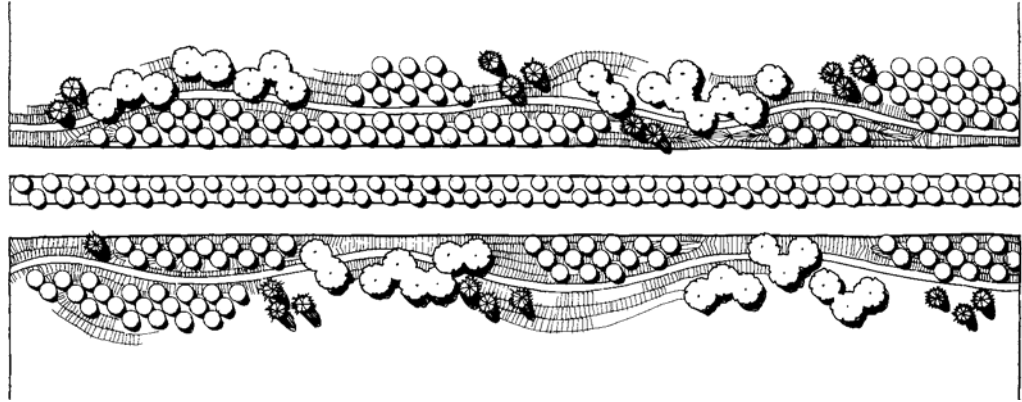
The design process began with a visual analysis of the corridor, detailed in Chapter 2, followed by the generation of three alternative urban design concepts – Harmony Orchard, Harmony Rhythm, and Harmony Oaks. The basic elements of each design concept are described below.

HARMONY ORCHARD

In this design concept, ornamental trees are planted in a grid pattern to create an orchard effect along Harmony Road from I-25 and to College Avenue. The tree grid is continuous in the median and occurs randomly along the road edges skipping properties that are already developed. Developers are encouraged to plant evergreens and tall deciduous canopy trees to act as a backdrop for the orchard. Species of orchard trees are selected for hardiness and disease resistance, as well as for spring and fall color.

The median and adjacent properties are graded to continue the rolling berms already becoming a hallmark of Harmony Road. A meandering bike trail parallels both sides of the street and connects to existing bike trails. The ground plain is planted with a bluegrass, brome and fescue mix to provide turf

Plan view of the Harmony Orchard design concept.

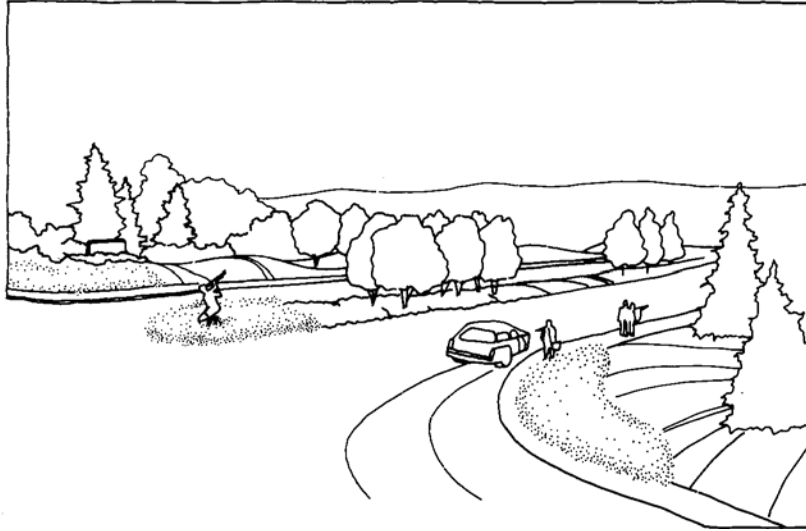


that is green during the growing season and still conserves significant amounts of water over conventional bluegrass. The mowing height is six inches, in keeping with an orchard theme. Thousands of daffodils are naturalized all along the median creating a spectacular flower display in early spring. Low stone walls are encouraged as an architectural design element at intersections and anywhere retaining walls or low screen walls are needed. Distinctive lighting and sign graphics are used to further build on the design concept.

HARMONY RHYTHM

A repetition of plant material and sculpture combine to create a rhythm along Harmony Road that the viewer perceives whether he is entering Fort Collins for the first time or is a resident taking advantage of the bike trail system paralleling the road. A narrow range of plant material is selected to provide seasonal interest. For example “Burning Bush” might be selected as a shrub that is repeated in the landscape of new developments, resulting in a dramatic display of glowing red shrubs during that few weeks in the fall when that shrub turns color. Other trees, shrubs and perennials are selected to provide similar effects all through the growing season.

Sculpture is promoted along the corridor making a statement about Fort Collins’ interest in the arts. Occurring at intersections and at prominent points along the trail system, sculptural elements could be individually unique or work together around a common theme.



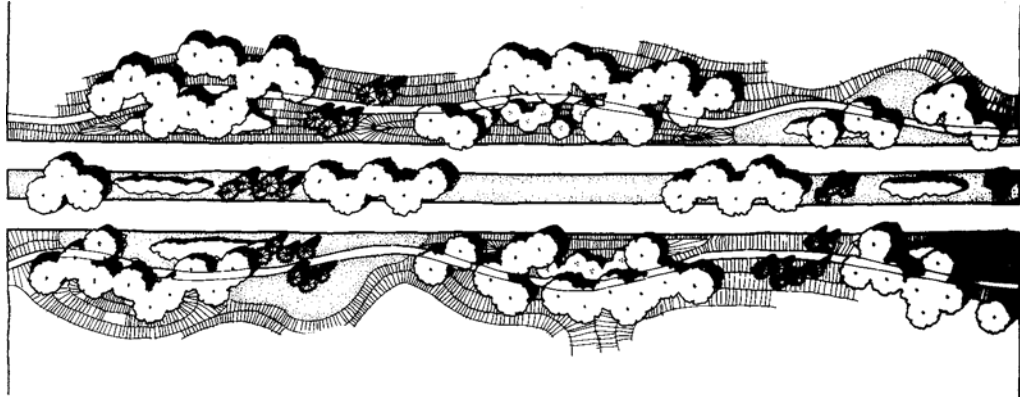
Perspective view of the Harmony Rhythm design concept.

