PLANNING AND ECONOMIC DEVELOPMENT MEETING
February 13, 2019
8:30 a.m.
Mt. Elbert Conference Room, 5th floor
Council Member Chair, Francoise Bergan
Council Member Johnny Watson, Vice Chair
Council Member Marsha Berzins, Member

Be a great place to locate, expand and operate a business and provide for well-planned growth and development.

1. Approval of January 9, 2019 draft minutes	Council Member Bergan	8:30 a.m.
2. Update on Development Activity Building Division	Scott Berg Tod Kuntzelman	8:35 a.m.
3. Northeast Aurora Market & Zoning Analysis – Final Draft Recommendations	Brian Duffany EPS	9:00 a.m.
4. Miscellaneous Matters for Consideration • Aurora Economic Development Council • Havana Business Improvement District • Aurora Chamber of Commerce • Planning Commission	Council Member Bergan	9:50 a.m.
5. Confirm Next Meeting March 13, 2019	Council Member Bergan	9:55 a.m.

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PLANNING AND ECONOMIC DEVELOPMENT (PED)
POLICY COMMITTEE MEETING
January 9, 2019

Members Present: Councilmember Francoise Bergan, Chair, Councilmember Johnny Watson, Vice Chair, Councilmember Marsha Berzins, Member

Others Present: Councilmember David Gruber, George Adams, Andrea Amonick, Jason Batchelor, Scott Berg, Bob Bengen, Kimberly Brown, Melvin Bush, Rachel Gruber, Karen Hancock, Dexter Harding, Leigh Hettick, Chance Horiuchi, Vinessa Irvin, Gayle Jetchick, Daniel Krzyzanowski, Heather Lamboy, Dennis Lyon, Dan Money, Mindy Parnes, Jose Rodriguez, Kevin Smith, Margie Sobey, Sarah Wieder, Anita Bauer

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APPROVAL OF MINUTES
Minutes of December 12th, 2018 were approved.

2018 PED COMMITTEE RECAP
Summary of Issue and Discussion:
Director of Planning and Development Services George Adams presented an overview of the agenda items that were discussed in 2018 as: Aurora Places Comprehensive Plan with numerous updates; Unified Development Ordinance (UDO) Zoning Code, Building Permit changes, and Business Transformation Office (BTO)/Accela updates. Others listed were: International Economic Development; Restaurant Incentive Program; Housing Diversity; Residential Lot Standards; Business Advisory Board (BAB) Ordinance Change; and 2017 Development Review Annual Report. A number of updates were also given on: Gaylord Rockies; Aurora Economic Development Council (AEDC), Aurora Chamber of Commerce, Oil and Gas Advisory Committee, International Council of Shopping Centers (ICSC) Retail Convention, Northeast Aurora Market Study, Aurora's Office Market, Development Review Fees & Payments Recommendations, Infill Incentive Program, Food Truck Regulations, Colorado State Land Board and Lowry Ranch, and Small Business.

Chair Bergan requested Planning Commission (PC), Board of Adjustments (BOA), Business Advisory Board (BAB), and Oil & Gas (O&G) Committee to provide updates to PED in 2019. Deputy City Manager Batchelor mentioned that when Council adopts a ruling that the PC, BOA, BAB, and O&G will be heard at the appropriate committee. Once approved, reporting will be forthcoming on these boards, commissions and committees.

Outcome: Informational purposes only.

Follow-up Action: None.

2019 PED COMMITTEE WORK PLAN
Summary of Issue and Discussion:
In addition to any agenda items requested by the PED Committee, staff suggested bringing back agenda items in 2019 to keep committee members updated on: UDO, Aurora Places Comprehensive Plan Implementation, Northeast Aurora Land Use and Market Study, Development, Oil and Gas Advisory Committee, Restaurant Incentive Program, ICSC Retail 2019 Convention, AEDC, Aurora Chamber of Commerce, BAB, Retail, Infill Incentive Program, Development Review - BTO/Accela, Aurora's Office Market, and Small Business.

Chair Bergan asked if the AEDC could present on Opportunity Zones and requested their presentation early in the year. Development Services Manager Andrea Amonick responded that the group who presented at a previous event was the Office of Economic Development & International Trade (OEDIT) and suggested to add to the proposed list of agenda items. Councilmember Watson asked who the city staff representative was for Opportunity Zones. Mr. Batchelor explained that an internal process is being managed by the Office of

Development Assistance Manager Vinessa Irvin, who will distribute Opportunity Zone questions to the appropriate department or contact for responses. Councilmember Gruber mentioned that Mr. Dan Green's development is the first Opportunity Zone project on Porteos and it was suggested that Mr. Green come to PED to get an insider's view. Ms. Irvin will invite Mr. Green to a future meeting.

Ms. Amonick recommended the Incentive Programs be brought to PED to create decision making policies because it is important to the business sector. She mentioned that in the past, Incentive Program items were taken to the Management & Finance Policy Committee, but believe it to be important for PED to discuss Economic Development Incentive issues.. Chair Bergan asked if the BAB addresses business challenges in their meetings. Ms. Amonick replied that the BAB has had general discussions about what types of incentives are important to the business community. She said it is important to bring those discussions to PED for decision making and then take that information back to the BAB because they are an advisory board to Council on such matters.

Vice Chair Watson requested focusing on the corridor of 64th Avenue, that is close to Gaylord, as an important area that should be addressed to get people out of their cars because people would rather walk to retail than drive and that he would like the income to stay in Aurora. Mr. Adams reassured the Committee that this is identified as one of the focus areas.

Mr. Batchelor referred to a map showing the Gaylord hotel in an unincorporated Adams County owned by Denver International Airport and said that Denver recently reached out to coordinate with Aurora and developers.

Chair Bergan requested to have real estate professionals give an update on the commercial marketplace citywide. Councilmember Gruber mentioned that Mr. Adams hosted a meeting with land owners in the northeast area about the EPS study and what to expect, and also discussed other potential retail from Horizon up to High Point, with the understanding that some of the landowners are willing to share where they are going to put retail, while others are not willing to share information. A second meeting is to focus on where and what retail is being planned prior to going to ICSC. He requested a presentation from Senior Retail Project Manager Tim Gonerka prior to going to the ICSC Convention.

Ms. Amonick explained that people are very interested in the northeast, but it needs the planning work. She said, with the changing nature of retail in the United States, staff wants to be sure to place retail in the right locations and the planning work that staff is doing is important in conjunction with what areas are going to be promoted to developers for that use at ICSC. She said Planning staff is working together on plans to find what areas could be promoted for retail. Vice Chair Watson mentioned that he would like walkability to be incorporated in the area plans. Mr. Adams mentioned that he is working with Mr. Gonerka to identify which areas are targeted and working on a plan to present an overview. Councilmember Gruber reiterated his points about sharing information and how it would benefit the City.

Committee Member Berzins mentioned how she doesn't want prospective developers to hear from the City "not in our plan." Chair Bergan suggested not to micromanage the plan and wants neighbors to complement each other instead of duplicate retail in the same proximity. She also requested someone from the Oil and Gas industry to be present at this meeting as well.

Mr. Batchelor reiterated the additional agenda item topics to be added to the list as requested: Opportunity Zones, Economic Development Incentives Policy, 64th Avenue, Building activity updates, Oil and Gas Industry updates, Single Family, and Boards of Adjustments. He also mentioned flexibility for the agenda topics and that other agenda items can be added as needed.

Outcome: Staff will update the 2019 list of agenda topics and coordinate with presenters.

Follow-up Action: Staff will adjust agenda items for the February meeting.

MISCELLANEOUS MATTERS

Havana Business Improvement District Update:

- In November/December, we hosted lots of Giveaways to supporters and shoppers of On Havana Street.
- Holiday Caroling with the Aurora Singers + distributed gift cards to shoppers at GOH
- December 1st, 2018 we gave out over 500 gift cards to shoppers at 3 different locations in the business corridor and walked with volunteers to various shopping centers to give shoppers a "Thank you for shopping On Havana Street, Enjoy this Gift Card on Us."
- Social Media Giveaways: Meals from Church's Chicken + Costco Membership Giveaways after Christmas
- Currently, preparing for 2019 events and exploring new marketing opportunities for the BID to reach diverse audiences.

Join Us On Havana --- Event Updates:

- Sunday, February 3, 2019: Super Bowl Party – Buffalo Wild Wings at GOH
- February 2019 --- tentative date --- Feb. 26, 2019: Grocery Cart Races at Safeway with Comitis Crisis Center
- March 2019: Celebrate Small Business --- Mom & Pop Business Month
- May 1-8, 2019 --- Restaurant Week - Eat On Havana Street
- Saturday, May 4, 2019: Rose Garden Clean Up – Volunteers Needed
- Saturday, 12-6pm, June 8, 2019: Cruzin Havana Car Show The 12th Annual Cruzin Havana Cruise and Poker Run hosted by the Collector Car Council of Colorado & the Havana BID. Free cruise & poker run. Grand prize for poker run is a 5 day & 4 night Ocean Cruise for two. 3 festival sites with food and entertainment at all three. Thousands of classic cars. For information Contact Chance at 720-788-8986
- Tuesday, June 25, 2019: 1st FREE Summer Rose Garden Concert & Hoagie Night at the GOH
- More details about On Havana Street Events visit www.OnHavanaStreet.com

Aurora Chamber of Commerce Update:

- Legislative breakfast was on Monday.
- Gearing up for many events.
- Nominations for Women in Business are being accepted with the event on Friday, February 1st.
- Annual Awards Banquet, Friday, March 15th, theme is Fire and Ice, City will get an invite soon.
- Kevin Hougen was nominated by business community as Most Admired CEO.

Planning Commission Update:

- Planning Commission meeting tonight will be reviewing six site plans.
- Error in Original Aurora plan will be corrected and presented for recommendation.

Vice Chair Watson inquired if Oil and Gas permits will be shared with Council, and Mr. Adams responded that something could be put together to share.

Mr. Batchelor asked about the 2019 schedule time and date for PED and Chair Bergan responded date and time are to remain as they have been.

Approved:____

Committee Chair Francoise Bergan   Date

Next meeting: February 13, 2019 at 8:30 a.m. in Mt. Elbert

Planning and Economic Development Policy Committee
Agenda Item Commentary

Item Title: Building Division Activity Update	
Item Initiator: Scott Berg	
Staff Source: Scott Berg	
Deputy City Manager Signature:	
Outside Speaker:	
Council Goal: 5.1: Support an environment conducive to business development and expansion	

ACTIONS(S) PROPOSED ***(Check all appropriate actions)***

- ☐ Approve Item and Move Forward to Study Session
- ☐ Approve Item and Move Forward to Regular Meeting
- ☒ Information Only

HISTORY ***(Dates reviewed by City council, Policy Committees, Boards and Commissions, or Staff. Summarize pertinent comments. ATTACH MINUTES OF COUNCIL MEETINGS, POLICY COMMITTEES AND BOARDS AND COMMISSIONS.)***
Development activity in 2018 was at a very high level and included the largest building in Aurora, the Gaylord. The purpose of this item is to review 2018 workload activity and provide a brief overview of what the Building Division is doing to prepare for the future.

ITEM SUMMARY ***(Brief description of item, discussion, key points, recommendations, etc.)***
Development activity in 2018 was at a very high level and included the largest building in Aurora, the Gaylord. The purpose of this item is to review 2018 workload activity and provide a brief overview of what the Building Division is doing to prepare for the future.

QUESTIONS FOR Committee
Informational only.
(Power Point Presentation)

EXHIBITS ATTACHED:
12 December Building Report.pdf

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Building Activity
December 2018

	October	November	December	2018	2017
Permits Issued				Year to Date	
New Commercial Buildings	5	8	6	62	72
New Single Family Dwellings	140	91	92	1,411	1,657
New Multi-Family Dwellings / Units	0 / 0	8 / 393	5 / 141	44 / 1,114	18 / 341
Renovation Permits on Existing Buildings	1,278	994	845	13,656	10,983
Total Permits Issued	1,423	1,101	948	15,173	12,730
Plan Reviews					
Target: Complete review of building plans within established timeframes 90% of the time	99%	98%	99%	99%	99%
Plan Reviews Completed	1,151	911	946	14,044	13,145
Building Inspections					
Target: Complete 90% of the building inspections on the day requested	98%	97%	99%	98%	98%
Inspections Completed	12,594	11,030	8,158	144,859	130,501
Permit Center					
Target: Average wait time less than 3 minutes	1:23	1:47	1:22	1:42	2:29
Walk-in Customers to the Permit Center	993	790	749	12,351	12,776
Target: 90% of calls are answered within :30 seconds	97%	96%	96%	96%	84%
Phone Calls to the Call Center	8,615	7,416	5,531	88,897	81,883
Revenue Collected					
Plan & Permit Fees	$ 1,663,894	$ 1,162,917	$ 1,305,206	$ 12,477,469	$ 9,973,144
Contractor Licensing Fees	$ 47,205	$ 41,430	$ 36,679	$ 559,249	$ 505,040
Total Revenues	$ 1,711,099	$ 1,204,347	$ 1,341,885	$ 13,036,718	$ 10,478,184

Notes on current construction projects:
* The Gaylord Hotel and Convention Center project ended and opened on time December 18th! It was the largest construction project ever in Aurora. During the 3 year project our staff completed over 60,000 inspections.

* The Ready to Work project (3176 S Peoria Ct) received its CO and began operations

* The permit for the Nine Mile Station senior living building (55 units) was issued in December

City of Aurora Building Division • 15151 E. Alameda Parkway, floor 2
aurora4biz.org • 303.739.7420 • permitcounter@auroragov.org

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Planning and Economic Development Policy Committee

Agenda Item Commentary

Item Title: Northeast Aurora Market and Zoning Analysis	
Item Initiator: Adams, George	
Staff Source: George Adams, Director, 303-739-7260	
Deputy City Manager Signature:	
Outside Speaker: Brian Duffany, Economic and Planning Systems	
Council Goal: 5.2: Plan for the development and redevelopment of strategic areas, station areas and urban centers	

ACTIONS(S) PROPOSED ***(Check all appropriate actions)***

☒ Approve Item and Move Forward to Study Session

☐ Approve Item and Move Forward to Regular Meeting

☐ Information Only

HISTORY ***(Dates reviewed by City council, Policy Committees, Boards and Commissions, or Staff. Summarize pertinent comments. ATTACH MINUTES OF COUNCIL MEETINGS, POLICY COMMITTEES AND BOARDS AND COMMISSIONS.)***

In May 2018 the city initiated a land use, zoning and market analysis for the area bounded generally by Denver International Airport on the north, Monaghan Road to the east, 48th Avenue to the south and Dunkirk Street/City of Denver border to the west. The purpose of the study is to provide guidance and recommendations on balancing competing demands for commercial and residential zoning and development in the area, and to ensure adequate land is available for future commercial and employment use.

Preliminary findings of the Study were presented to PED on September 12, 2018 and were presented to area stakeholders in October 2018.

This presentation will describe final draft findings and recommendations of the study.

ITEM SUMMARY ***(Brief description of item, discussion, key points, recommendations, etc.)***

QUESTIONS FOR Committee

Does the Committee have guidance or questions for staff or the consultant?

EXHIBITS ATTACHED:

Draft Final Report-NE Aurora Market and Zoning Analysis 02-01-2019.pdf

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Draft Final Report

Northeast Aurora Market and Zoning Analysis

The Economics of Land Use

Prepared for:
City of Aurora, Colorado

Prepared by:
Economic & Planning Systems, Inc.

Economic & Planning Systems, Inc.
730 17th Street, Suite 630
Denver, CO 80202-3511
303 623 3557 tel
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Denver
Los Angeles
Oakland
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February 1, 2019

EPS #173049

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1. Findings and Recommendations

Introduction

The purpose of this report is to provide guidance and recommendations to the City of Aurora on achieving the City's economic development vision for the area south of Denver International Airport (DEN), and on balancing competing demands for residential and commercial land. This area is important to the City for its potential to attract commercial development to sustain the tax base needed to fund services and invest in infrastructure. Economic & Planning Systems (EPS) prepared this report and its recommendations for the City of Aurora at the request of City Council and Staff.

Aurora's Comprehensive Plan, *Aurora Places*, and the adopted zoning identify much of this area for high quality commercial development. The City's goal is to leverage the economic activity generated by DEN, the new Gaylord Rockies hotel and conference center, and access to the regional highway and transit network to attract office development, retail and mixed use, and high density high quality housing along the E-470 Corridor.

Currently the Study Area is largely undeveloped primarily due to a lack of infrastructure; however, there is a large amount of land planned and approved for development. The residential market in both Northeast Denver and Northeast Aurora has strengthened as the economy and housing market have recovered from the lingering effects of the Great Recession and accompanying financial crisis. Currently, the demand for first-time buyer homes is stronger than demand for office and retail/commercial development in the area. This is motivating developers and property owners to seek rezoning of commercial property to allow more single family detached housing, and in some cases smaller lots (higher densities).

The City is generally supportive of allowing new residential development, but not at the expense of achieving its long-term economic development goals. If commercial property is rezoned to residential uses, the City risks losing important land for jobs and an enhanced tax base. Single family residential areas are harder to redevelop to commercial uses, and any rezoning to residential could be a permanent change and opportunity cost to the City.

The City has requested this evaluation of market expectations, zoning and development capacity, potential timeframe for development, and fiscal impact considerations to inform its decision-making on land use and zoning issues. The main zoning districts in question include the E-470 Regional Activity Center Subarea; E-470 Airport Corporate Subarea; E-470 Airport Distribution Subarea; and I-70 Corridor Subarea (Northeast Plains/NEP).

Report Organization

This report is organized into six chapters, as listed below:

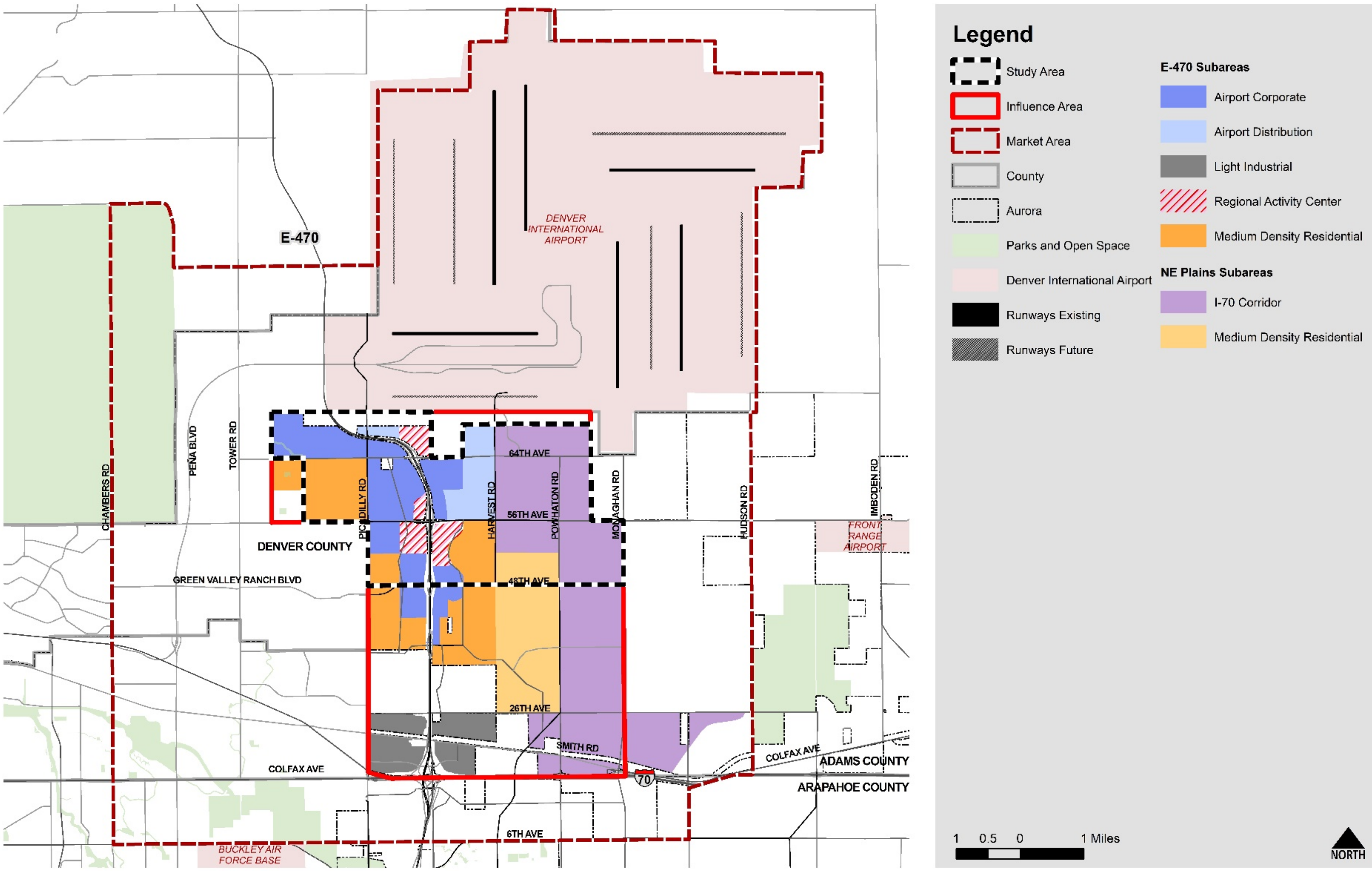
1. **Findings and Recommendations** - Contains EPS' summary of findings and recommendations.
2. **Existing Conditions** - Data and analysis on existing land use, City land use policy, and future market influences.
3. **Demographic and Economic Trends** - Demographic, economic, and real estate trends for the Study Area and a larger Market Influence Area.
4. **Real Estate Development Trends** – A synopsis of national and regional trends in the office, industrial, retail, and housing markets that will affect the City and Study Area.
5. **Stakeholder Interviews** - Summarizes comments from stakeholder interviews conducted by EPS.
6. **Case Studies** - Provides comparative land use data around newer U.S. airports and large employment districts.

Study Area and Geography

The Study Area is bounded to the north by the City of Aurora boundary on the southern edge of Denver International Airport (DEN), Monaghan Road to the east, 48th Avenue to the south, and Dunkirk Street to the west. The Study Area is comprised of approximately 7,300 acres of land south of DEN and along highway E-470, shown in **Figure 1**. Since much of the Study Area is undeveloped, a larger Influence Area was defined to consider surrounding trends and conditions in planned development and transportation as well as active developments extending south to I-70. To consider these impacts, an Influence Area was defined that extends south to I-70, as shown.

A larger competitive Market Area is also used to show historical population, employment, and demographic trends in Northeast Aurora and Denver. Since there is very little development, population, or employment in the Study Area today, there is no data from which to extrapolate trends, and the Study Area also competes for development with this larger Market Area. The Market Area was also defined to capture trends from the area around DEN in Northeast Denver and Northeast Aurora. The market area is loosely defined as the northern border of DEN, Hudson Road to the east, 6th Avenue to the south, and Chambers Road to the west.

Figure 1. Study Area Map



Summary of Findings

Existing Conditions

1. ***The Study Area is a vast area of almost entirely undeveloped land (comprised of 7,250 acres or over 11 square miles) but planned for a large amount of urban development.***

   Much of the Study Area is currently planned and entitled for approximately 10,000 planned housing units and 16.7 million square feet of industrial development, and another 20 to 30 million square feet of retail, office, and mixed use commercial space. There has been extensive land planning and entitlement activity well ahead of infrastructure, indicating the opportunities that the private market sees.

   Projects built or underway so far include the Gaylord of the Rockies hotel and conference center (opened in December 2018), High Point Academy Charter School (opened in 2006), and approximately 500 housing units in the High Point development. There are at least 12 planned and proposed developments that range from single family residential, to industrial and light manufacturing, commercial/retail, age-restricted active adult housing, and office. Development is likely to accelerate in the coming years.

2. ***The City's vision is for large scale high quality employment, retail, and mixed-use development with complementary housing. There are, however, some conflicts between this vision and current market conditions and developer interests, which are for more housing than is currently allowed.***

   Aurora Places, the City's Comprehensive Plan, shows that the area south of DIA and along the E-470 Tollway Corridor is designated as an Urban District, City Corridor, Emerging Neighborhood, and Industrial Hub. The focus of these areas is on high quality development, a mix of land uses, and re-defining the City of Aurora's image in this key gateway area. The City's zoning is compatible with these designations but may be based on outdated assumptions. Both the Comprehensive Plan and zoning lack the attention to urban design and the mix of uses needed to achieve the vision.

   Current zoning requests and proposed development plans are more heavily weighted to single use developments, primarily residential with a narrow pricing band and housing product mix. Given the lack of a current market for office and retail, some developers are seeking to re-zone commercial property to residential to take advantage of the strength of the housing market.

3. ***Housing and warehousing and distribution are currently the strongest real estate market segments in Northeast Aurora and Northeast Denver.***

   The market for first time buyer and attainably priced single family homes (approximately $250,000 to $400,000) is the strongest real estate segment in the Study Area, having recovered since the Great Recession. Demand for apartments is also strong. Generally, Metro Denver has pent up demand for affordably priced housing. Job growth at DIA and in Northeast Denver and Aurora are contributing to demand, as well as economic growth in Metro Denver. There are nearly 10,000 housing units approved and planned in the Study Area with roughly 500 built in 2018. Construction is expected to increase once infrastructure is complete, with construction rates in the range of 500 or more units per year possible if current economic conditions continue.

   The Study area is in the DIA industrial submarket. This is the strongest industrial submarket in Metro Denver, having added 8.0 million square feet over the past eight years, capturing half of the market for new industrial space in Metro Denver. The market is expected to remain strong as there is a large supply of well-located industrial land, and other industrial locations in central Metro Denver are built out. With four-directional highway access, airport proximity, and the potential for rail-to-truck facilities nearby, this area is well positioned for industrial, and warehousing and distribution development.

4. ***Currently there is little demand for corporate or multitenant office development in the Study Area. There are areas however that at some point in the future could be suitable—but not prime—locations for office development given today's location criteria.***

   Northeastern Metro Denver has not to date had strong demand for office development. Developers in the Study Area report that there is no current demand. Over the long term, the Peña Boulevard and A-Line commuter rail corridor west of the Study Area are expected to be more competitive for office development as it has better visibility and transit access. Transit access and mixed use urban settings are increasingly important to attracting the younger skilled labor force.

   Stakeholders and developers in the area suggested that high visibility sites near the Gaylord Rockies at major arterial interchanges with E-470—particularly 64th and 56th—could be good office sites in the future but at the same time acknowledge the competitive environment with the A-Line and Peña Boulevard corridor, and potentially DEN on-airport real estate. The City should, through infrastructure investment and partnerships with developers, work to position this area for future office, other employment, and potentially entertainment district development.

5. ***With little housing built in the Study Area, there is currently insufficient household spending demand to attract retailers.***

   Retail stores and shopping centers will not develop until the minimum population/household thresholds for the trade area are reached. In general, it is not feasible for developers to build and subsidize retail ahead of sufficient housing demand. Retail development has not extended past Tower Road in any significant amount.

   Developers in the area do report some growing interest from grocery chains attracted by the potential for housing growth. The market for large regional retail centers however has softened due to the impacts of e-commerce. It will likely be some time before another center like Gateway Town Center (Tower Road and I-70) is built. Developers closer to DIA are targeting smaller retail pad users and limited service hotels frequently found near airports.

6. ***The Study Area and broader market area exhibit some subtle differences in demographics, influenced by new home construction, compared to the rest of Aurora.***

   The large amount of new home construction in Northeast Aurora and Northeast Denver has created a high home ownership rate—69 percent in the market area compared to 56 percent in all of Aurora. The population is also slightly younger and more family oriented compared to the rest of the city. There is a need and demand for housing for first time buyers, and this area is one of the primary locations for this market segment today in Metro Denver. The City should consider the benefits of providing needed housing. As jobs grow in the Study Area, housing will also be needed for the labor force.

Forward Looking Influences

7. ***There are several market drivers and influences that will shape development in the Study Area. If the City's vision is supported by proactive implementation actions and investments to overcome some of the constraints identified, the City will be better able to leverage these influences to achieve its vision.***

    - **Denver International Airport Real Estate -** DEN Real Estate staff are working on a strategic plan to expand commercial development on DEN property. DEN is targeting a range of markets from hotel and conference facilities to office parks, bioscience, and airport freight distribution/ logistics. The Study Area will both compete for some of this development as well as benefit from spin-off businesses and supply chain linkages.

    - **DEN Airport Operations -** At the same time, residential encroachment is a concern for the long-term operations of the airport. The airport was relocated from the Stapleton site both out of a need for growth and due to the encroachment of residential neighborhoods.

    - **Gaylord Rockies -** The Gaylord Rockies is a 1,501 room hotel and conference center that opened in December 2018. Based on what has occurred around Gaylord properties in other cities, the project is expected to catalyze additional hotel, restaurant, retail, and entertainment/leisure development. Strong pre-booking activity is reported, with approximately 1,000,000 room nights booked through 2028. Planning for additional hotels and entertainment space is beginning in Rockies Village, adjacent to the Gaylord.

    - **Transportation Network -** The direct access to I-70 (east-west), I-76 (north-east), and I-25 (north-south) makes this area an excellent location for warehousing and distribution. The impact of the E-470 Tollway may be mixed. On one hand, it is a major access way to DIA and regional highway. As a tollway however, it has not supported the amount of commercial development at interchange locations that other non-tollway highways have, at least within the Denver market. However, commercial development along tollways is more prevalent in the Dallas, Houston, and other metro areas where tollways are more common. In Metro Denver, this may change in the future as tolling via "express toll lanes" becomes more commonplace.

Case Studies

8. A comparison of the land use around Dallas-Fort Worth (DFW); Atlanta (ATL); Dulles; and Austin, TX (ATX) airports suggests some common conditions around newer large U.S. international airports.

- Industrial development is the dominate commercial land use ranging from 54 percent of square footage surrounding DFW to 65 percent surrounding ATL to 72 percent surrounding ATX.
- Office development is highest around Dulles Airport at 43 percent of commercial development. Much of the office space surrounding DFW and Dulles are in or near major master planned communities such as Las Colinas (just outside DFW) and Reston Town Center (near Dulles). These communities are of a sufficient scale to be able to invest in high quality amenities and to be patient for the type and quality of development that is desired.
- Retail ranges from 7 to 17 percent of commercial square footage and hotels comprise about 8 percent.
- Housing is generally 40 to 50 percent single family detached and 40 to 50 percent multifamily surrounding these airports.

9. National and local trends show that office park development is shifting from the single use suburban model to a mixed used urban place model.

Denver Tech Center was the first office and business park developed in the South I-25 Corridor. The area remains the premier office location outside of Downtown Denver for office development and company siting. The area is becoming more mixed use as both workers and employers seek mixed-use amenitized locations rather than single purpose office parks. New housing, retail, entertainment, and office projects are clustering around TOD locations, emphasizing the importance of transit accessibility. Approximately 6,000 housing units have been built on the South I-25 Corridor since 2010.

Fiscal Impact Considerations

10. Rezoning commercial land to residential has long term fiscal opportunity costs.

Colorado cities and counties rely on commercial development to support their tax base and municipal services. Due to the tax structure under the Gallagher Amendment, commercial property generates about 4 times the tax revenue than residential on the same amount of assessed value. For this reason, cities frequently pursue and incentivize commercial development, especially retail which has even larger fiscal benefits generated from local sales taxes.

When commercial land is re-zoned for residential use, it largely precludes commercial development for many years or decades especially in areas developed with single family homes.

11. Fiscal balance should be looked at on a city- or district-wide basis rather than on individual development projects.

A related issue is the tendency of cities to use fiscal impacts as a reason for approving or denying residential development applications. While it may be appropriate in some cases, applying this policy broadly is an oversimplification of how the market generates sales and property tax revenues. A balanced land use mix in a larger area should be the goal. It is not realistic for each project to achieve fiscal neutrality as a single project may not have the locational attributes necessary to build commercial development.

Recommendations

This section contains EPS' recommendations which were developed from an analysis of market and land use data, case study research, and informed input from the stakeholder interviews.

1. ***Prepare and adopt an Area Plan for the Study Area to better define the City's vision and to guide development.***

   Aurora Places is a bold new Comprehensive Plan for the City. It identifies a citywide vision and land use policies that should be implemented. However, for a city this size, Aurora Places cannot provide enough detail to address the issues in of the Study Area. A more detailed Area Plan should be completed by the City. This Study identified several land use and infrastructure issues that need to be addressed.

   First, a vision for the area needs to be more formally defined and adopted in a Plan. This will give the City more footing from which to make long term zoning and infrastructure decisions if there is an adopted vision for the area. It will also help the City take a more proactive approach to defining this area, rather than reacting to individual developer requests.

   The plan should address the areas of economic development, land use, urban design, development principles, infrastructure phasing and prioritization, transportation facilities and conceptual design, incentives policies, and zoning. It should incorporate modern best practices in the design of transportation corridors, mobility hubs, bicycle and pedestrian mobility, neighborhoods, and commercial and mixed use districts.

2. ***There is a sufficient land supply in the Study Area to allow for some flexibility in rezoning land for more residential development.***

   Housing will be needed in the study area to support Aurora's vision for attracting more employment to the area, and to support the anticipated job growth associated with the Gaylord Rockies, the DEN Aerotropolis concept, and the growth of the DEN airport.