HARMONY OAKS

The Harmony Oaks concept is characterized by wide setbacks, naturalistic berming, a meandering sidewalk, and groves of oak trees alternating with wildflower meadows. Oaks have been selected as the dominant tree species for several reasons. Two types of trees are native to Colorado: Coniferous species usually associated with higher elevations, and deciduous species found along streams. One of the few deciduous hardwood trees native to Colorado is the Gambel Oak. This combined with the oak's reputation for longevity, hardiness, disease resistance, low water demand, fall coloring, and at-

tractive appearance led to the conclusion that the Gambel Oak along with other oaks known to thrive in this climate would be the best tree to dominate in the corridor landscape. Although the oaks are combined with a substantial number of other tree species to avoid a monoculture, they are planted in sufficient quantities to have a unifying effect. The oak's rugged appearance makes it ideally suited to the informal naturalistic landscape emerging along Harmony Road. Drifts of pines occur randomly to provide winter interest and add to the naturalistic forested effect.

Plan view of the Harmony Oaks design concept.



Starting at I-25 and continuing to College Avenue, wildflowers are planted in the median and intermittently along the edges of the road. The continuity of the wildflowers provides a colorful welcome mat for people coming to Fort Collins via Harmony Road. Along both sides of the road, an extra-wide sidewalk meanders through berms providing the pedestrian and bicyclist with alternate experiences of wildflower meadow and oak forest. Low stone walls, special signage and flags sporting a unique logo that ties in with the Harmony Oaks design theme are used at intersections to strengthen the design concept.

EVALUATING THE DESIGN CONCEPTS

Each concept was evaluated against the following criteria:

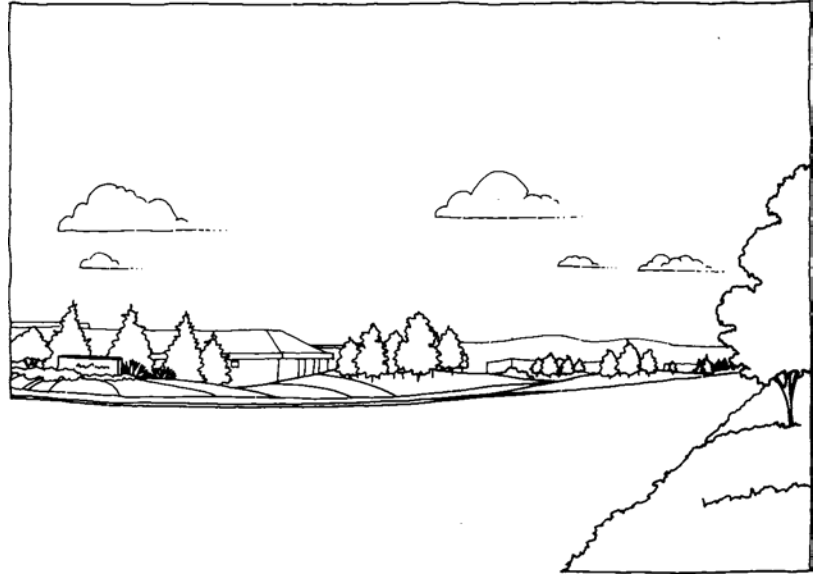
- Ability to unify the corridor.
- General attractiveness.
- Seasonal variety.
- Ease of implementation.
- Construction cost.
- Maintenance cost.
- Water conservation.
- Landowner values.
- General public values.

All three alternatives along with supporting graphics were displayed at a series of public open houses. Staff held numerous meetings with affected interests and work sessions with boards and commissions. The feedback overwhelmingly supported the Harmony Oaks urban design concept over the other concepts.

In the final analysis, the Harmony Orchard concept was rejected because of the difficulty of implementation, high costs and lack of support from the landowners and general public. Although the Harmony Rhythm design concept scored high when evaluated against the criteria, it was also eliminated because of high installation costs and lack of landowner support. The Harmony Oaks alternative was selected as the urban design concept with the most potential.

A dominant tree species combined with a narrow plant palette will be very effective in unifying the corridor over time, while the use of wildflowers can provide a dramatic unifying effect in a much shorter time frame. The combination of plant material, rolling berms and meandering trail system will create a pleasant and attractive setting for future development and at the same time complement existing developments. The naturalistic, informal design will provide developers with needed flexibility and the cost of implementation and maintenance will be equal to or less than the typical landscape currently proposed for Harmony Road.

The Harmony Oaks concept emphasizes xeriscape, a term for water conservation through appropriate landscaping, in two ways. The plant palettes will consist of a variety of low to moderate water demand plant materials, and the recommended turf and wildflower ground covers will consume significantly less water than traditional blue grass turf.



Perspective view of the Harmony Oaks design concept.

URBAN DESIGN PLAN

GOAL STATEMENT

Guide development in the corridor so that collectively a perceivable, unified urban design theme and landscape character is created along Harmony Road. Utilize urban design principals to ensure that Harmony Corridor continues to be a great place to live, work and play.

POLICIES

UD-1 Implement the Harmony Oaks design concept through design standards and guidelines for private and public sector development projects.

UD-2 Promote water conservation by providing design guidelines that encourage xeriscape landscape techniques.

UD-3 Establish a well-planned and attractive gateway entrance to the community at the I-25 interchange, emphasizing the natural scenic qualities of the area.

UD-4 Promote the development of an extensive recreational trail that connects to the city-wide trail system.

UD-5 Promote the development of a commuter bikeway system that supports bicycling as an alternative mode of transportation in the corridor.

UD-6 Coordinate the long range planning efforts of other City departments and governmental agencies with the goals and objectives of the *Harmony Corridor Plan*.

UD-7 Support efforts to preserve the historical heritage associated with the original community of “Harmony”.

UD-8 Adopt design guidelines and standards for retail development in the corridor to create better neighborhoods by promoting safe, pleasant walking and bicycling environments, more lively commercial centers, convenient transit access, and human scale design.

IMPLEMENTATION ACTIONS

The following implementation actions are intended as a guide for implementing the urban design section of the Plan.

1. DESIGN GUIDELINES

The Planning and Zoning Board and the City Council should adopt the Plan along with design standards and guidelines for new development. The design standards and guidelines will set expectations for private and public sector improvements along Harmony Road. (Design standards and guidelines are available under separate cover.)