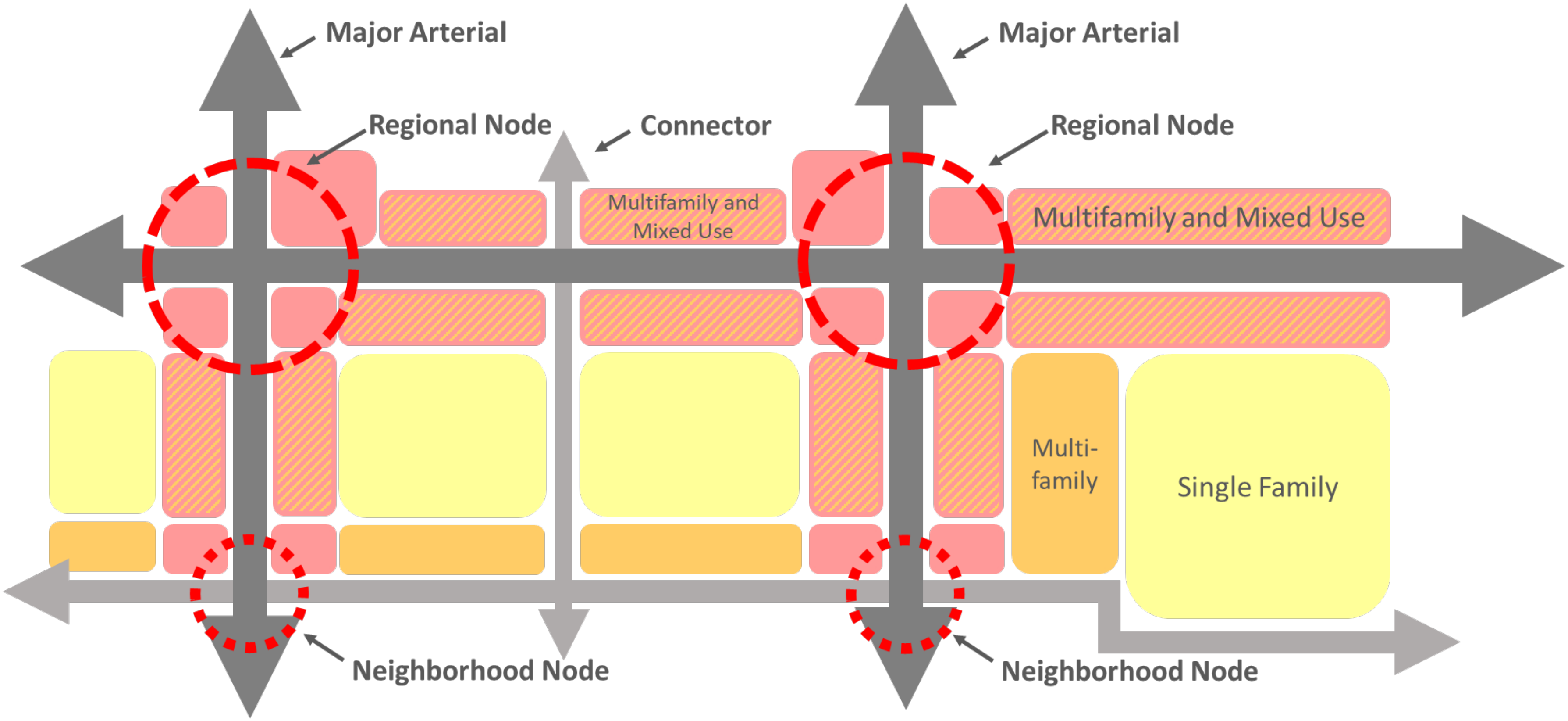
   EPS estimates that the entire City of Aurora captured about 17 percent of the Metro Area job growth from 2002 through 2015. A caveat to this figure however is that approximately two-thirds of this job growth occurred on the Anschutz Medical Campus, which now has over 20,000 jobs. If the Anschutz Campus is removed from this calculation, the rest of Aurora captured 5 to 6 percent of metro area job growth. In order for all of the planned commercial development to nearly fully absorb by 2040, the area would need to capture an ambitious 15 percent of metro area job growth each year, tripling the citywide market share (excluding the Anschutz Campus). These calculations indicate that there is more than enough commercial land capacity in the Study Area to accommodate future economic development, and to accommodate additional residential development at appropriate locations. These calculations influence our recommendations below on potentially modifying land use approaches and zoning designations in some areas.

3. ***Consider a strategy of focusing commercial development at key nodes such as major arterial and E-470 highway interchange locations.***

   The current zoning may require too much commercial development along arterial frontages. While arterials are often good locations for commercial development, there is a concern that the zoning will result in strip development patterns that dilutes economic and place-making synergies rather than concentrating it in the best locations. With little current demand for large scale office or retail development, there is a risk that the first development to occur will be smaller pad site and strip-retail uses, resulting in smaller parcel sizes and irregular blocks that will deter future high quality and larger scale integrated development.

   The approach to addressing recent rezoning requests and the recommended Area Plan could explore a node-focused strategy that: identifies the best locations for commercial development to create focused mixed use urban economic centers; prioritizes infrastructure investment in these locations; and allows more residential development on the corridors between the key nodes, as illustrated conceptually in **Figure 2**. On the corridors between nodes, it would be important to activate these areas with higher density housing and some mixed use development, and to also provide mobility alternatives (sidewalks, bicycle facilities, transit-only lanes) to anticipate changing travel mode preferences and needs.

Figure 2. Node and Corridor Development Strategy



4. ***Stakeholders and EPS identified the most important locations in the Study Area to be prioritized for commercial development. The City should consider preserving these locations for commercial development and should also consider investing in infrastructure to catalyze the market for development.***

   The interchange locations at 64^{th} and E-470, 56^{th} and E-470 are the closest to DEN and have excellent visibility and access. They are also closest to the Gaylord Rockies and Highpoint, which currently have the most development momentum. The interchange locations could be future office or mixed use district locations. Arterial Corridors with the greatest potential were suggested to be 64^{th} from Tower Road to Jackson Gap; 56^{th} from Picadilly to Harvest; and Jackson Gap from 64^{th} to the DEN entrance. When improved, these arterials could create a tight connection loop with the airport that will facilitate the economic linkages between the Study Area, Gaylord Rockies, interchange locations, and the Airport. While Aurora has not traditionally built infrastructure to serve new development, there may be cases where it would be beneficial in the Study Area to promote a more cohesive development pattern.

   With many developers pursuing their own projects and building infrastructure when cash flow allows, there is risk of a piecemeal and leapfrog development pattern. This development pattern will negatively impact development quality and be costlier for the City to serve. The City could consider, in partnership with developers, funding key roadway and utility connections to promote a more logically phased and better connected development pattern.

5. ***Leverage the Gaylord Rockies as a development catalyst in Northeast Aurora.***

   The new Gaylord Rockies has the potential to catalyze additional hospitality, retail, and housing development surrounding the facility. The area could also develop into a broader hospitality, tourism, and entertainment district. Longer term, it may also catalyze office development as the area becomes more established and amenitized. In order to take full advantage of the investment in the facility and to maximize the economic and community benefits, it will be important to ensure that surrounding development is built to high standards of design and quality. The following general principles of urban design should be emphasized to create an urban place and destination with lasting value rather than a single use facility with little relation to its surroundings.

   - **Connectivity and walkability** – An interconnected and tight knit block network should connect the Gaylord to surrounding developments to encourage interactions between different developments and businesses. Large suburban style "superblocks" should be avoided. EPS believes that the better that the Gaylord is connected to surrounding areas the greater the spin-off benefits will be. A comparison of development densities and urban design between the Gaylord Texan and the Gaylord National is an illustrative example. The Gaylord National is part of an emerging urban district with a full range of housing, offices, and destination retail well connected to the hotel facility.

- **Mix of land uses** – The City should encourage a broader mix of land uses beyond limited service hotels. Housing, retail, restaurants, performing arts venues, and offices will broaden the economic activity and create an authentic place.
- **Transit and multimodal access** – The area around the Gaylord and planning in the broader study area should address transit and other multimodal access. Part of creating a place with lasting value will be anticipating changing travel habits and accommodating and connecting to transit and other emerging travel modes.

6. Adopt land use and design policies to implement current best practices in neighborhood design.

Since residential neighborhoods will be the first to develop in the Study Area due to the strength of the housing market, it is important that this initial development is done well. This does not mean that all new housing needs to be high priced or "high end" executive housing as that is unrealistic from a market perspective. The focus instead is on promoting better design and transportation standards to promote walkability, connectivity, a broader mix of housing, and access to parks and trails and schools.

Smaller lots are in demand in the market for cost efficiencies and have been successfully integrated into residential development in Denver, Commerce City, Westminster, and Brighton when mixed with a broader range of home prices and types. The City is in the process of adopting new standards for small residential lots and should continue working with the Home Builders Association and Joint Task Force on this subject. The city should closely monitor the effectiveness of these standards and modify where needed to ensure high quality neighborhoods are being constructed.

2. Existing Conditions

Existing Land Use

The Study Area is 7,250 acres land just south of the Denver International Airport along the E-470 Tollway. The majority of the area is planned for urban development with 12 planned and proposed developments that range from single family residential, to industrial and light manufacturing to medium density active adult housing, and office and retail. Nearly all of the Study Area is undeveloped land with the exception of the Gaylord of the Rockies hotel and conference center that was built in 2017, High Point Academy Charter School (opened in 2006), and some residential units. Nearly 500 housing units have been constructed as a part of the High Point planned development and there are several other scattered residences, homesteads, and airport parking lots in the area.

Market Influences

There are five key influences driving development interest and shaping the market and future land use in the Study Area.

Denver International Airport

Airport Operations

The primary mission of DEN is to operate the airport. DEN was built in its current location in 1994 (completed) and relocated from the Stapleton Airport due to the encroachment of residential development, and the need to expand the airport. Zoning does generally prohibit residential development north of 64th Avenue. However, residential encroachment is a concern for the long-term operations of the airport.

DEN Real Estate

DEN Real Estate staff are working on a strategic plan to expand commercial development on DEN property. The IGA between Denver and Adams County executed in 2011 allows Denver to develop commercial land uses on no more than 1,500 acres of land and requires Denver to make a one-time payment of $10.0 million to Adams County to amend the agreement.

A 7th runway is planned south of Peña Boulevard west of Jackson Gap along a west-east axis. DEN staff emphasized their concerns that encroaching residential development would be impacted by this runway. In addition, a rumble protection zone is proposed west and east of each end of the runway which may further limit the types and locations of development.

DEN has identified five nodes for future development over a 50 year planning time period. Concept planning to date addresses approximately 900 acres of the 1,500 acre maximum. The general land use approach is outlined below.

- **West Approach –** This is the area around the existing Conoco gas station complex just west of Gun Club Road. This is planned to be the first area of development, targeting hotels and retail and other hospitality.
- **Second Creek –** This 360 acre area is south of 80th Avenue west/northwest of Peña Boulevard. This is envisioned as an agri-technology research and development area, with a potential partnership between Denver, the National Western Center, and Colorado State University.
- **East Approach –** This is a 250 acre area south of the terminal identified for 2.5 million square feet of office, and hotel/conference center development. The Westin at DEN is reporting strong demand for conference facilities, and DEN would like to expand this opportunity.
- **Peña Station Next –** DEN owns 60 acres adjacent to the commuter rail station at 61st. The property is planned for up to 1.7 million square feet of transit oriented development (TOD) focused on renewable energy and sustainable development, in partnership with Panasonic.
- **72nd and Himalaya –** DEN has a 355 acre site located at a planned commuter rail station. The site is planned conceptually for up to 6.0 million square feet of mixed use TOD.

Gaylord Rockies

The Gaylord Rockies, scheduled to open in December 2018, is a 1,501 room hotel and conference center with 485,000 square feet of convention and meeting space. Based on what has occurred around other Gaylord properties, the project is expected to catalyze other hotel, restaurant, retail, and entertainment/leisure development. Strong pre-booking activity is reported, with approximately 1,000,000 room nights booked through 2028.

Housing Market

There is pent up demand for entry level for-sale housing. During and after the Great Recession and Financial Crisis, the homebuilding industry built less entry level housing. The economic recovery, growth of Metro Denver, aging of Millennials who are the largest segment of buyers in the market now, and bifurcation of wages and income at the high and low ends is driving demand for affordably priced homes.

E-470 and Transportation Network

The E-470 Tollway runs north-south through the study area. It is a major accessway to DIA, and allows for regional travel through the metro area with less traffic than I-25 and I-70. As a tollway however, it has not generated the amount of commercial development at interchange locations that other non-tollway highways have. Office brokers and real estate developers have suggested that the toll is a deterrent to attracting employment development along the corridor. This may change in the future as tolling becomes more commonplace. Although the other tolled regional highways also have non-toll lane options.

The direct access to I-70 (east-west), I-76 (north-east), and I-25 (north-south) makes this area an advantageous location for warehousing and distribution which seek locations with 4-direction interstate access.

The recently completed University of Colorado A Line commuter rail is hoped to drive transit oriented development and attract more employment to the Peña Boulevard corridor. This area of the City and County of Denver will compete with Aurora for economic development.

Warehousing and Distribution Market

Eastern Metro Denver has become the premier location for warehousing and distribution development. The industrial submarket covering the Study and Influence Areas has added 1.0 million square feet of industrial development annually since 2010, capturing half of the market for new industrial space in the Metro Area. The growth of e-commerce is driving demand for fulfillment centers and distribution space, combined with Metro Denver’s growth and its function as a distribution hub for the Intermountain West.

Planned Development

Over 80 percent of the land in the Study Area is a part of a planned development, as shown in **Table 1**. Planned developments in the area have approvals for approximately 9,700 residential units, 16.7 million square feet of industrial, 8.2 million square feet of office, 1.6 million square feet of retail, and 24.3 million square feet of mixed commercial. High Point, located south of Pena between Dunkirk and Gun Club and north of 64th Avenue, is currently the only planned development in the Study Area with active construction. The Gaylord Rockies hotel and conference center will open in late 2018. In High Point, nearly 500 (31 percent) of the planned homes have been constructed as of April 2018.

The Influence Area which extends south of the Study Area along E-470 to I-70 contains six additional planned developments. The six planned developments in the Influence Area propose an estimated 22,200 housing units, 28.4 million square feet of industrial, 9.6 million square feet of office, 3.9 million square feet of retail, and 26.5 million square feet of mixed commercial. Housing units in Single Tree at DIA are nearly built out at 85 percent (787 housing units) built. Industrial development at the intersection of I-70 and E-470 in the Influence Area is 17 percent built out with nearly 5 million square feet constructed in Prologis Park 70, Eastgate Industrial Park, and Aurora Commerce Center.

Table 1. Planned Development Percent Built

Description	Acres	Residential			Industrial		Commercial		
		Proposed	Built	Pct. Built	Industrial	Pct. Built	Office	Retail	Mixed Commercial
		Units	*Apr. 2018*	*%*	*sq. ft.*	*%*	*sq. ft.*	*sq. ft.*	*sq. ft.*
Study Area									
Painted Prairie	640	3,076	0	0%	0	0%	0	0	0
Fulenwider	775	0	0	0%	5,530,000	0%	220,000	240,000	0
Porteos	1,341	0	0	0%	10,900,000	0%	1,850,000	200,000	4,630,000
310 West	331	1,603	0	0%	110,000	0%	580,000	330,000	0
Windler Homestead	335	2,171	0	0%	0	0%	0	0	0
Fine Point Business Park	113	0	0	0%	170,000	0%	0	0	3,800,000
High Point	1,214	1,600	497	31%	0	0%	5,260,000	180,000	15,860,000
Gaylord Hotel [1]	107	0	0	0%	0	0%	0	0	0
Rockies Village	137	300	0	0%	0	0%	260,000	440,000	0
Sun Empire	252	0	0	0%	0	0%	0	0	0
Sagebrush Farms	437	989	0	0%	0	0%	0	220,000	0
McVey	295	0	0	0%	0	0%	0	0	0
Total	**5,977**	**9,739**	**497**	**5%**	**16,710,000**	**0%**	**8,170,000**	**1,610,000**	**24,290,000**
Focus Area									
Prologis Park 70	262	0	0	0%	2,600,000	100%	0	0	0
Eastgate Industrial Park	226	0	0	0%	2,310,000	22%	0	0	0
Aurora Commerce Center	221	0	0	0%	2,800,000	54%	0	0	0
Green Valley Ranch East	578	8,860	0	0%	0	0%	0	0	0
The Aurora Highlands	3,554	12,429	0	0%	3,950,000	0%	1,380,000	2,250,000	2,180,000
Single Tree at DIA	158	923	787	85%	0	0%	0	0	0
Total	**5,000**	**22,212**	**787**	**4%**	**11,660,000**	**0%**	**1,380,000**	**2,250,000**	**2,180,000**
Total Focus Area	**10,977**	**31,951**	**1,284**	**4%**	**28,370,000**	**16%**	**9,550,000**	**3,860,000**	**26,470,000**

[1] Gaylord Hotel has 1,500 hotel rooms and 490,000 sq. ft. of event space

Source: City of Aurora; Economic & Planning Systems

Policy Context

Aurora Places

Aurora Places is the City of Aurora's Comprehensive Plan that provides a roadmap to guide the community's physical development over the next 20 years. The Comprehensive Plan compiles existing conditions in Aurora, community input, and targeted goals and policies to reach the 20 year vision for the community. Topics like economic and environmental sustainability, housing, cultural diversity, health, land use, transportation and more are all a part of the integrated approach to guide development.

A major component of Aurora Places is the concept of Placetypes. Placetypes provide a vision for different places in Aurora that when put together create a cohesive, vibrant community made up of a balanced mix of uses and unique places. The plan includes 11 different Placetypes including Urban Districts, Innovation Districts, Industrial Hubs, Buckley Airforce Base, Urban Green Spaces, Original Aurora, Established Neighborhoods, Emerging Neighborhoods, City Corridors, Commercial Hubs, and Special Uses. The Study Area has 5 of the 11 districts, described below.

- **Urban Districts** are Aurora's signature destinations that offer a unique, vibrant urban experience.

  Primary land uses: multifamily residential, restaurant, commercial retail, commercial service, entertainment and arts district, and office
- **Industry Hubs** are primarily dedicated to a mix of commercial and industrial uses and can be a significant employment center.

  Primary land uses: light industrial, heavy industrial, and urban agriculture
- **Emerging Neighborhoods** offer an opportunity for Aurora to redefine itself through highly-desirable, connected, and complete neighborhoods.