2. RECREATIONAL TRAIL/BICYCLE COMMUTER SYSTEMS

The City should develop a master plan for a recreational trail system and for a commuter bicycle system to serve bicyclists and pedestrians in the corridor. Additional field investigations and coordination efforts are needed to develop a strategy for implementing effective systems for commuting and recreation. Analyzing cost/benefit relationships and developing appropriate funding mechanisms are a part of this work effort.

3. WILDFLOWER RESEARCH

For wildflowers to be done well and create a spectacular seasonal display, careful planning is required. The City should establish test plots along Harmony Road to determine the most appropriate seed mix and best maintenance practices. Ideally the test plots would be monitored for three years before large areas are seeded.

4. SPECIAL SIGNAGE

The City should develop a coordinated public signage system to enhance the Harmony Oaks theme. Special colors and unique Harmony Road design detail for public signage, traffic control devices and light standards along Harmony Road are envisioned. A funding mechanism needs to be developed.

5. NAME CHANGE

The City should change the name of Harmony Road to Harmony Parkway, which is more in character with the future vision of the Harmony Corridor.

6. COORDINATION WITH THE STATE DIVISION OF HIGHWAYS

The City should work with the State Division of Highways to answer questions about the future operation and physical appearance of Harmony Road. January 1993 should be set as a target date to resolve the following issues:

- Ownership of Harmony Road.
- Future widening.
- Curb, gutter, and splash block detailing. Planting in the median.
- Future interchange design and construction.
- Frontage roads.
- Bicycle commuting along Harmony Road.
- Car-pooling at I-25.

7. LANDSCAPE PLAN FOR THE MEDIAN

The City should complete a design development plan for the median that addresses curb, gutter, splash block, plant material, and irrigation. Establishing a funding source for construction and maintenance of the median landscape is part of this work effort.

8. LANDSCAPE PLAN FOR THE I-25 INTERCHANGE

The City should design and implement a well-integrated landscape plan for the I-25 interchange at Harmony Road. Creative use of plant material and carefully designed entry feature should introduce the Harmony Oaks concept to motorists leaving I-25 and entering Fort Collins. Landscaping the interchange should also present a positive first impression to motorists continuing on the interstate. The Plan needs to be integrated with the gateway planning effort described in Chapter 5.

9. COLLEGE AVENUE/HARMONY ROAD INTERSECTION PLAN

The City should develop a conceptual design plan for the College Avenue/Harmony Road intersection along with a specific implementation strategy. In addition to being the west gateway to the Harmony Corridor, this intersection is a major gateway to Fort Collins from the south. The importance of this intersection should be reflected in its appearance. Landscape elements on each corner can be coordinated to achieve

a well designed urban intersection that creates an impressive gateway to Fort Collins from the south and at the same time introduces the Harmony Oaks design concept for motorists entering the Harmony Corridor. This intersection is an ideal location for a special signage demonstration project.

10. HISTORIC INTERPRETATION

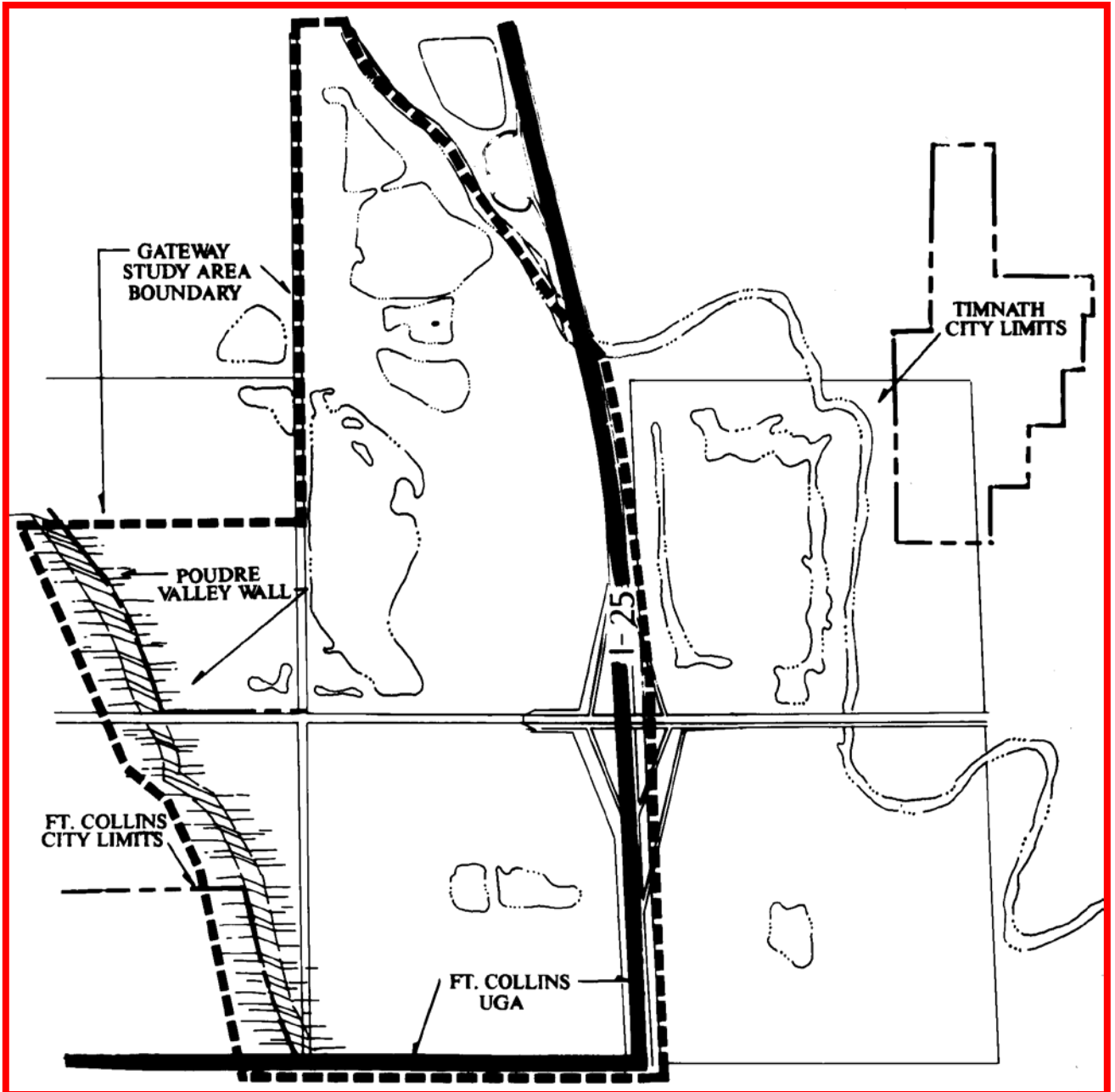
Opportunities for historic interpretation of the historic “Harmony” community should be explored as part of any future bicycle planning efforts in the corridor.