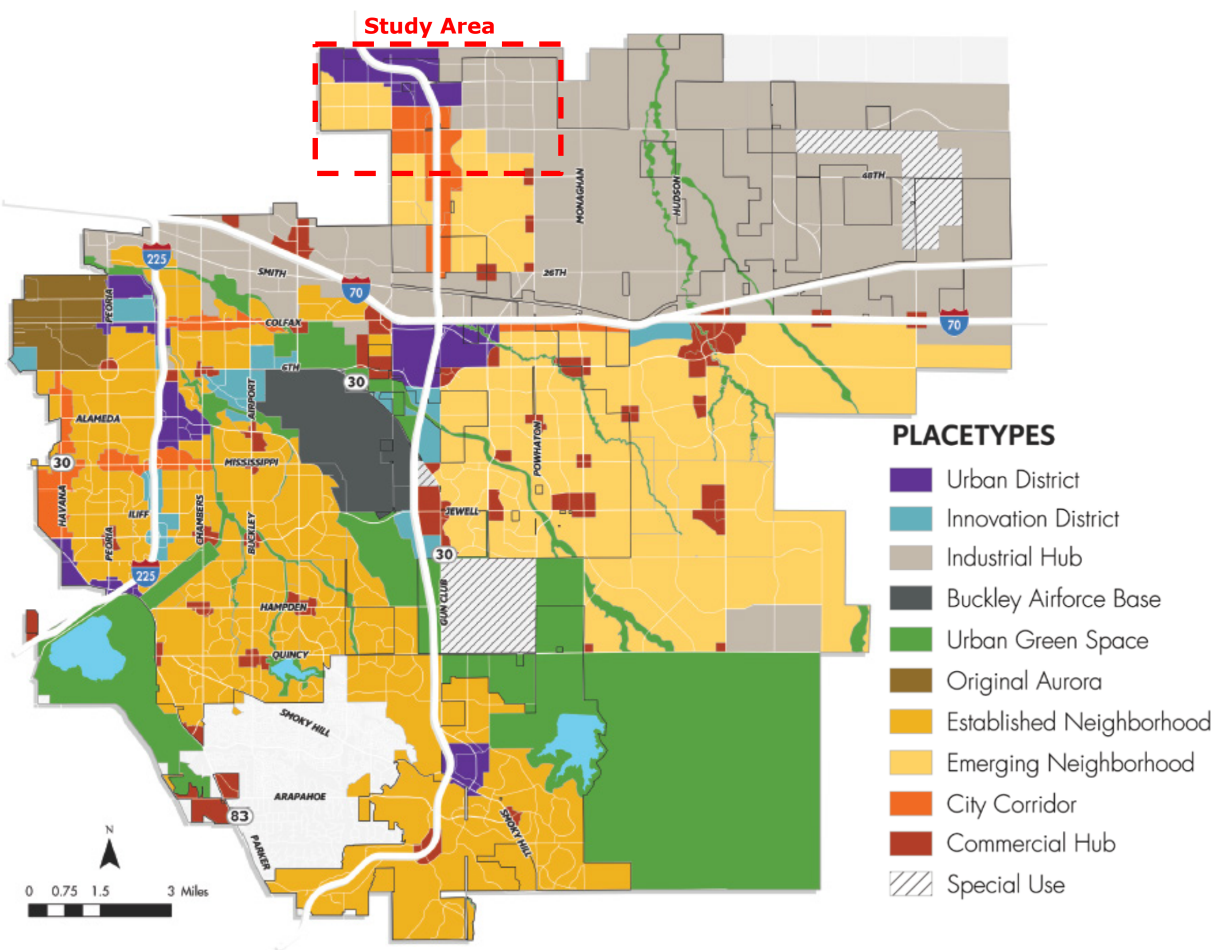
  Primary land uses: single family detached residential, single family attached residential, and multifamily.
- **City Corridor's** focus is commercial activity along the main road or street, with connected mixed residential types supporting this vibrant district.

  Primary land use: multifamily residential, restaurant, commercial retail, and commercial service
- **Commercial Hubs** are centers of activity supporting adjacent neighborhoods with shopping, services, entertainment, and community life.

  Primary land use: restaurant, commercial retail, and commercial service

As shown below in **Figure 3**, the northern portion of the study area along E-470 is shown as an Urban District. This is consistent with the proposed High Point planned development and the newly constructed Gaylord Rockies hotel and conference center. Commercial uses continue south down E-470 with the City Corridor Placetype which will focus on retail and service uses for the surrounding Emerging Neighborhoods. The Commercial Hub at the corner of 48th Avenue and Powhaton will also serve as a center of activity for shopping, services, entertainment, and dining for the surrounding residential. The Industrial Hubs are located in the areas that make up the Porteos planned industrial development and the DEN Airport 65 LDN noise contours. Residential uses are not permitted within the 65 or 60 LDN noise contours.

Figure 3. Aurora Places Placetype Map



Zoning Summary

The development for the Study Area is divided into two zone districts including the E-470 Zone District and the Northeast Plains Zone District. Both zone districts have an emphasis on commercial activity related to DIA, E-470, and I-70. The zoning districts are divided into subareas with specific zoning regulations, primary uses, and secondary uses.

The majority of the Study Area (55 percent) is located in the E-470 Zone District, as shown in **Table 2**. The Study Area includes four of the E-470 subareas including airport corporate, airport distribution, regional activity center, and medium density residential. Airport corporate, airport distribution, and regional activity center subareas make up 38 percent of the Study Area and are all focused on commercial land uses. All of the districts allow some residential development with a focus on high quality single family and small scale multifamily housing types. The commercial districts allow for a maximum 50 percent of the land to be residential, except within a half mile of E-470 only 25 percent residential is permitted, as shown in **Table 3**.

Table 2. Existing Study Area Zoning

Description	Acres	Percent
E-470 Subareas		
Airport Corporate	1,698	23%
Airport Distribution	639	9%
Regional Activity Center	440	6%
Medium Density Residential	1,196	16%
Subtotal	**3,974**	**55%**
NE Plains Subareas		
1-70 Corridor	2,419	33%
Medium Density Residential	323	4%
Subtotal	**2,742**	**38%**
Total Zoned Area	**6,716**	**93%**
Other Land (mostly E-470)	536	7%
Total Study Area	**7,252**	**100%**

Source: City of Aurora; Economic & Planning Systems

The remainder of zoned land in the Study Area is within the Northeast Plains Zone District. Within the Study Area the Northeast Plains I-70 corridor and medium density residential subareas make up around 2,700 acres (38 percent). The I-70 corridor subarea is intended to encourage commercial uses that are supported by proximity to I-70 and E-470 such as light industrial and distribution. Residential development is permitted in the I-70 corridor subarea up to 80 percent in the overlay zone; however, the majority of the I-70 corridor subarea in Study Area is within the DIA 65 LDN noise contour, which does not permit residential development. The medium density residential subarea consists of medium-density high quality single family and small scale multifamily. Supporting retail and services are permitted in the residential subareas.

Table 3. E-470 and NE Plains Zoning

Zoning	Vision	Primary Uses	Supportive Uses	Max. Residential Density
E-470 Subareas				
The purpose of the E-470 Corridor Zoning Regulations is to enable the development of lands in the E-470 Corridor Zone District in accordance with the Aurora Comprehensive Plan (including without limitation the E-470 Corridor element of that plan), with the highest possible levels of community and building design consistent with the healthy economic development of the corridor. The E-470 Corridor District includes 10 distinct subareas, each of which is created to achieve the more specific purposes below.				
Airport Corporate	A variety of employment uses are anticipated to be developed in this classification, with an emphasis on high-quality corporate office and business parks.	● Office ● Business parks	● Hotel ● Limited retail ● Commerical and services ● Limited residential	● 50% ● 25% within 0.5 mile of E-470 ● Only 32% of total units can be multifamily
Airport Distribution	A variety of commercial, light manufacturing, and distribution uses are anticipated to be developed in this classification, with an emphasis on high-quality transportation-oriented business related to DIA.	● Variety of commerical ● Light manufacturing and dist. ● Transit-oriented business	● Retail and services ● Limited residential	● 50% ● 25% within 0.5 mile of E-470 ● Only 32% of total units can be multifamily
Regional Activity Center	E-470 Regional Activity Center Subareas are located at intersections of the E-470 tollway with principal arterials, is intended to encourage the development of large-scale, distinctive, attractive, urban regional activity centers.	● Mix of large retail stores ● Shopping centers ● Restaurants ● Entertainment ● Hotel ● Dense office	● High-density multifamily ● Major civic or public facilities ● Parks and open space	● 50% ● 25% within 0.5 mile of E-470 ● Only 32% of total units can be multifamily
Medium Density Residential	This subarea, located in close proximity to the E-470 tollway and other major highway systems, is intended to encourage development of master-planned, medium-density, high-quality residential land uses.	● Medium-density single family	● Small scale multifamily ● Limited retail ● Commercial ● Institutional and civic ● Open space	● 25% within 0.5 mile of E-470 ● Only 24% of total units can be multifamily
NE Plains Subareas				
The purpose of the Northeast Plains Zoning Regulations is to enable the development of lands in the Northeast Plains Zone District in accordance with the Aurora Comprehensive Plan (including without limitation the Northeast Plains element of that plan), with the highest possible levels of community and building design consistent with the healthy economic development of the corridor. The Northeast Plains District includes 4 distinct subareas, each of which is created to achieve the more specific purposes below.				
I-70 Corridor	The subarea is intended to support the economic development potential of the I-70 corridor, to encourage well-designed planned developments, and to support the economic development potential of fringe areas in proximity to the E-470 Corridor Zoning District.	● Commercial ● Employment ● Light industrial	● Residential (SFR and MF) in overlay zone	● 80% of land in overlay zone ● New residences prohibited until 2,500 full-time jobs within 2 miles of subarea or within Front Range Airport subarea
Medium Density Residential	This subarea is intended to encourage development of master-planned, medium-density, high quality residential land uses.	● Single-family residential	● Small scale multifamily ● Limited retail ● Commercial ● Institutional and civic ● Open space	● Only 24% of total units can be multifamily

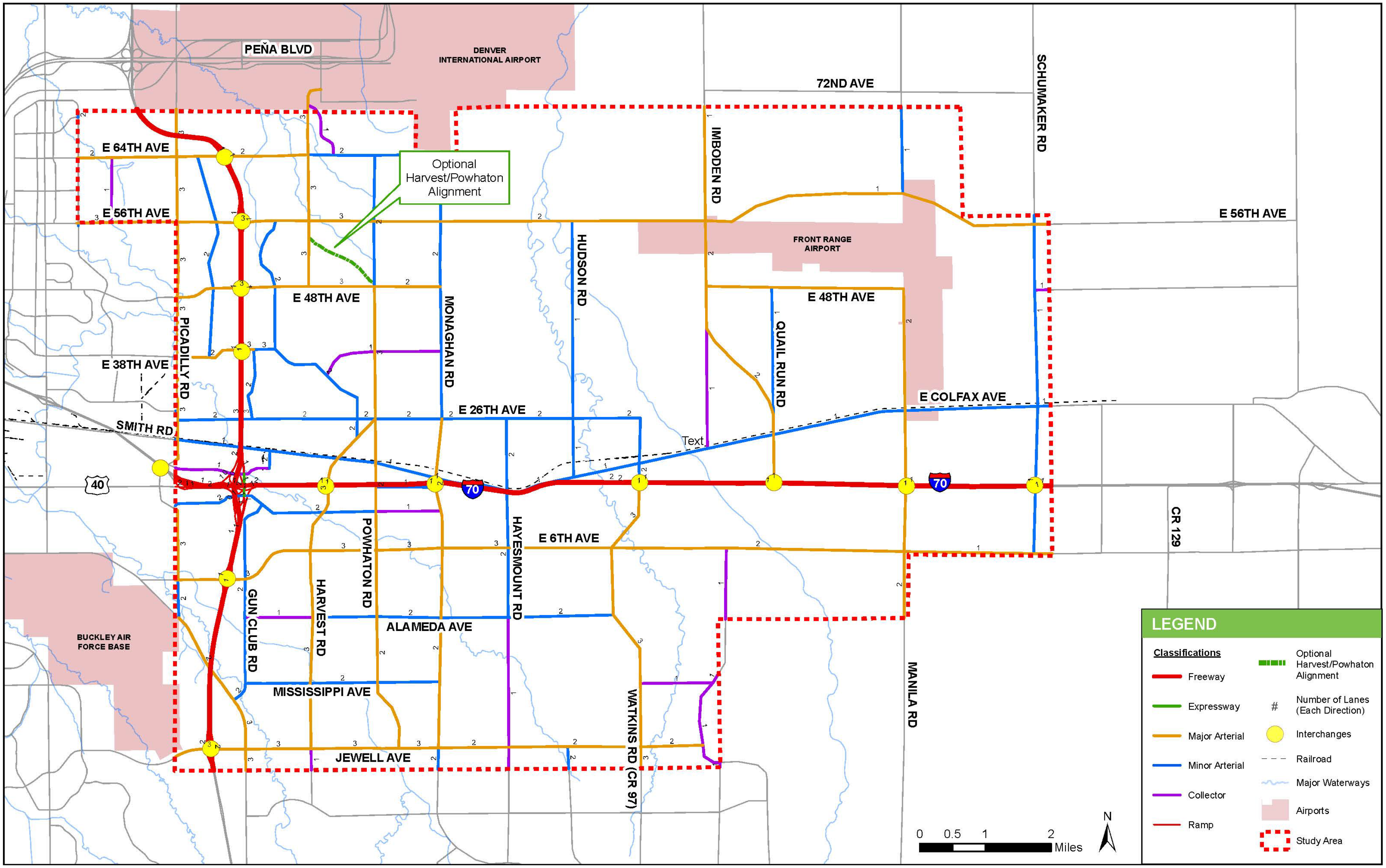
Source: City of Aurora; Economic & Planning Systems

Future Transportation Network

An update of Aurora's Northeast Area Transportation Plan (NEATS) was recently approved and has produced a Recommended Roadway Network map covering the Focus and Study Areas, shown in **Figure 4**. This future roadway network is important for two reasons: it defines the future connections to the airport and influences where the best locations will be for office and retail/commercial development.

Two direct north-south connections to DEN property are proposed in the NEATS: Picadilly and the Harvest/Jackson Gap combination. With existing interchanges on E-470 at 64th and 56th, real estate developers working in this area suggested that this will create a looped network connecting with DIA, Peña Boulevard, and the Gaylord Rockies making it the strongest location for office, commercial and higher density development. With the proximity to Gaylord Rockies and DEN property, the 64th Corridor is likely to be the stronger location.

Figure 4. Northeast Area Transportation Study Recommended Roadway Network



3. Demographic and Economic Trends

This section provides information on the current demographics and trends in the Study, Market, and Influence Area. This information is used to prepare a commercial development projection to gauge land capacity, and to inform recommendations on housing. Data from the broader market area is used as there is very little development in the Study Area to date.

Population and Households

The rate of growth in the Market Area over the past 18 years has been more than double that of the City of Aurora. While many other planned residential communities in Aurora and the Denver Metro have continued to build out, development has begun to shift to the largely undeveloped areas in the Metro Area including the Market Area.

The 2018 population of the City of Aurora was estimated at 370,647 with the Market Area estimated at 61,335 (17 percent), as shown in **Table 4**. The City of Aurora gained 93,645 residents between 2000 and 2018. The Market Area gained 37,420 residents during the same time period. Much of the growth in the Market Area occurred in Denver's Green Valley Ranch that accounts for approximately 9,100 units residents, and Gateway Park further west. Between 2000 and 2018, the City of Aurora gained 31,181 households or 1,732 households annually. The Market Area represents around 36 percent of household growth in Aurora with 11,185 new households or 621 per year.

Table 4. Population and Households, 2000-2018

Description	2000	2010	2018	2000-2018 Total	2000-2018 Ann. #	2000-2018 Ann. %
Population						
City of Aurora	277,002	325,241	370,647	93,645	5,203	1.6%
Market Area	23,915	46,996	61,335	37,420	2,079	5.4%
Pct. of Aurora	*9%*	*14%*	*17%*	*40%*	*40%*	---
Households						
City of Aurora	105,869	121,976	137,050	31,181	1,732	1.4%
Market Area	8,484	15,767	19,669	11,185	621	4.8%
Pct. of Aurora	*8%*	*13%*	*14%*	*36%*	*36%*	---

Source: ESRI Business Analyst; Economic & Planning Systems

Household Characteristics

The Market Area has a higher rate of home ownership, more children, and larger households than the City of Aurora as a whole, as shown in **Table 5**. In 2018 it was estimated that nearly 70 percent of housing units in the Market Area were owner occupied, while in the City of Aurora 56 percent of units were owner occupied. More than 60 percent of households in the City of Aurora do not have children. Conversely, the Market Area has a majority of households with children at 52 percent. The Market Area has a higher percentage of households with three or more people than the citywide trend and a larger average household size.

Table 5. Household Characteristics

Description	City of Aurora Number	City of Aurora Percent	Market Area Number	Market Area Percent
Average Household Size, 2018	2.69	---	3.12	---
Tenure, 2018				
Owner Occupied	80,116	56%	13,945	69%
Renter Occupied	56,933	40%	5,723	29%
Vacant	6,494	5%	410	2%
Total	**143,544**	**100%**	**20,079**	**100%**
Houeholds with Children, 2016				
Households w/ Children	46,860	37%	9,122	52%
Households w/o Children	78,530	63%	8,402	48%
Household Size, 2016				
Single Household	33,671	27%	3,336	19%
2 Person Household	38,432	31%	4,116	23%
3-4 People Household	38,047	30%	6,984	40%
5+ People Household	15,240	12%	3,087	18%
Total Households	**125,390**	**100%**	**17,523**	**100%**

Source: ESRI Business Analyst; Economic & Planning Systems

Home ownership has grown in the Market Area and decreased in the City of Aurora since 2000, as shown in **Table 6**. In 2018 it is estimated that nearly 14,000 (69 percent) of housing units in the Market Area are owner occupied compared to around 6,000 (66 percent) of housing units in 2000. Vacancy rates in the Market Area have also decreased substantially as some of the housing developments in the area have built out and stabilized.