~~5~~ ~~ALTERNATIVE~~ ~~GATEWAY CONCEPTS~~

The psychology of arrival is more important than you think. If it is not obvious where to park, if there is no room to park when you get there, if you stumble into the back door looking

for the front entrance, or if the entrance is badly lighted, you will have subjected your guests to a series of annoyances which will linger long in their subconscious. No matter how warm your hearth or how beautiful your view, the overall effect will be dimmed by these first irritations.

THOMAS D. CHURCH



INTRODUCTION

The gateway area located between I-25 and the bluffs east of Hewlett Packard has many unique physical qualities including open water, wetlands, wildlife habitat, and spectacular mountain views. The area is underlain with high quality gravel resources. Past, present, and future mining operations have changed and will continue to change the character of the landscape. Most of the area lies within the 100-year floodplain of the Cache la Poudre River and significant portions are located in the floodway. These physical conditions create a variety of development constraints and at the same time offer many recreational and educational opportunities.

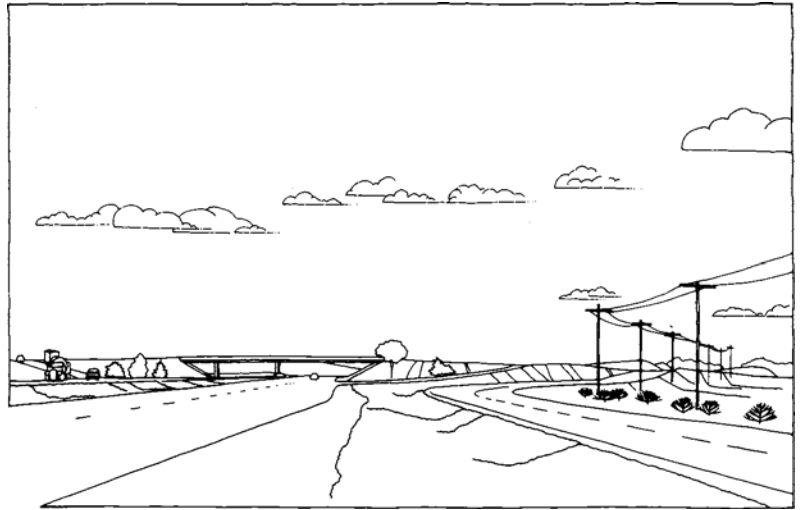
Located at the crossroads of an interstate highway and a state highway, this major gateway entrance to Fort Collins has a great deal of development potential despite the constraints mentioned above. The commercial development that already exists in the gateway, as well as the kinds of development that interchange locations typically attract, do not mesh well with the scenic and natural resource values of the area. This combination of circumstances challenges the community to find a way to balance natural resource assets with economic development.

ISSUES

ECONOMIC CONSIDERATIONS

The gateway area is literally the “Front Door” to this community. The psychology of arrival is important. If a newcomer’s first impression is marred by sights and sounds that are distasteful, those irritations will linger no matter how wonderful the rest of the visit to Fort Collins might be. How this area is planned makes a statement about the people of this community—what our values are and the pride we take in our community. This is why it is important to establish a particularly well-planned and attractive gateway entry.

From an economic standpoint, a positive first impression can encourage quality



View of the I-25 interchange at Harmony Road looking north.

development to locate in the Harmony Corridor versus other Front Range communities. Quality development can create jobs and generate tax revenues that pay for a variety of public services. A favorable first impression can give Fort Collins an edge and help put the community in the driver's seat when it comes to selecting business and industry that is consistent with local values, as opposed to merely reacting to development when it comes.

SCENIC RESOURCE VALUE

The setting, being located in the floodplain of the Cache la Poudre River, is what makes the gateway area unique in the Harmony Corridor and significant in the community. The area is bounded by I-25 on the east, and the bluffs on the west. The bluffs, known as the Poudre River Valley Wall, are a result of the river's down-cutting action as it meandered and migrated within its floodplain for thousands of years. The bluffs are a dominant visual element that identifies the river's floodplain while mature riparian vegetation seen in the distance defines the meandering path of the river. The resulting visual quality of this area is significant. Standing in the gateway area, one can see the whole spectrum of local ecosystems, from snow-capped peaks in the far distance, to forested mountaintops, to chaparral foothills, to grass-covered plains, down to the wetlands and the riparian vegetation associated with the river valley. To have such a sweeping vista at the front door to our community can be a valuable asset.

THE FLOODPLAIN

The 100-year floodplain is the most significant development constraint in the gateway area. Most of the property in the gateway area lies within the 100-year floodplain, and significant portions of the area are within the floodway. Land located in the 100-year floodplain has a one per cent chance of flooding in a given year. The floodway is the land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface more than six inches. Under current policies, no development is allowed within the floodway. The areas between the floodway and the 100-year floodplain have some potential for development if flood-proofing is addressed. Since serious land development restrictions are associated with the floodplain and natural resource areas, the gateway is an excellent resource for alternate, less intensive land uses. The river and its floodplain along with associated wetlands and wildlife habitat is an integrated system. The ability to manage floodplain lands for appropriate uses is important to the river's natural resource value.

WATER QUALITY CONSIDERATIONS

Wetlands have historically been considered to have little value and generally good for nothing unless they could be filled and put to productive use. Only recently have wetlands come to be appreciated for the vital role they play. Besides providing wildlife habitat, wetlands have a unique capability to filter and enhance water quality. Located at the edge between land and water, the plant and animal life found in the saturated soil conditions of wetlands creates an environment that naturally breaks pollutants down into harmless substances. Portions of the gateway area hold potential for being utilized to clean up stormwater run-off before it reaches the Cache la Poudre River.

GRAVEL RESOURCES

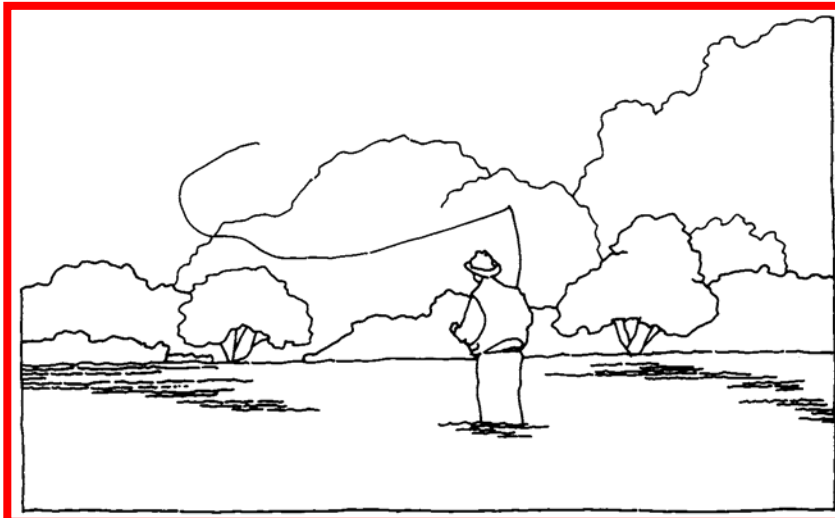
Gravel mining operations will affect the future of this area. Parts of the gateway have already been mined, parts are currently being mined and still other areas have gravel resources that could be mined in the future. All of these areas are presently outside of the city limits. Larimer County has a permit process for extraction of mineral resources that requires provisions for safety during the extraction operations and for reclamation. Both the City and County encourage the removal of gravel resources prior to development. There has been a recent trend in other areas of the community for property owners to donate land to the City after the gravel resources are depleted. This practice has advantages for the owner and provides opportunities for the

City to acquire open space at minimal cost.

RECREATIONAL OPPORTUNITIES

The Parks and Recreation Department has developed a rating system used to evaluate property in order to determine whether or not acquisition of the property fulfills the City's objectives in regards to open space. Scenic qualities of the site combined with development limitations make land in the gateway area a viable candidate for public acquisition. Close proximity to the Strauss Cabin and the Northern Colorado Nature Center is important and the ease of accessibility is also a plus. The rating system also prioritizes acquisition of land based on development pressure, meaning that land most likely to be developed should be acquired first. The fact that there are man-made structures on the site and an interstate highway is located adjacent to the property are negative factors when evaluating the area as public open space.

In addition to the property's value as open space, the area also provides opportunities for various forms of both active and passive recreation. A series of old quarries and lakes associated with gravel mining operations provide opportunities for fishing, swimming, boating and skating in winter. Quarries, lakes, wetlands, the river, and scenic views combine to make the area ideally suited for bicycling, leisurely hiking and cross country skiing. Opportunities for viewing wildlife and bird watching are



The Cache la Poudre River and numerous lakes in the gateway area could provide opportunities for recreational fishing.

good and could be enhanced further. Existing groves of cottonwood trees add to the visual interest and create sheltered areas for picnicking. The area may also hold potential for more active recreational uses such as golfing, field sports, and camping.

EDUCATIONAL RESOURCE VALUE

Resources for learning about history and the environment are abundant in the gateway area. The Cache la Poudre River floodplain with the Front Range as a highly visible backdrop creates an opportunity to learn about Colorado landforms and ecological systems. A diversity of vegetation and wildlife habitat is there to be observed. In addition, there are opportunities to learn about mining operations and reclamation as well as drainage basins, stream flows, and water quality.

There are a variety of ways to take advantage of these educational opportunities. Preserving all or part of the area as open space and providing an interpretive center is one example. Simply providing interpretive markers along a bike trail system would be another way to increase environmental awareness.

WILDLIFE HABITAT VALUE

Significant portions of the gateway area have been identified as having wetland, wildlife or vegetative interest. These areas include the open water created by old quarries left from mining operations, wetlands, groves of cottonwood trees and the riparian habitat along the river itself. (See Maps 2 and 3) The result of the habitat is a significant community of wildlife species, which include birds, mammals, reptiles and fish. Bald eagle, great blue heron, horned owl and peregrine falcon are important bird species known to occur along the river. Mule deer and whitetail deer are also commonly found along the river corridor.

OTHER FACTORS

A variety of other influences, beyond the physical ones, affect how land use decisions are made. Property ownership and land values are also key factors. There are approximately 6 different landowners represented in the area. Properties have been bought and sold with the expectation that highway business and/or other types of development would occur here in the future. The result has been an increase in land values.

Governmental jurisdictions in the gateway are overlapping and complicated. While the gateway planning area is within the City's Urban Growth Area boundary, only a small part of the area is currently within the city limits. The governmental jurisdictions and the development review procedures and processes are defined in the Intergovernmental Agreement for the Fort Collins Urban Growth Area. Generally speaking the City's jurisdiction applies to properties within the city limits and those eligible for annexation. A joint review procedure has been established for property outside city limits but within the UGA. The County has jurisdiction over properties located east of I-25. The Larimer County Land Use Plan has designated this area as "Rural" meaning that it should be protected for agricultural use or other low intensity uses, however the County zoning ordinance contradicts this designation. Property at the southeast corner of the I-25/Harmony Road intersection is zoned C-Commercial, which allows a wide range of land uses including

~~highway commercial. Significant portions of the gateway area are state highway right-of-way and subject to rules and regulations of the State Division of Highways. Planning and development of the gateway area will require special coordination efforts.~~



Blue herons are commonly seen near the Cache la Poudre River.

WHAT THE FUTURE HOLDS

THE NULL ALTERNATIVE

If the governmental agencies, which have jurisdiction over land in and adjacent to the gateway area continue to operate under current policies, we can make some predictions about the future of this area. The following development scenario is based on current trends and development patterns of interchange locations in other communities:

Properties on the east side of the interstate would develop under County regulations. The area north of Harmony Road but east of I-25 is currently being mined for gravel resources. It is anticipated that the area will be mined for at least ten more years before the gravel resources are depleted. The landowner's plans for the future of the property after the resources are removed are not determined. The land is zoned for agricultural use, but could conceivably be re-zoned to allowed commercial or industrial land uses.

Land located south of Harmony Road and east of I-25 is zoned C-Commercial in the county. This zoning district allows a variety of highway business uses such as gas stations, fast food restaurants and motels. Large-scale commercial uses such as automobile sales, mobile home sales and storage warehouses are also permitted.