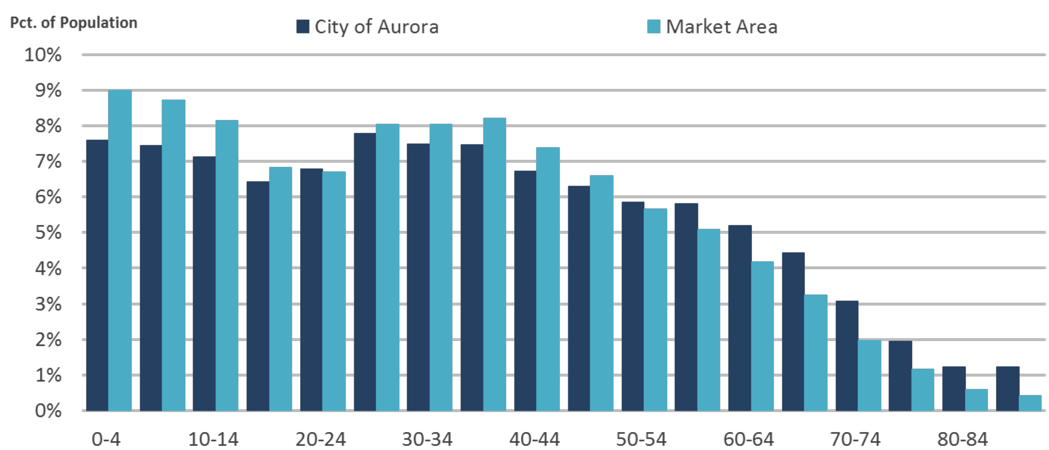
Table 6. Household Tenure and Vacancy Share, 2000-2018

Description	2000		2010		2018	
	Number	Percent	Number	Percent	Number	Percent
City of Aurora						
Owner Occupied	67,823	62%	73,102	56%	80,116	56%
Renter Occupied	38,046	35%	48,874	37%	56,933	40%
Vacant	3,664	3%	9,143	7%	6,494	5%
Total	**109,533**	**100%**	**131,119**	**100%**	**143,544**	**100%**
Market Area						
Owner Occupied	6,110	66%	10,834	64%	13,945	69%
Renter Occupied	2,374	26%	4,933	29%	5,723	29%
Vacant	3,664	40%	1,033	6%	410	2%
Total	**9,215**	**100%**	**16,800**	**100%**	**20,079**	**100%**

Source: ESRI Business Analyst; Economic & Planning Systems

The Market Area population is younger than the City of Aurora as a whole. The Market Area age distribution is consistent with a large population of younger families with children. In the Market Area there are more residents under 19 and in the 25 to 59 age range compared to the City of Aurora, as shown in **Figure 5**. The median age in Aurora is 35 compared to 32 in the Market Area.

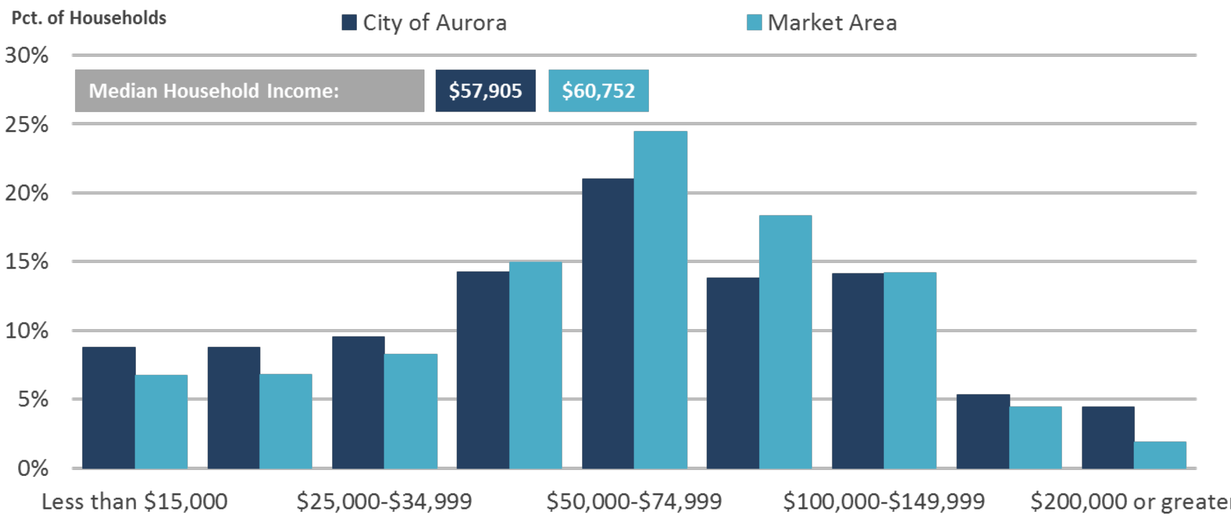
Figure 5. Age Distribution, 2018



Source: ESRI Business Analyst; Economic & Planning Systems

The Market Area has higher household incomes than the City of Aurora. The Median Household Income in the Market Area is estimated at $60,752, as shown in **Figure 6**. The City of Aurora as a whole has a lower median income of $57,905. Overall, the Market Area has a higher concentration of middle income households between $40,000 and $150,000. The concentration of ownership households and larger household sizes in the Market Area contribute to higher household incomes as households are more likely to have more than one wage earner.

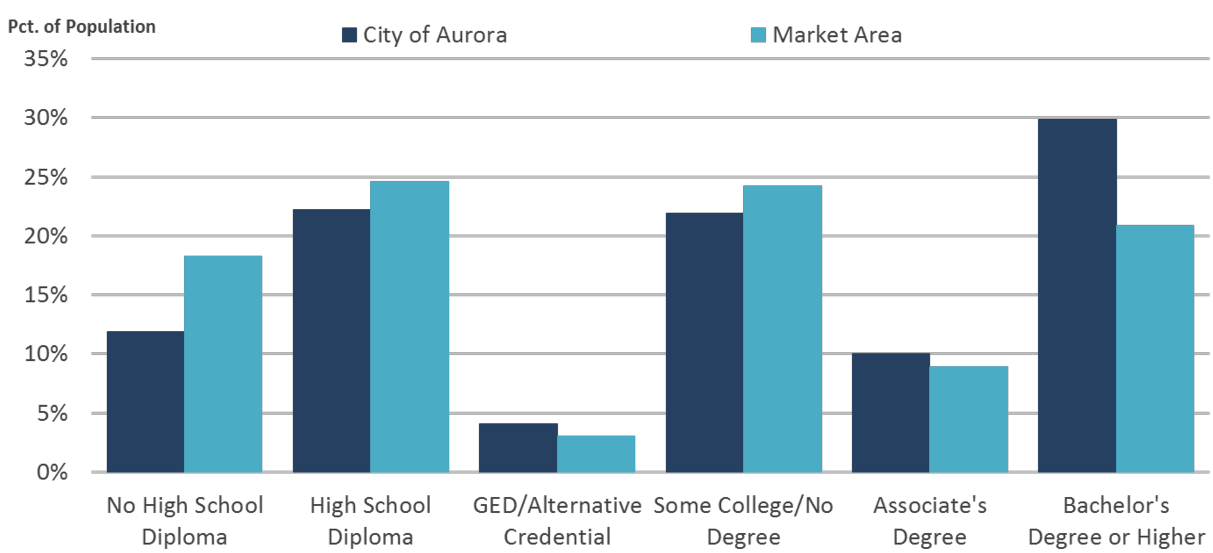
Figure 6. Income Distribution, 2018



Source: ESRI Business Analyst; Economic & Planning Systems

The City of Aurora has a larger percentage of the population with a bachelor's degree or higher, as shown in **Figure 7**. The percentage of the population in the Market Area that did not receive a high school diploma or received a high school diploma or equivalent (GED) is 55 percent of the population compared to 45 percent in the City of Aurora.

Figure 7. Educational Attainment, 2018



Source: ESRI Business Analyst; Economic & Planning Systems

Employment

This section presents employment trend data for from 2002 through 2015, the most recent year for which publish job estimates are available for areas smaller than counties. More recent data is available at the county level, but from a different source which makes comparisons less reliable.

Employment growth in the Market Area was strong between 2010 and 2015. In 2015 there was around 26,000 jobs estimated in the Market Area not including the airport, as shown in **Table 7**. Between 2010 and 2015 employment in the Market Area grew by around 7,700 jobs or 1,500 per year. Job growth in the Market Area during this time represents 3.4 percent of the 7-County Metro Area Growth. Between 2010 and 2015 the Market Area grew at an annual rate more than double that of the Metro Area and faster than the City of Aurora.

Table 7. Employment Growth, 2002-2015

				2002-2015			2010-2015		
Description	2002	2010	2015	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
7-County Metro Area									
Adams	144,060	147,987	191,865	47,805	3,677	2.2%	43,878	8,776	5.3%
Arapahoe	276,591	270,342	316,597	40,006	3,077	1.0%	46,255	9,251	3.2%
Boulder	156,352	152,116	172,723	16,371	1,259	0.8%	20,607	4,121	2.6%
Broomfield	25,481	29,919	35,983	10,502	808	2.7%	6,064	1,213	3.8%
Denver	438,891	420,592	478,370	39,479	3,037	0.7%	57,778	11,556	2.6%
Douglas	63,592	89,824	112,883	49,291	3,792	4.5%	23,059	4,612	4.7%
Jefferson	205,990	202,559	228,407	22,417	1,724	0.8%	25,848	5,170	2.4%
Wage and Salary Employment	**1,310,957**	**1,313,339**	**1,536,828**	**225,871**	**17,375**	**1.2%**	**223,489**	**44,698**	**3.2%**
City of Aurora	**94,036**	**102,917**	**132,051**	**38,015**	**2,924**	**2.6%**	**29,134**	**5,827**	**5.1%**
Share of the Metro Area	*7%*	*8%*	*9%*	*17%*			*13%*		
Market Study Area (excluding airport)	**20,771**	**18,492**	**26,162**	**5,391**	**415**	**1.8%**	**7,670**	**1,534**	**7.2%**
Share of the Metro Area	***2%***	***1%***	***2%***	***2%***			***3%***		

Source: LEHD on the Map; Colorado Department of Labor; Economic & Planning Systems

The airport accounts for the majority of employment in the Market Area with around 35,000 or 57 percent of jobs in the Market Area, as shown in **Table 8**. The largest industries in the Market Area are wholesale trade (warehousing/ distribution), retail, and accommodations and food services which make up around 75 percent of total employment in the area. Airport jobs are primarily concentrated in the transportation and warehousing, accommodation and food services, retail trade, and real estate industry sectors.

Table 8. Employment by Industry, 2018

Description	Jobs	Percent
Agriculture, Forestry, Fishing & Hunting	4	0%
Management of Companies & Enterprises	4	0%
Mining	7	0%
Utilities	80	0%
Arts, Entertainment & Recreation	277	0%
Information	287	0%
Finance & Insurance	291	0%
Health Care & Social Assistance	465	1%
Public Administration	641	1%
Other Services (except Public Administration)	1,126	2%
Manufacturing	1,210	2%
Professional, Scientific & Tech Services	1,264	2%
Administrative & Support & Waste Management	1,281	2%
Educational Services	1,357	2%
Real Estate, Rental & Leasing	1,538	2%
Construction	1,883	3%
Wholesale Trade	3,753	6%
Retail Trade	3,854	6%
Accommodation & Food Services	4,162	7%
Transportation & Warehousing	38,093	62%
Total	**61,577**	**100%**
On-Airport Employment (Aerotropolis) (Included above)	**35,000**	**57%**

Source: ESRI Business Analyst; Economic & Planning Systems

Study Area Employment Projection

Commercial development tends to be more cyclical or "lumpy" than residential development and is therefore harder to predict, especially in an area such as the Focus and Study Areas with no historical trends on which to base a forecast. For context on the amount of capacity for commercial development, employment trends are evaluated for the Metro Area, City of Aurora, and the Market Area extending beyond the Influence Area.

As shown in **Table 9**, the City of Aurora Captured 16.8 percent of the Metro Area job growth from 2002 through 2015, although approximately two thirds of this occurred on the Anschutz Medical Campus which now has over 20,000 jobs. The overlapping time period of 2010 through 2015 shows that the City captured 13 percent of Metro Area job growth. The Market Area captured 2.4 to 3.4 percent of job growth.

Table 9. Metro Employment Trends, 2002-2015

	Change 2002-2015			Change 2010-2015		
Description	Total	Ann. #	Share of Metro	Total	Ann. #	Share of Metro
7-County Metro Area						
Adams	47,805	3,677	21.2%	43,878	8,776	19.6%
Arapahoe	40,006	3,077	17.7%	46,255	9,251	20.7%
Boulder	16,371	1,259	7.2%	20,607	4,121	9.2%
Broomfield	10,502	808	4.6%	6,064	1,213	2.7%
Denver	39,479	3,037	17.5%	57,778	11,556	25.9%
Douglas	49,291	3,792	21.8%	23,059	4,612	10.3%
Jefferson	22,417	1,724	9.9%	25,848	5,170	11.6%
Wage and Salary Employment	**225,871**	**17,375**	**100.0%**	**223,489**	**44,698**	**100.0%**
City of Aurora	**38,015**	**2,924**	**16.8%**	**29,134**	**5,827**	**13.0%**
Market Area (excluding airport)	**5,391**	**415**	**2.4%**	**7,670**	**1,534**	**3.4%**

Source: LEHD on the Map; Colorado Department of Labor; Economic & Planning Systems

In order for all of the planned commercial development to nearly fully absorb by 2040, the area would need to capture an ambitious 15 percent of all job growth each year. In **Table 10** a scenario is shown in which the Influence Area captures the same share of growth that the Market Area has captured, and the capture rate doubles each decade to a maximum of 13.6 percent from 2030 to 2040. This would result in absorbing roughly three quarters of the commercial development planned to date. This is highly speculative however, as the capture rate does not adequately address the location and market constraints for office development or the mix of office, retail, and industrial.

Table 10. Influence Area Employment Growth Scenario

					Change 2015-2040		Planned Development	
Description	2015	2020	2030	2040	Total	Ann. #	Buildout	% of Build-out
DRCOG Forecast								
Metro Area	1,708,001	1,827,251	2,084,335	2,393,336	685,335	27,413		
Growth	---	119,250	257,084	309,001				
Focus Area Forecast								
Estimated Capture Rate	---	3.4%	6.8%	13.6%				
Employment	806	4,861	22,342	64,366	63,560	2,542	84,504	76.2%

Source: DRCOG; Economic & Planning Systems

These uncertainties pointed out above do though suggest that there is sufficient capacity, and potentially excess capacity, for employment growth within the planned developments which have been sized under the current zoning.

4. Real Estate Development Trends

This chapter provides an overview of national and local trends in the real estate market. The national trends are highlighted to show how markets are evolving to inform the City's consideration of how it might approach changes to land use and zoning. Local trends in the Study Area, Market Area, and City of Aurora are summarized to show the Study Area and City's competitive market position and strengths and weaknesses.

Residential Market

National Trends

Three-bedroom townhome, Billings, MT

The U.S. housing market has changed as a result of broad demographic shifts and in part due to the still lingering effects of the Great Recession. There are three overarching trends: first, the Millennial and Baby Boom generations are the largest demographic groups. These two generations have higher preferences for walkable neighborhoods and urban locations, especially for young Millennials. Second, after the Great Recession, many households experienced a loss of net worth due to lost income and unemployment, the crash in housing prices, and high household debt levels. The home building market focused more on the move-up and luxury markets, as there were far fewer first time buyers in the market. Less entry level housing was built as a result, and there was a boom in rental housing. The boom in rental housing was driven both by the lack of new for-sale housing, the growth of the young millennial-aged renter population, and a decline in income and assets for home purchases. The third factor is the decline of middle wage jobs (and household incomes) as economic growth has been more concentrated in upper and lower wage industries.

The impacts of these trends were seen locally in the large number of multifamily units constructed in Metro Denver, concentrated in locations close to jobs and transit such as Denver and the Southeast I-25 Corridor. The City and County of Denver added approximately 20,000 multifamily units from 2010 to 2018. In comparison, Aurora added 4,000 multifamily units over the same time period.

The entry level for-sale market has rebounded over the last three to four years as the economy has recovered and as Millennials have aged. The oldest Millennials are in their late 30s and are the largest segment of homebuyers now according to the National Association of Realtors. The for-sale market recovery is especially noted in Aurora, with the large amount of single family housing planned and proposed in the Study Area. Housing developers in this area are largely targeting the first-time buyer market priced from approximately $250,000 to $400,000. The prime residential locations in Metro Denver are largely developed, and new housing is being built further from the major employment centers and transportation corridors. There is similar development activity and planning occurring on the I-76 corridor north of Brighton into Weld County, and on the North I-25 Corridor as communities such as Frederic, Firestone, Dacono, and Johnstown are seeing developments rebound that were dormant during the recession.

Housing Preferences


Bradburn Village, Westminster, CO

There have been several national housing surveys that show a shift in preferences toward denser single family housing types, such as small-lot single family homes, townhomes and row houses. This implies a shift away from lower density and single use single family home neighborhoods. These preferences contrast with the trends in suburban housing development for much of last half of the 20th Century. The Baby Boom generation shares many of the same preferences for housing as the millennials – modest cost, low maintenance, and close to shopping and services and social activities and networks.[1] These two groups account for about 41 percent of the U.S. population If even a small percentage of these people migrate towards different housing types or neighborhood types, it has a large impact on the housing market and on land use policy. These demographic shifts are affecting housing markets in U.S. cities large and small.

Part of the shift in preferences is cost or affordability-driven, especially for first-time buyers and middle class households. Smaller homes on smaller lots are less costly to build, which potentially allows developers and builders to deliver homes at a more affordable pricepoint. The challenge however is to incorporate good neighborhood design, quality of life, and quality construction at an affordable pricepoint.

[1] What Is Livable? Community Preferences of Older Adults. AARP, 2014.

Three bedroom home on 3,000 sq. ft. lot, Billings, MT

“Wee Cottages”, Stapleton, Denver, CO

Aurora and Influence Area Trends

Certificates of occupancies (home completions) for major developments in eastern Aurora are summarized in **Table 11**. Historically most of the residential construction in eastern Aurora has been roughly south of Yale Avenue. From 2001-2008 this area built over 1,200 housing units per year compared to 234 per year between Yale and I-70 and 87 per year north of I-70. Similarly the area south of Yale built an average of 984 per year from 2009 through 2018 year to date. Construction has accelerated in the past three years with over 1,300 units in 2015 and over 1,000 units in 2018 so far.

In comparison, the area between Yale and I-70 built an average of 234 homes per year from 2001 through 2008 and 150 per year from 2009 through 2018. North of I-70, development has been slower with 75 units per year since 2009. Highpoint has been constructing an average of 50 units per year. Single Tree added 204 units of mostly multifamily housing in 2016.

Table 11. Home Completions in Major Residential Developments, 2001-2018

Description	Avg. Ann. 2001-2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2009-2018 Total	2009-2018 Ann. #
North of I-70													
High Point	6	4	0	8	17	38	83	101	48	103	50	452	50
Single Tree At DIA	80	20	0	0	0	0	0	0	204	0	0	224	25
Subtotal	**87**	**24**	**0**	**8**	**17**	**38**	**83**	**101**	**252**	**103**	**50**	**676**	**75**
Yale to I-70													
Adonea	10	1	45	33	39	104	138	1	0	0	21	382	42
Cross Creek	56	39	36	8	12	12	1	2	0	2	13	125	14
Murphy Creek	152	7	3	0	1	1	0	27	1	50	32	122	14
Traditions	16	12	27	14	45	80	113	34	36	165	198	724	80
Subtotal	**234**	**59**	**111**	**55**	**97**	**197**	**252**	**64**	**37**	**217**	**264**	**1,353**	**150**
South of Yale													
Beacon Pointe	50	98	74	44	31	91	17	19	69	31	22	496	55
Conservatory	162	71	8	9	0	9	0	57	42	2	50	248	28
Heritage Eagle Bend	254	7	0	0	0	0	0	0	224	0	8	239	27
Highplains	26	8	10	31	24	20	26	40	52	7	241	459	51
Rockinghorse	3	19	27	23	23	27	74	36	69	135	159	592	66
Saddle Rock	274	285	13	3	8	12	44	35	504	4	43	951	106
Serenity Ridge	16	0	22	16	21	30	0	7	50	52	33	231	26
Sorrel Ranch	50	15	11	27	44	89	3	0	0	0	4	193	21
Southlands	49	0	0	0	0	0	0	300	29	0	0	329	37
Southshore	19	9	7	18	19	25	59	50	81	61	163	492	55
Tallyns Reach	190	433	112	77	52	77	12	37	132	36	21	989	110
Tollgate Crossing	112	55	87	53	55	31	0	52	57	43	20	453	50
Wheatlands	23	50	63	116	105	135	116	34	29	135	188	971	108
Whispering Pines	0	0	0	0	0	0	0	14	13	66	90	183	20
Subtotal	**1,228**	**1,050**	**434**	**417**	**382**	**546**	**351**	**681**	**1,351**	**572**	**1,042**	**6,826**	**758**
Total	**1,549**	**1,133**	**545**	**480**	**496**	**781**	**686**	**846**	**1,640**	**892**	**1,356**	**8,855**	**984**

Source: City of Aurora; Economic & Planning Systems

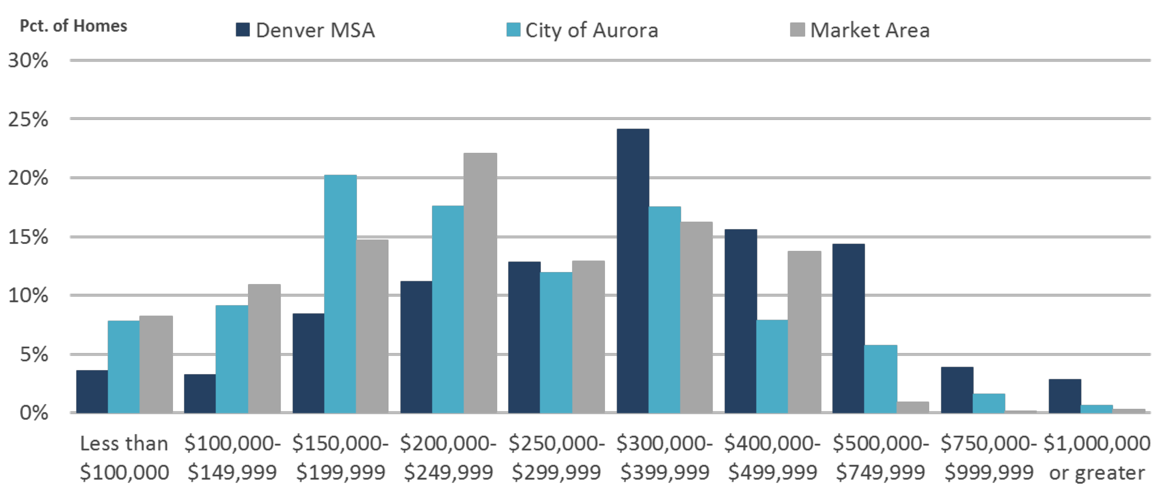
Some of the key factors influencing the pace of housing construction in each area are suggested below:

- **Infrastructure –** the area north of I-70 including the Influence Area has less infrastructure completed to serve development (roads, water, and sewer). The area between Yale and I-70 and south of Yale is better connected to existing areas of Aurora than the Influence Area which made it easier and less costly to extend major arterial roads, water, and sewer to new development.
- **Schools –** Development south of Yale is generally in the Cherry Creek School District which is perceived to be better than Aurora Public Schools for the target home buyers. Home values in the 80016 zip code (south of Yale, east of E-470) are average approximately $490,000 compared to $375,000 in the 80018 zip code from Yale to I-70.
- **Location/Access –** The area south of Yale is well connected to the South I-25 employment corridor via Arapahoe Road, Smokey Hill Road, and E-470. The housing market in this area of Aurora is more oriented to the office-based workforce as a result.

The pace of development in the Focus and Study Areas is expected to increase substantially however. In the Study Area, there are over 9,700 units proposed. The Influence Area contains projects with another 22,000 units proposed.

Home values in the Market Area and City of Aurora are lower than in the rest of the Metro Area on average, however homes in the Market Area are higher than averages in the City of Aurora as a whole. The Market area has more homes than the City of Aurora valued above $300,000 and $400,000 as shown in **Figure 8**. The Market Area contains newer construction in both Aurora and Denver which explains some of the difference.

Figure 8. Home Value Distribution, 2018



Source: ESRI Business Analyst; Economic & Planning Systems

Office and Business Park Market

Business Park History


Denver Tech Center

Suburban business parks date from the late 1950s, evolving in part as a reaction to deteriorating conditions in urban downtown areas, and also from a desire by business executives to work closer to their suburban homes. These parks are master planned developments in suburban settings with clusters of firms in a campus setting and are generally auto-oriented, single use, and separated from surrounding residential and commercial uses. Metro Denver was very much at the forefront of this development trend with the founding of the Denver Tech Center (DTC) in 1962.

One of the earliest and largest parks was Research Triangle Park founded in 1959 and located northwest of Raleigh, NC on I-40 straddling the Wakefield County and Durham County line. Research Triangle encompasses 7,000 acres of wooded land with over 190 companies located in 22.5 million square feet of building space. There are more than 50,000 employees, with the largest companies being IBM, with 14,000, Glaxo Smith Kline, with 5,000, and Cisco, with 4,000 employees.

In Dallas, Las Colinas is a 12,000 acre master planned community located near DFW Airport. The employment areas contain 25 million square feet of office housing four Fortune 500 companies and 30 other major employers. The 40-year-old Las Colinas project is now one of the largest corporate office locations in the country.

Stanford Research Park (SRP) in Palo Alto, California was the first of a generation, originally developed in also in the late 1950s. It is built on 700 acres and contains 10.4 million square feet of space, 162 buildings and 23,000 employees. The park became a cornerstone for the development of numerous corporate business park campuses in nearby Silicon Valley.

Recent Development Changes

Proposed Park Central Station Office Building, Stapleton, Denver, CO

In recent years, several economic and demographic forces have converged that raise questions about the health and sustainability of the suburban business park going forward. The economic model upon which these business parks were built is changing. These parks were historically centers of innovation. Technological advancements and increased productivity mean that most companies do not need as much space as in the past. Also, employees are demanding a different work environment, both internal to the company in the form of more space for collaboration, and external in the form of nearby housing and retail shopping facilitating opportunities to live and work in close proximity. Lower car ownership rates among the young workforce and general increases in road congestion nationally are also pushing more new office buildings to transit-accessible locations.

Finally, the business parks that began 40 to 50 years ago are starting to show their age with buildings declining from Class A and B to Class C properties with higher vacancies and lower rents. In response, building and property owners in some areas are working to adapt to the changing market and workforce.

Housing retrofit concept, Research Triangle, NC

Many master developers are adding restaurants, hotels, and other amenities, as well as housing, to compete with the "live, work, play" attraction of the city. Notable efforts are underway at some of the most prominent business parks including a new 50-year master plan for Research Triangle Park that allows for mixed use and higher densities, and a study to evaluate innovation district potentials for Stanford Research Park.

Locally, the DTC and the South I-25 Corridor are experiencing the same market forces and evolution. First, over 75 percent of new office construction has been around the Southeast Light Rail stations. Second, there has been an increase in residential and mixed use development in and adjacent to DTC as described in further detail in the Case Study Chapter.

Mixed use office building, South I-25 Corridor

Anchored or Innovation Districts

Several variations of employment districts anchored around a single economic generator or an agglomeration of firms have also emerged. During the industrial revolution locations for innovation were the concentrations of manufacturing jobs and large factories in cities in the same or similar industries (e.g. car manufacturing and Detroit). In the second half of the 20th century, innovation shifted to the suburban office/science park with clusters of firms in isolated campuses and buildings. The latest shift has been to areas with concentrations of assets, companies and institutions, often in urban areas, that foster innovation. The Brookings Institute defines Innovation Districts as "geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators. They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office and retail."

Brookings' research suggests there are three general models for innovation districts:

- **Anchored Districts** – These projects are clustered around major anchor research institutions and are typically in downtown or mid-town settings. Examples include the Kendall Square/ MID cluster in Cambridge; the University City/University of Pennsylvania cluster in Philadelphia; and the Saint Louis/ Washington University and Saint Louis University cluster in Saint Louis.
- **Re-imagined Urban Areas** – These projects include revitalizing industrial districts and waterfronts in major urban areas including: San Francisco's Mission Bay; Boston's South Waterfront; and Seattle's South Lake Union.
- **Urbanized Science Park** – This model is focused around the urbanization and diversification of traditional business research parks. Examples include the new master plans for Research Triangle Park and Stanford Research Park as well as similar efforts at the University of Wisconsin-Madison, University of Virginia-Charlottesville, and University of Arizona-Tucson.

Medical Districts

A related planning concept is medical districts that are intended to capitalize on the business and research associated with major medical institutions. The Anschutz Medical Campus in Aurora is such a district. The University of Colorado relocated its medical school, hospital and research facilities to a 200 acre campus site at the former Fitzsimons Army Medical Center. Children's Hospital of Denver and Veteran's Hospital are located on an adjacent 25 acre site. The public medical facilities are complemented by a 160-acre bioscience research park intended to facilitate the commercialization of university research as well as capture other private sector medical related businesses. The Anschutz Medical Campus has been the fastest growing employment center in the metro area since 2005, having captured nearly 20,000 jobs over the last 10 years, making it Aurora's largest economic engine.

The University of Colorado Anschutz Medical Campus

Metro Area Office Trends

The trends in office development in Metro Denver to some extent reflect these national location preference trends, but also the tendency of office development to agglomerate with other offices and near housing for its targeted workforce.

From 2010 through 2018 second quarter, the Metro Denver market added 12.0 million square feet of office, shown in **Table 12**. Of this, 33 percent or nearly 4.0 million square feet was in Downtown Denver and 25 percent, or 3.1 million square feet was in the Southeast and South I-25 submarkets. The market share (the percent of new development captured in an area) for Downtown doubled from 16.6 percent from 2000 through 2010 to 33.0 percent from 2010 through 2018 second quarter. The Southeast I-25 area held its 25 percent market share over both time periods. The Lone Tree submarket alone accounted for 8.2 percent of Metro Denver office space growth.

Major market areas that lost market share from 2010 through 2018 second quarter compared to 2000 through 2010 include the U.S.-36 and Boulder County markets which went from 17.6 percent market share to 13.3 percent.

Aurora has approximately 9.4 million square feet of office which is 5.2 percent of the Metro Denver inventory. Aurora's share of office market growth was 6.4 percent from 2000 through 2010 and 3.2 percent from 2000 through 2018 second quarter. Aurora added about 2.6 million square feet of office space since 2000, which includes medical office space. The pace of construction has slowed from 124,000 square feet per year during the earlier time period to just under 50,000 square feet per year since 2010.

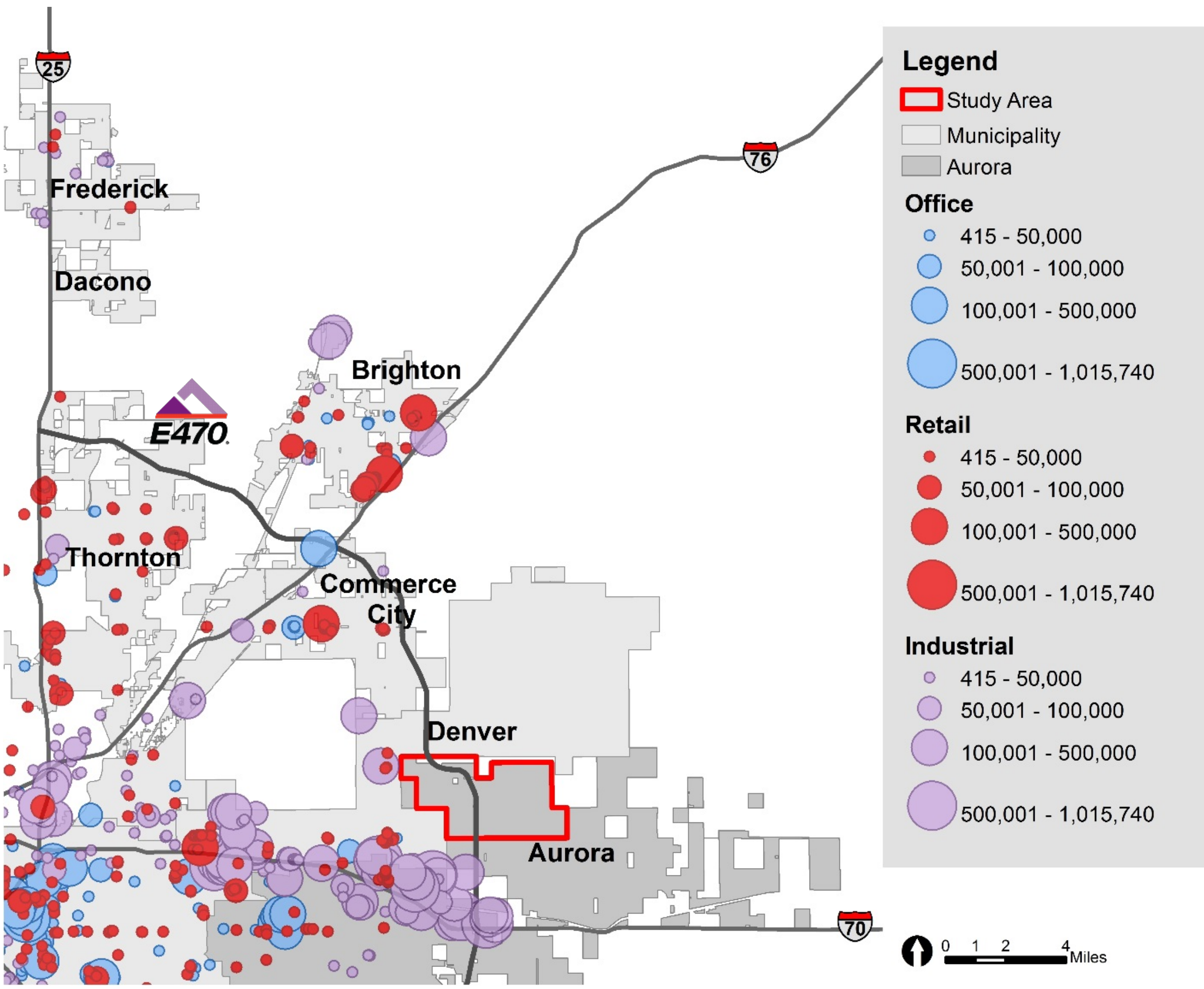
Table 12. Denver Metro Area Office Inventory, 2000-2Q2018