~~Land on the west side of I-25 is within the Fort Collins Urban Growth Area (UGA) and is subject to Larimer County land use regulations and to the Fort Collins Urban Growth Area Intergovernmental Agreement. Development proposals on land not eligible for annexation, would be reviewed by the Urban Growth Area Review Board, with representatives from both Larimer County and Fort Collins. This board makes a recommendation to the Larimer County Board of Commissioners.~~

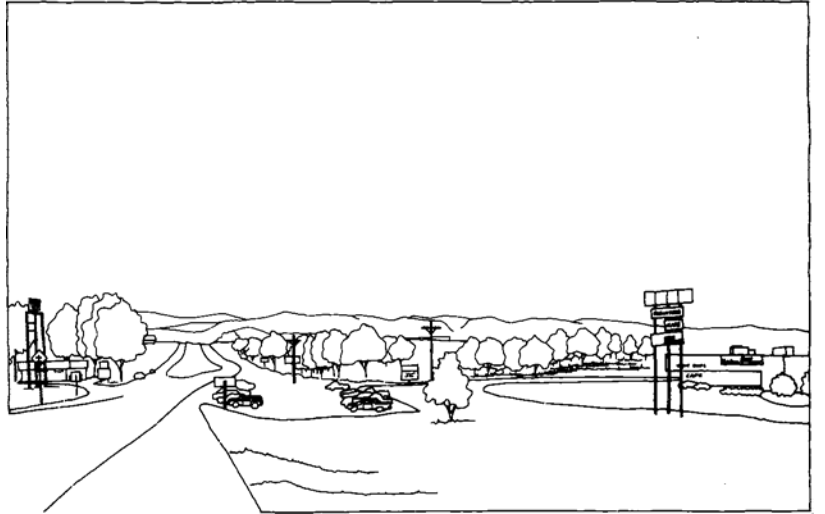
~~Land that is eligible for annexation must annex prior to development. Property is zoned at the time of annexation. The City Council typically places a planned unit development condition on the zoning, meaning that development of the property must satisfy the criteria of the LAND DEVELOPMENT GUIDANCE SYSTEM (LDGS). Under existing City or County regulations, we can reasonably anticipate a mixture of land uses that would include highway business oriented uses near the interstate, more commercial development along Harmony Road and office and/or industrial land uses both north and south of Harmony Road. The prominence of the interstate highway coupled with floodplain restrictions make residential uses unlikely in this area, although it is a possibility for land areas closer to the bluffs.~~

~~Development in the floodway is not allowed, however, developers may propose to realign the floodway, narrow its dimension by channelizing it and generally change the character of the landscape to create more developable land as long as capacity and flow requirements are met. Filling in areas of the floodplain is also acceptable and creates more developable land. The wetlands located on the north side of Harmony Road are protected by the Army Corps of Engineers. The Corps of Engineers will sometimes grant permits to fill wetland areas if wetlands of equal value are being created elsewhere.~~

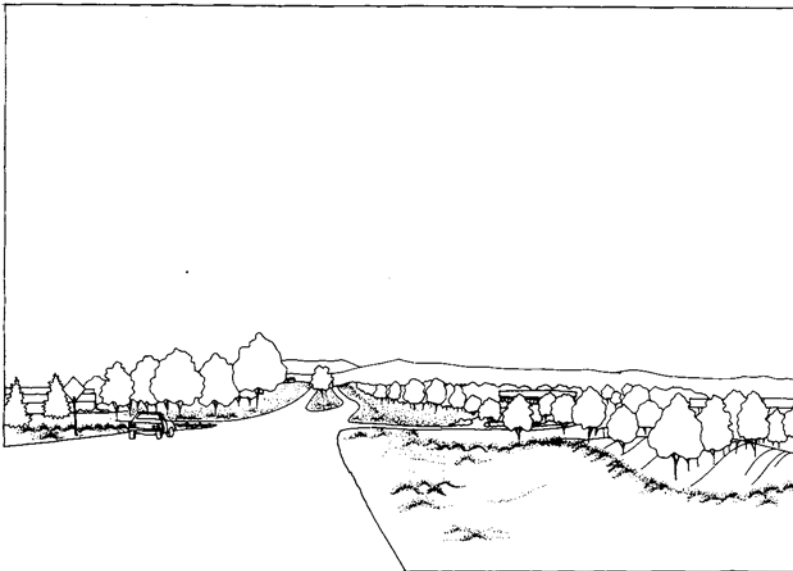
~~Although the constraints caused by the floodplain and wetlands will make development more expensive in this area, positive locational aspects of the site coupled with a lower initial land cost will probably make it cost effective to eventually develop most of the land in the gateway area west of Harmony Road. The lakes and some of the more mature vegetation would probably be retained. A substantial number of the cottonwood trees are likely to be lost because of the fill necessary to develop the land.~~

~~Through the LAND DEVELOPMENT GUIDANCE SYSTEM review process, staff can encourage open space, public access and trail systems, but it would be difficult to create effective open space networks and trail systems without a conceptual master plan for the gateway area. This scenario is filled with unknowns. The only certainty is that the gateway area will continue to change.~~

Since the area is still largely undeveloped, we have an opportunity to affect the future of this gateway to our community. Two alternative approaches were developed. Alternative A assumes urban level development and emphasizes design guidelines and intergovernmental coordination, while Alternative B controls the future of the area through acquisition and emphasizes recreational and educational opportunities.



Existing commercial development in the gateway.



Alternative A proposes development that is well integrated into the natural setting of the gateway area.

ALTERNATIVE A

This development scenario places certain development restrictions upon the property, in order to take advantage of some of the recreational, educational and aesthetic opportunities the gateway offers. In exchange for having to comply with additional land use and/or design restrictions, developers gain the advantage of more predictability and the economic edge provided by a spacious and well-planned gateway.

The intent is to create a gateway entrance that integrates quality development with the natural characteristics of the existing landscape. Wetlands, lakes and floodway areas are left undeveloped and become the focus of an elaborate open space network. The open space areas are laced with an extensive system of trails. The character of the gateway area as a whole

is naturalistic with heavy emphasis on native plants and wildlife habitat. The challenge for development is to blend into the natural scheme of things with as little visual disruption as possible.