				Change 2000-2010			Change 2010-2018		
Submarket	2000	2010	2018	Sq. Ft.	Ann. Sq. Ft.		Sq. Ft.	Ann. Sq. Ft.	Market Share
Downtown Denver									
Downtown Denver	27,274,740	26,962,734	27,795,966	521,226	28,957	1.5%	833,232	104,154	6.9%
Lower Downtown Denver	4,969,404	6,613,180	7,620,732	2,651,328	147,296	7.6%	1,007,552	125,944	8.4%
Platte River	1,304,926	1,810,690	3,947,788	2,642,862	146,826	7.6%	2,137,098	267,137	17.7%
Subtotal	**33,549,070**	**35,386,604**	**39,364,486**	**5,815,416**	**323,079**	**16.6%**	**3,977,882**	**497,235**	**33.0%**
Other Denver	**43,265,629**	**46,930,010**	**48,922,439**	**5,656,810**	**314,267**	**16.2%**	**1,992,429**	**249,054**	**16.5%**
North Denver	**2,728,623**	**4,149,074**	**4,420,884**	**1,692,261**	**94,015**	**4.8%**	**271,810**	**33,976**	**2.3%**
Northeast Denver	**995,576**	**1,829,679**	**2,042,692**	**1,047,116**	**58,173**	**3.0%**	**213,013**	**26,627**	**1.8%**
East I-70/Montbello	**1,981,854**	**3,012,584**	**3,059,298**	**1,077,444**	**59,858**	**3.1%**	**46,714**	**5,839**	**0.4%**
Aurora	**7,191,896**	**9,043,797**	**9,423,677**	**2,231,781**	**123,988**	**6.4%**	**379,880**	**47,485**	**3.2%**
Northwest and US-36	**17,121,664**	**21,669,392**	**23,277,793**	**6,156,129**	**342,007**	**17.6%**	**1,608,401**	**201,050**	**13.3%**
Southeast and I-25 Corridor									
Arapahoe Road	1,510,549	1,721,686	1,721,686	211,137	11,730	0.6%	0	0	0.0%
Centennial	2,592,861	3,456,290	3,483,928	891,067	49,504	2.5%	27,638	3,455	0.2%
Denver Tech Center	10,222,567	11,053,421	11,661,647	1,439,080	79,949	4.1%	608,226	76,028	5.0%
East Hampden	3,466,017	3,489,415	3,489,885	23,868	1,326	0.1%	470	59	0.0%
Greenwood Village	8,134,763	8,640,987	9,282,372	1,147,609	63,756	3.3%	641,385	80,173	5.3%
Meridian	2,245,314	3,232,213	3,412,213	1,166,899	64,828	3.3%	180,000	22,500	1.5%
Lone Tree	582,807	2,137,515	3,126,020	2,543,213	141,290	7.3%	988,505	123,563	8.2%
Inverness	4,698,503	5,447,084	6,062,710	1,364,207	75,789	3.9%	615,626	76,953	5.1%
Subtotal	**33,453,381**	**39,178,611**	**42,240,461**	**8,787,080**	**488,171**	**25.1%**	**3,061,850**	**382,731**	**25.4%**
Southwest and C/E-470 Corridor	**5,727,498**	**7,765,318**	**8,265,261**	**2,537,763**	**140,987**	**7.3%**	**499,943**	**62,493**	**4.1%**
Total	**146,015,191**	**168,965,069**	**181,016,991**	**35,001,800**	**1,944,544**	**100.0%**	**12,051,922**	**1,506,490**	**100.0%**

Source: CoStar; Economic & Planning Systems

The locations of office, industrial, and retail buildings in the northeastern metro are shown in **Figure 9** in relation to the Study Area. Note that the data source used focuses on investment grade properties and is therefore not a 100 percent land use inventory. Office development (blue) is concentrated around the Anschutz Medical Campus and in Downtown Denver. Industrial Development has grown rapidly eastward along the I-70 corridor. Retail has not yet extended east past Tower Road as there is not sufficient residential density yet to support the retail businesses.

Figure 9. Office, Industrial, and Retail Buildings by Size, 2007-2018



Industrial Market

National Trends

Industrial development is shifting in reaction to technology use and the internet. The shifts are having both positive and negative impacts on the economic health of communities. The focus of this section is on the warehousing and distribution market which are particularly active in Northeast Aurora and Denver.

As e-commerce has driven down demand for retail space, it has at the same time driven up demand for warehousing and distribution development to support its growth. These industrial jobs often pay considerably less than manufacturing jobs however. Logistics and distribution-oriented employment sectors (transportation and warehousing, wholesale trade) and industrial development are the largest drivers of new industrial development. As e-commerce retailers and traditional retailers are pushing for more convenience and more online shopping, demands for local distribution are growing. Industrial buildings and developments related to logistics want to locate centrally to their service market, and along major transportation routes. Industrial spaces for logistics activities look for larger floor plates, with higher ceilings, which make newer buildings more attractive.

The Amazon fulfillment centers in Aurora (near 38th and Himalaya and Smith Road east of Picadilly) and the potential Wal-Mart distribution center in Porteos are local examples of the growth in logistics.

Metro Area Industrial Trends

The largest industrial sub markets are listed in **Table 13**. The SW DIA/Peña Boulevard is currently the largest at 34.7 million sq. ft. (roughly Peoria to Hudson, 6th Avenue to DIA). This submarket captured half of all new industrial space from 2010 through 2Q2018, adding 8.2 million square feet or about 1.0 million square feet per year. This includes the two Amazon fulfillment centers built recently in this area, and buildings in Majestic Commerce Center. The next largest submarket in terms of market share was Quebec Street (Colorado Boulevard to Havana, Colfax to I-70) which added 1.8 million square feet for 11 percent market share. The Quebec Street submarket captured 7 percent market share, adding 1.1 million square feet (Colorado Boulevard to Havana, I-70 to 64th).

Table 13. Denver Metro Area Industrial Inventory, 2000-2Q2018

				Change 2000-2010			Change 2010-2018 Q2		
Submarket	2000	2010	2018 Q2	Sq. Ft.	Ann. Sq. Ft.	Market Share	Sq. Ft.	Ann. Sq. Ft.	Market Share
Aurora	1,960,057	2,334,859	2,364,398	374,802	37,480	1%	29,539	3,692	0%
Cent I-70/Montbello	16,569,107	17,700,338	18,310,877	1,131,231	113,123	4%	610,539	76,317	4%
DIA	5,721,619	7,575,883	8,518,016	1,854,264	185,426	7%	942,133	117,767	6%
East I-70/270	14,738,643	17,843,967	18,979,951	3,105,324	310,532	11%	1,135,984	141,998	7%
Quebec Street	8,885,480	9,458,163	11,289,126	572,683	57,268	2%	1,830,963	228,870	11%
North I-25 Denver	8,352,908	9,601,251	8,797,429	1,248,343	124,834	4%	-803,822	-100,478	-5%
SW DIA/Pena Blvd	19,207,825	26,491,667	34,689,934	7,283,842	728,384	26%	8,198,267	1,024,783	51%
Total	**75,435,639**	**91,006,128**	**102,949,731**	**15,570,489**	**1,557,049**	**55%**	**11,943,603**	**1,492,950**	**74%**
% Industial Market	*34%*	*37%*	*39%*						
Denver Industrial Market	**220,074,062**	**248,377,241**	**264,581,410**	**28,303,179**	**2,830,318**	**100%**	**16,204,169**	**2,025,521**	**100%**

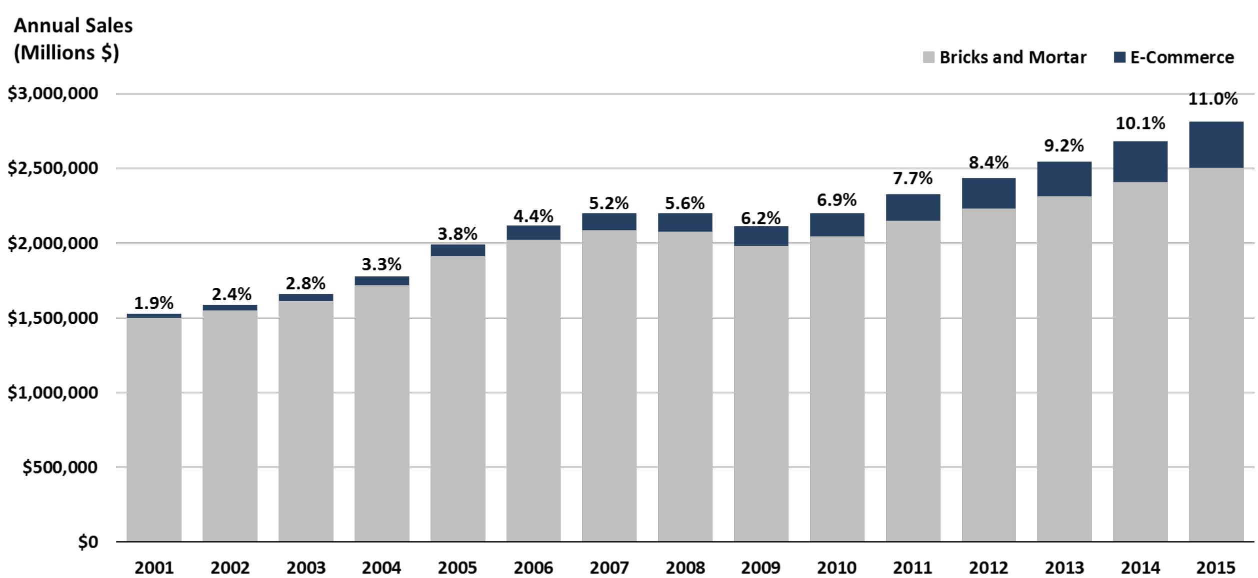
Source: CoStar; Economic & Planning Systems

Retail Market

The retail industry has shifted greatly over the last 10 to 15 years, impacted by the growth of internet sales, declining brick and mortar store sales, retail chain consolidations, and demographic shifts and preferences. Collectively, these trends are impacting store sizes and reducing the overall demand for new retail space locally and nationally.

Between 2001 and 2015, total online retail purchases (excluding auto related) grew from approximately $29 billion to $310 billion, a 21.8 percent annual growth rate. Online sales accounted for 22 percent of total retail sales growth (**Figure 10**). During the same period, brick and mortar stores grew at a 3.7 percent annual growth rate, decreasing their share of the total retail market from 98 percent to 89 percent. Despite still accounting for only 11 percent of overall spending, the growth in online shopping is impacting the demand for traditional brick and mortar stores. This also affects the way retailers are doing business, pushing them to alter store formats and incorporate online sales and marketing into their business concepts. The list of top online retailers reinforces this point as many have a significant brick and mortar presence as well. This group includes such major retailers as Walmart, Target, Home Depot, Best Buy, and Bed Bath & Beyond.

Figure 10. US E-Commerce Sales, 2001-2014

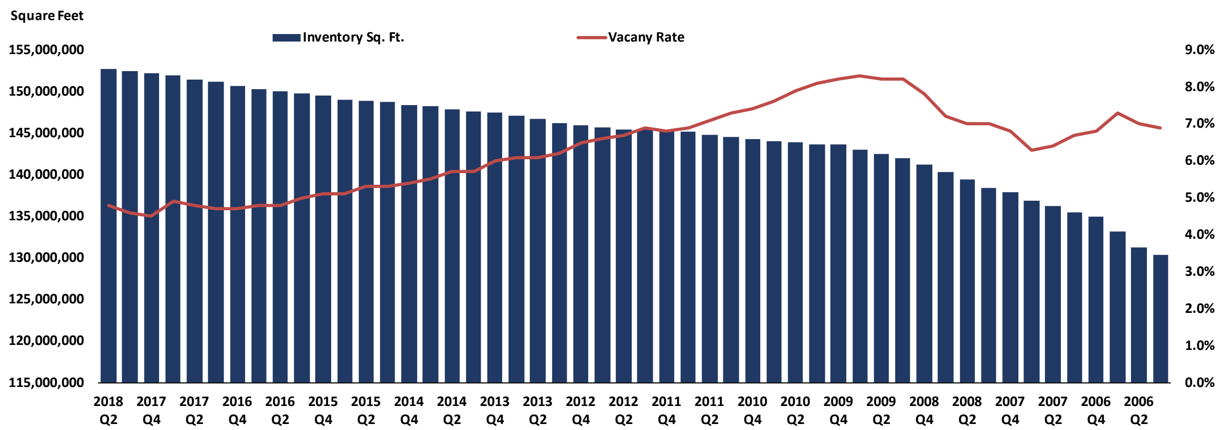


Several national trends impacting the existing inventory of retail stores as well as new development are highlighted below:

- **Social Media and "Showrooming"**- According to the National Retail Federation, 86 percent of American consumers at least occasionally research items online before buying in a store; of this, 22 percent conduct this research primarily on blogs and 32 percent primarily on Facebook. Electronics is most researched, followed by apparel, appliances, and then shoes. Many consumers will also look at or try on an item in a store and then price shop and purchase it online.
- **Spending Patterns -** Changes in spending patterns are also affecting the amount and mix of retail space. Millennials, who are highly mobile, are less likely to accumulate furniture and home furnishings and other large, high cost items. They are also more interested in experiences, emphasizing travel and entertainment over material goods. Their spending patterns are similar to the boomer generation who has already purchased much of the goods they need and are downsizing their homes and accumulated items. Boomers are also spending more of their income on travel, leisure, entertainment, and dining out.
- **Changing Retail Mix -** These changes in spending patterns are impacting the mix of retail space in aggregate and in downtowns in particular. The restaurant, bar, and microbrewery segment has grown rapidly and new food and beverage formats have been introduced (e.g. food halls and market halls, farm to table restaurants, and food trucks). Aurora's Stanley Marketplace is an example of how retail is evolving from shopping centers and malls to experiential mixes of retail and food and beverage. The growth of shoppers goods store space (general merchandise, apparel, furniture, and other shopper's goods) is flat or declining in contrast as exhibited by numerous closures by Macy's, JCPenney, Sears, and Kmart.
- **Store and Chain Closures -** Over the past five years, there have been nearly 200 retail chain bankruptcies. In 2017, CNN Money reported that there were 5,300 store closing announcements through June 20 compared to 6,200 in 2008 during the entire Great Recession—the worst year so far for store closings. There are fewer stores in the market now, making it more difficult to find tenants for new retail developments. Vacancies are increasing nationally as large blocks of space are vacated by store brands that no longer exist.

Despite the negative outlook on retail, Metro Denver has continued to add new retail space due to a stronger economy than the national average. Since 2010, the metro area added 8.8 million square feet, or about 1.0 million square feet per year as shown in **Figure 11**. The vacancy rate has been climbing however and is at 7.0 percent, which is 1.0 to 2.0 percent higher than it was during the recession prior to 2009.

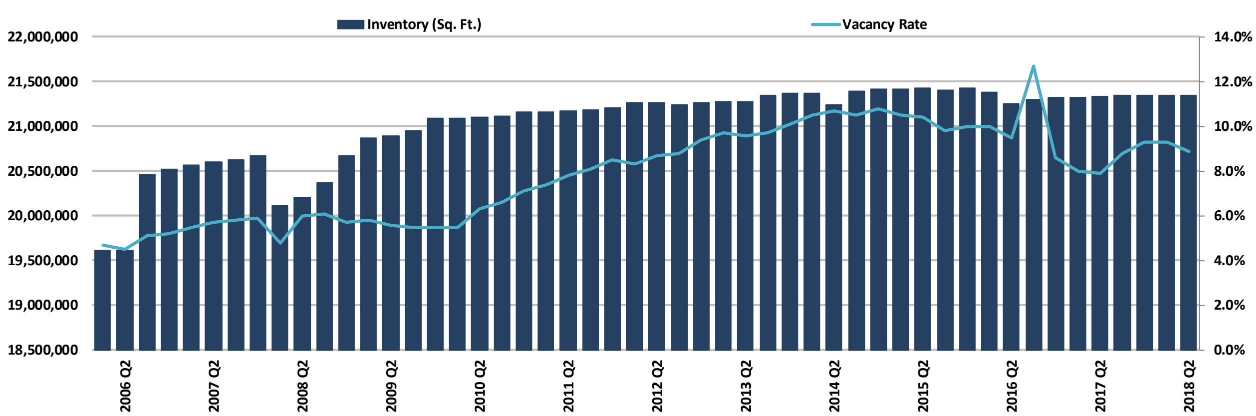
Figure 11. Metro Denver Retail Inventory and Vacancy Rate.



Source: CoStar; Economic & Planning Systems

Aurora has not added retail space at the same pace as the rest of the metro area as shown in **Figure 12**. There was a rapid expansion in the early 2000's in Aurora that may have saturated the market. Since then, retail growth has been flat. The overall vacancy rate remains at a manageable level though in the 8 to 10 percent range which is consistent with the Metro average of 7.0 percent.

Figure 12. Aurora Retail Inventory and Vacancy Rate.



Source: CoStar; Economic & Planning Systems

Influence Area Retail Conditions

Within the Study and Focus areas, there is not retail development yet. The nearest retail development is further west along Tower Road where there are two shopping centers and two grocery stores as shown in **Figure 13** and **Table 14**. The first is the King Soopers-anchored shopping center in Green Valley Ranch (in Denver) at Green Valley Ranch Boulevard and Tower Road. Additional small retail and fast food has also developed around this intersection. The second is in the power center anchored by a Wal-Mart Super Center, which contains a full supermarket, Home Depot, and Best Buy.

A rule of thumb in grocery store development is that at least 6,000 households are needed to support a 55,000 to 65,000 square foot store, ideally within three miles. With over 30,000 residential units proposed in the Influence Area, the area will be able to support several supermarkets plus other retail when there is enough housing.