Although more work is required to determine how this development scenario could be implemented, the following is suggested as a starting point for discussion purposes. Light industrial and office uses are encouraged. Commercial land uses are discouraged unless they can be shown to blend unobtrusively into the naturalistic setting. Setbacks would be in the magnitude of 80-100 feet from the right-of-way, creating a significant greenbelt around the interchange. Both the architecture and landscape plans would be subject to design standards and guidelines that emphasize the naturalistic character of the gateway area.

Open space and a trail system associated with the floodway, wetlands and lakes would be for public use. Ownership, maintenance and liability issues would have to be negotiated. Retaining significant amounts of open space may require the expenditure of public funds or a re-investment of tax dollars created by the development. Property owners may be willing to dedicate some non-developable land to the City as open space.

The primary goal of Alternative A is to preserve the naturalistic character of the landscape and ensure that development projects are well integrated and contribute to the visual quality of the gateway area.

ALTERNATIVE B

This crossroads is not only a gateway to the Harmony Corridor and to Fort Collins, it is also where the Cache la Poudre River and the edge of the Urban Growth Area boundary intersect. How this area is planned and developed will impact the value of the river as a natural resource. This alternative recommends public acquisition of the gateway area for open space. Publicly owned open space at this location serves several purposes. It offers opportunities for unstructured recreation such as hiking, biking, jogging, or fishing and provides opportunities to relax and enjoy nature. The Cache la Poudre River floodplain, wetlands and wildlife habitats are environmentally sensitive areas the open space would protect. Public awareness of the river and its floodplain would be enhanced and educational programs could extend this awareness to learning about a variety of environmental issues. Lastly, having scenic open space at the front door to our community speaks loud and clear about the community's values and emphasizes our appreciation and concern for the natural environment.

Although the area is largely undeveloped, there is some highly visible commercial development which exists just west of the interchange. This scenario proposes purchase of the commercial developments. The cost of eventually removing the structures is added to the acquisition cost. The total cost for acquiring the land at fair market value plus the cost of removing the commercial structures is estimated to be in the magnitude of 3.6 million dollars.

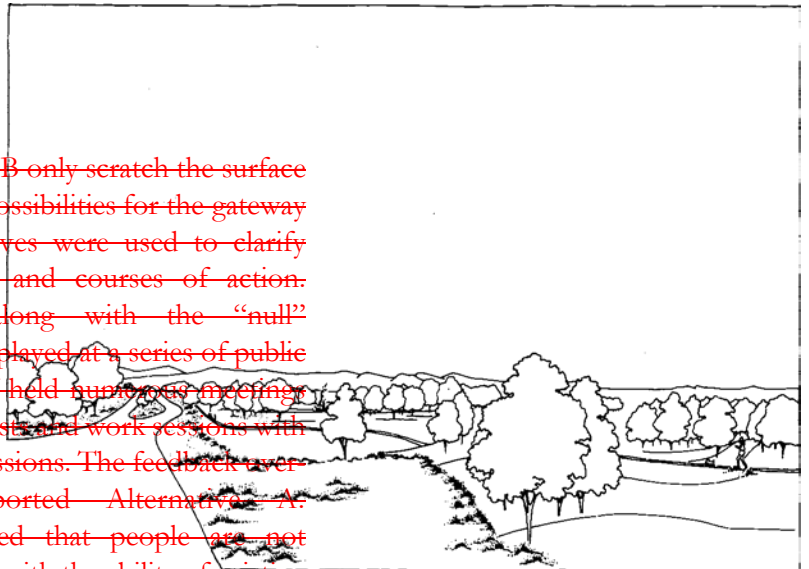
This scenario takes maximum advantage of the recreational, educational and aesthetic opportunities offered by the gateway area. It would be fair to the land owners as well as to the public. This solution is less complex than Alternative A, requires less coordination and therefore would be easier to implement. Unfortunately the price tag associated with this solution is high.

Alternative B proposes purchase of the gateway area for public open space.

LOCAL VALUES

Alternatives A and B only scratch the surface of a multitude of possibilities for the gateway area. The alternatives were used to clarify distinct directions and courses of action. Both options, along with the "null" alternative were displayed at a series of public open houses. Staff held numerous meetings with affected interests and work sessions with boards and commissions. The feedback overwhelmingly supported Alternative A. Responses indicated that people are not totally comfortable with the ability of existing City policies to coordinate and guide development in this area. They are concerned that natural resource value will be lost and important opportunities will be missed if we do not put forth a conscious effort to coordinate and plan this area with community values in mind.

Staff has studied the natural and scenic resource value of the gateway area, and speculated on the types of recreational and educational opportunities that the area can provide. The citizen participation component of the planning process has helped determine a direction. Additional work is required to develop a strategy for shaping the future of this important



~~segment of the community. The vision described in Alternative A is the starting point for the next work phase.~~

~~THE GATEWAY PLAN~~

~~GOAL STATEMENT~~

~~Shape the future of the gateway area, so that scenic qualities are emphasized and natural resources are protected. Enable the community to take advantage of recreational and educational opportunities associated with the Cache la Poudre River, lakes and wetlands.~~

~~POLICIES~~

~~GW-1 Establish a well-planned and attractive gateway entrance to Fort Collins at the I-25 interchange, emphasizing the natural scenic qualities of the area.~~

~~GW-2 Protect and enhance the natural resource value of the Cache la Poudre River.~~

~~GW-3 Encourage master planning efforts in the gateway area.~~

~~GW-4 Establish design guidelines for development in the gateway area that emphasize scenic and natural resource values.~~

~~GW-5 Discourage development from encroaching upon the bluffs that define the edge of the floodplain.~~

~~GW-6 Create networks of open space and trail systems, that incorporate wetlands and wildlife habitat.~~

~~IMPLEMENTATION ACTIONS~~

~~The following actions need to be taken by the City to ensure that the gateway section of the Plan is implemented:~~

~~1. PLAN ADOPTION~~

~~The Planning and Zoning Board and City Council should adopt the Plan.~~

~~2. GATEWAY PLANNING PHASE TWO~~

~~The City should continue the gateway planning effort through the following research, design, coordination and citizen participation activities:~~

RESEARCH

- ~~• Analyze both short term and long term costs associated with development in the floodplain.~~
- ~~• Research funding sources for acquisition of open space~~
- ~~• Investigate what implications gravel mining operations have on future development of the area:~~

~~State statutes:~~

~~Reclamation standards and practices:~~

~~Value of mineral rights:~~

~~Ownership of mineral rights:~~

~~Time frame for extracting gravel resources:~~

~~Development restrictions for mined land:~~

~~Open water and wetlands:~~

~~Water rights:~~

- ~~• Investigate how the area can be serviced with water and sanitary sewer.~~
- ~~• Explore the potential for using wetlands in the gateway as stormwater filtering systems.~~
- ~~• Analyze the need for and best layout for frontage roads.~~
- ~~• Investigate how car pooling can be provided for in future development plans.~~
- ~~• Investigate economic development opportunities.~~

DESIGN

- ~~Design a gateway entry feature and develop a funding mechanism.~~
- ~~Develop a conceptual plan for an open space network and recreational trail system.~~

COORDINATION

- ~~Coordinate with the City's river management program.~~
- ~~Coordinate with the Natural Resources Department both in regards to the environmental management plan and the prioritization of wetlands.~~
- ~~Coordinate with the long range planning efforts of other City departments—Transportation, Parks and Recreation, Water, Wastewater and Stormwater Utilities.~~
- ~~Coordinate with Larimer County and the Town of Timnath, in regards to existing plans and policies and expectations for the future.~~
- ~~Coordinate with the State Division of Highways in regards to future design of the interchange, frontage roads, and landscaping in the highway right of way.~~

CITIZEN PARTICIPATION

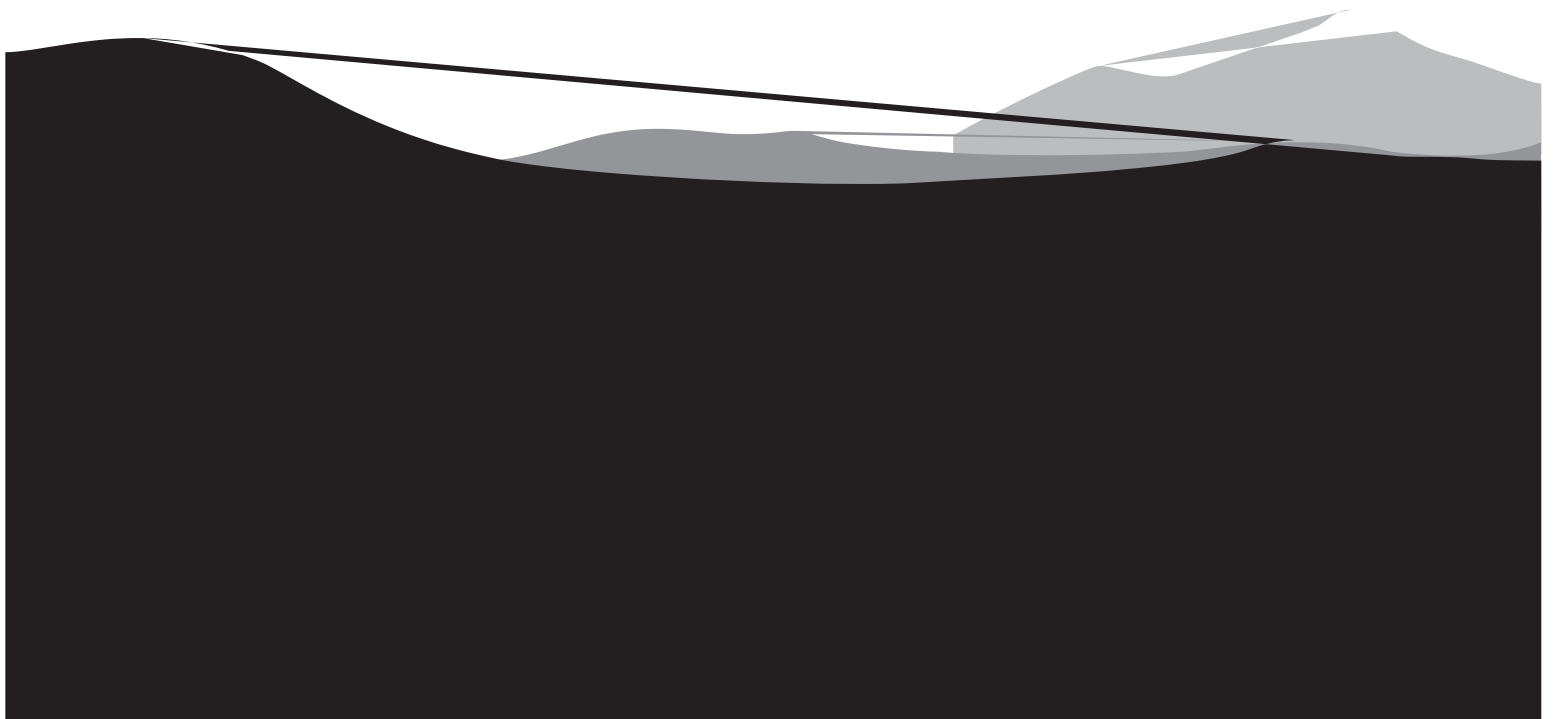
- ~~Work directly with landowners to understand their values and plans for the future.~~
- ~~Develop a systematic process for developing informed consent.~~
- ~~Identify potentially affected interests.~~
- ~~Identify the issues.~~
- ~~Determine citizen participation objectives and select techniques to achieve the objectives.~~
- ~~Develop substantial effective agreement on a course of action.~~

~~ADOPTING ORDINANCE AND RESOLUTIONS~~

- ~~Resolution PZ-91-4 of the Planning and Zoning Board of the City of Fort Collins approving the City of Fort Collins *Harmony Corridor Plan* and recommending its inclusion as an element of the Comprehensive Plan of the City of Fort Collins.~~

- ~~Resolution 91-42 of the Council of the City of Fort Collins approving the City of Fort Collins *Harmony Corridor Plan* and including it as an element of *City Plan*, the Comprehensive Plan of the City of Fort Collins.~~
- ~~Ordinance No. 187, 1994 of the Council of the City of Fort Collins amending the *Harmony Corridor Plan* and the *Harmony Corridor Standards and Guidelines*.~~
- ~~Resolution 2003-086 of the Council of the City of Fort Collins amending the *Harmony Corridor Plan*.~~

~~The full text of these resolutions and ordinances are available for inspection from the City Clerk's office.~~



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