Figure 13. Existing Major Retail Development

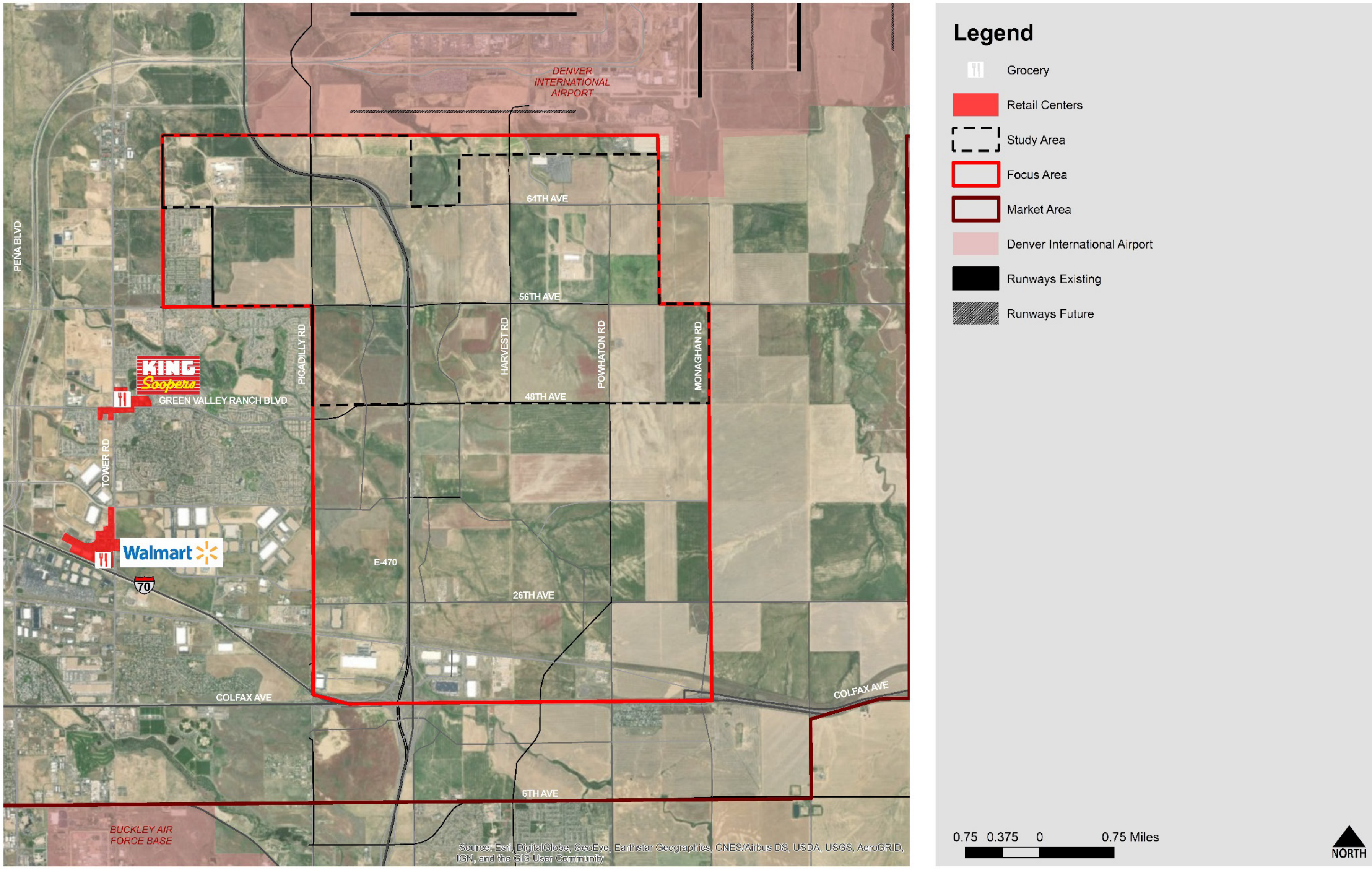


Table 14. Retail Development in the Market Area Since 2005

Business	Address	City	Year Built	RBA
Tower Road Corridor from I-70 to 38th				
Dairy Queen	3701 Tower Rd	Aurora	2013	1,886
Del Taco	3465 Salida St	Aurora	2006	2,491
Wendy's	3435 Salida St	Aurora	2005	2,661
Murphy Express	3470 Tower Rd	Aurora	2010	2,814
Compass	3491 Salida St	Aurora	2008	3,673
Chili's	3451 Tower Rd	Aurora	2006	4,312
Discount Tire	3601 Tower Rd	Aurora	2007	5,120
Brakes Plus	3571 Tower Rd	Aurora	2007	5,300
Panda Express, Spring, and Firehouse Sub:	3425 Salida St	Aurora	2013	5,300
Checker Auto Parts	3651 Tower Rd	Aurora	2007	5,775
Salida Shoppes	3455 Salida St	Aurora	2006	5,968
Wells Fargo	3521 Tower Rd	Aurora	2006	6,381
GNC, Verizon, and Modern Smiles	3445 N Salida St	Aurora	2011	6,664
Les Schwab Tire Center	3430 Tower Rd	Aurora	2012	10,407
Gateway Town Center	3471 Salida St	Aurora	2007	10,653
Tower Road Crossings	3450 Tower Rd	Aurora	2013	10,806
Dollar Tree	3454 N Salida St	Aurora	2012	12,040
Goodwill	18355 E 35th Pl	Aurora	2014	17,865
Gateway Point Plaza	3751 N Tower Rd	Aurora	2014	23,000
Gateway Town Center	3511 N Salida Ct	Aurora	2005	87,653
The Home Depot	3475 Salida St	Aurora	2006	91,481
Wal-Mart Supercenter	3301 Tower Rd	Aurora	2005	206,000
Subtotal				**528,250**
Tower Road Corridor from 38th to Pena				
Mobil	5910 Tower Rd	Denver	2017	1,404
Carl's Jr.	4730 Tower Rd	Denver	2007	1,953
7-eleven	4709 Tower Rd	Denver	2009	2,000
McDonald's	4780 Yampa St	Denver	2007	2,124
Dunkin' Donuts	4761 Tower Rd	Denver	2014	2,194
Conoco	7080 Tower Rd	Denver	2010	3,010
Bank of the West	4820 Chambers Rd	Denver	2005	3,520
Tower Commons	18630 E Green Valley Ranch Blvd	Denver	2008	3,572
TCF Bank	18520 48th Ave	Denver	2007	4,718
Chase Bank	4791 Tower Rd	Denver	2006	4,799
Ruby Tuesday	6751 Tower Rd	Denver	2006	5,385
1st Bank	18521 Green Valley Ranch Blvd	Denver	2005	5,664
Starbucks	6691 Tower Rd	Denver	2018	6,400
AutoZone	18643 E 48th Ave	Denver	2008	7,381
Family Dollar	4775 N Yampa St	Denver	2012	8,320
Oakwood Plaza	NEC 49th Ave & Tower Rd	Denver	2017	9,682
The Shops at Gateway Park	16221 E 40th Ave	Denver	2005	10,015
Oakwood Plaza	NEC 49th Ave & Tower Rd	Denver	2017	10,282
DiCicco's Italian Restaurant	6701 Tower Rd	Denver	2006	11,303
Walgreens	18550 E Green Valley Ranch Blvd	Denver	2006	13,566
Subtotal				**117,292**
Total				**645,542**

Source: Economic & Planning Systems

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5. Stakeholder Interviews

This Chapter summarizes input received from stakeholders interviewed by EPS. The stakeholders were comprised mainly of the major developers and property owners active in the study area and northeast Aurora, plus Denver International Airport (DEN) real estate staff as listed below. Stakeholders gave their input and experience on current market conditions, and expectations on how the area could evolve in the future. Some of the major constraints identified by stakeholders for each land use category are also highlighted.

Organization	**Project/Interest**
Paul's Corporation	Gateway Park
L.C. Fulenwider Corporation	Fulenwider property south of DEN
Sonnenreich	Sagebrush
Windler Homestead	Windler Homestead
Westside Investment Partners	High Point
The San Juan Company	Porteos
Sebastian Partners, LLC	Avelon
Oakwood Homes	Green Valley Ranch East
DEN Real Estate	Denver International Airport

The Chapter is organized by topic, addressing market conditions for the major land use types as well as transportation.

Residential Market

Current Market

Residential developers reported that entry level for-sale housing priced between $250,000 and $400,000 is in high demand in Metro Denver and is the strongest selling product type in Focus and Study Areas. They report no current demand in upper end pricepoints (above $500,000) in Northeast Aurora and Northeast Denver. Some builders and developers stated that they are targeting attainable housing. Demand for market rate multifamily rental housing is also strong.

Two main factors are driving demand in this entry level/first time buyer price range and product type. First, several interviewees cited analysis by the Home Builders Association of Metro Denver estimating that Metro Denver is still 40,000 housing units short of what is needed due to the decline in production during the Great Recession which was 10 years ago. Second, the workforce in Northeast Aurora and Northeast Denver is oriented to DIA; Buckley AFB; Anschutz Medical Campus; and the industrial, warehousing, and distribution concentrated along the East I-70 corridor. The wages for many of these jobs support home prices generally below $400,000 and support demand for rental housing.

Future Market

Several stakeholders suggested that housing growth in the area has not kept pace with the growth of jobs in the area. DIA is the largest employer in the State, for example with 35,000 on-airport jobs. There is expected to be continued growth in industrial, warehousing, and distribution jobs along the East I-70 corridor plus airport-related commercial and hospitality jobs (hotels, restaurants) along the Tower Road/Peña Boulevard corridors, and at Gaylord Rockies. Stakeholders believe that more housing will be needed to support the expected job growth.

Some indicated that going forward, there will be a need for a broader mix of housing not focused in one narrow price range and/or product type. They pointed to the success of other master planned developments such as Stapleton, Reunion, and Lowry as examples. It is notable that these developments all have a diversity of product types, price ranges, and lot sizes.

Constraints and Other Issues

- The location within the Aurora Public Schools (APS) district was cited as a major constraint to attracting upper market housing. Charter Schools have been supported by developers to 1) bring schools in earlier and 2) address the perception in the market of APS.
- Homebuilders are requesting variances for smaller single family lot sizes to lower land and infrastructure costs to deliver homes at prices in demand in the market.
- Residential demand is strongest west of E-470. Some expressed concerns that a patchwork of residential development is emerging that will not result in cohesive neighborhoods.

Office Market

Current Market

Among the major land use categories, the market for office was reported to be the weakest. Paul's Corporation developed Gateway Park, a 1,200 acre project west of Peña Boulevard and along I-70 over a 25 year period. The project contains 2,100 housing units (single family and apartments), big box retail (Tower Road at I-70), 3,000 hotel rooms, plus industrial parks. There has been 600,000 square feet of office built to date, primarily in build-to-suit buildings (e.g. Prologis, now Frontier Airlines). Recently, Paul's was successful in recruiting Kärcher, a German manufacturer of professional/industrial and consumer cleaning equipment (e.g. pressure washers). These are the only two Class A buildings in proximity to the Focus and Study Areas.

No stakeholder reported any near-term prospects for recruiting office tenants. Developers are pursuing residential first, then retail, and holding out some sites for potential employment development in the future. DEN real estate staff are still working to define their target tenant types for office development, which is still at least 10 years in the future in their concept planning.

Future Market

Over time, some stakeholders suggested that office development could be developed at prime locations. The E-470 corridor has some high visibility sites in Rockies Village, and potentially at 64th and 56th. The E-470 corridor however competes with the Peña Boulevard and A-Line sites at 40th and Airport and 61st and Peña. These areas are further ahead in the development cycle and are in an area with more development momentum than the E-470 corridor.

Comparison to Denver Tech Center

Several stakeholders brought up the Denver Tech Center (DTC) and Southeast I-25 corridor as an example to compare to the study area. The original DTC encompassed approximately one square mile (640 acres) bounded by I-225 on the north, Orchard on the South, I-25 on the West, and DTC Boulevard and S. Yosemite St. on the East. This area developed over at least a 50 year time period and is still not completely built out. In comparison, the study area is approximately 11 square miles. The length of E-470 from the Denver-Aurora line south of DIA to I-70 is approximately six miles.

Stakeholders noted that a South I-25 Corridor has a mix of housing to support the labor force, plus, retail, schools, and other supporting amenities. This, advocates point out, is the reason the land use mix in the Study area should be equally balanced. A difference too is that much of South I-25 Corridor is in the Cherry Creek School District which has a good reputation among the target workforce for Class A office space.

Industrial Market

Current Market

After residential, industrial is the next most active market segment in the study area. The growth of online retail distribution/fulfillment centers continues to drive the warehousing and distribution market, which is the bulk of the building and leasing activity in the area. There are fewer prospects for manufacturing or other value-added industrial uses.

Most industrial development prospecting and development is occurring east of E-470 in the Porteos and Fulenwider holdings. Porteos is more aggressively pursuing industrial building users as Fulenwider's cost structure allows them to hold the land for a longer period. Porteos is marketing proximity to the airport cargo facilities as an advantage. Majestic Commerce Center I and II, Eastgate Industrial Park, and Prologis Park 70 are also continuing to develop. Industrial developers noted that this area has the best located supply of industrial land in the metro area and is highly competitive for industrial development.

Future Market

Developers expect this area to remain competitive for industrial development for many years as there is a large supply of land with good interstate access. Stakeholders pointed to other airports, particularly DFW, as examples of industrial development around airports. The benefits of direct proximity to DIA were downplayed however by DEN staff, as there are security restrictions for direct cargo access. There is a general sense among the developers that they are receptive to the "Aerotropolis" concept and vision, but that the tangible impacts of it are difficult to quantify today. In other words, it may not substantially change the opportunities for traditional industrial development in the study area.

Constraints and Other Issues

Completion of the major road network in the area is a constraint to development. It affects all land uses, but those with industrial interests noted this more frequently. Better connections to I-70 are desired.

Retail/Commercial Market

The developers would like to see more retail and commercial development in the area. It is needed to complement the new housing being built, and to support the growing number of employees and hotel guests. The moniker "retail follows rooftops" was repeated by many interviewed. In their prospecting with retailers, developers are finding that there is not enough housing density in the area to generate interest from retailers. There is reported to be a new grocery store (King Soopers) planned though in Denver near 56th and Picadilly. The two closest existing grocery stores are the King Soopers in Green Valley Ranch and the Wal-Mart Supercenter at I-70 and Tower Road. Painted Prairie may be the furthest along in terms of retail development with a planned 50-acre town center comprised of 30 acres of multifamily housing and 20 acres of retail/commercial.

Stakeholders are optimistic that the Gaylord Rockies will have a catalytic impact on the area. Several noted that the "energy is shifting to 64th and Himalya-Picadilly". The Rockies Village FDP has nearly 120 acres of planned retail, hotel, and mixed use development along 64th, Liverpool, and Himalaya. Approximately 30 acres of this is identified as office development. There are an additional 30 acres designated for multifamily development in Rockies Village. Other Gaylord properties have attracted additional hotel, flagship restaurant, conference center, and amusement/entertainment development (e.g. water parks, outlet shopping).

Transportation Network and Land Use Patterns

The incomplete road network was identified as a constraint to development. Stakeholders felt that the City should take a more proactive role in directing and building infrastructure. This would accelerate development, but also help to achieve a more cohesive development pattern and avoid leapfrog/patchwork development.

The transportation network in any setting has a large impact on development. Comments from stakeholders on the road network are summarized below.

- **Looped Influence Area –** One stakeholder suggested that the loop that will be created by Picadilly, 64th, Jackson Gap, and Peña will be the most attractive for commercial development.
- **64th and 56th Avenues –** These two east-west major arterials were noted as the key future locations for retail/commercial development.
- **Completion of N-S Roads –** Picadilly, Gun Club, Harvest or Harvest/Powhattan, and Monaghan were all mentioned as important north-south connections to DEN and I-70 that need to be completed.
- **Overall land use pattern –** From stakeholder conversations and the current zoning, the land use mix being targeted is more heavily residential west of about Harvest and more heavily industrial/distribution east of Harvest. Interchange locations may have potential for future office or other retail/commercial development when market support is strong enough.

6. Case Studies

The Aerotropolis initiative used case studies of other Aerotropoli to help establish the vision for DEN. In this chapter, historical development data from selected airport market areas is used to provide a benchmark of the amount and mix of development that is likely to occur in the Study Area. We have also conducted an analysis of historical development absorption in the Denver Tech Center and larger South I-25 Corridor, which is the dominant suburban office center of the region, as an upper benchmark of what might be possible to capture at this location. Las Colinas, a master planned community near DFW airport in Irving, Texas is also included for comparison.

Airport Case Studies

Four US airports were selected to provide a comparative analysis of the amount of development that has occurred since each opened in Dallas/Fort Worth International Airport (D/FW) approximately 20 miles from both Dallas and Fort Worth; Dulles International Airport, 26 miles from Washington, DC in suburban Loudon County, Virginia; Hartsfield-Jackson Atlanta International Airport, 7 miles south of downtown Atlanta, Georgia; and Austin-Bergstrom International Airport (ABIA) in the southeast portion of the City 8 miles from downtown.

In each case, EPS compiled current data on population, households, and housing units over the 2000 to 2018 time period for a six-mile radius around each airport as shown in **Table 15**.

Dulles has the most residential development with a total of 206,635 households in the six-mile market area. This equates to an annual average of approximately 3,700 units a year over 56 years since opening in 1962. D/FW Airport has 132,198 housing units in its market area which is equal to about 3,000 units a year over the 44 years since opening in 1974. This does not account for any development that was present before the airports opened but both were developed in relatively rural undeveloped areas similar to DEN.

Austin-Bergstrom, the newest airport surveyed, has a total of 29,117 housing units in the six mile area; however a greater amount of this development is between the airport and downtown was there before the former Air Force base was converted to the City’s primary airport. Denver has the fewest housing units within its environs to date with a total of 1,144 units or an average of 143 per year since opening.

The composition of housing in the six-mile market area surrounding each airport is shown in **Table 15**. Denver's market area is currently 82 percent single family compared to 43 percent at Dulles, 41 percent at D/FW, 45 percent at Austin-Bergstrom, and 53 percent around Atlanta's Hartfield Airport.

The mix of employment in industrial/production, retail/hospitality, office, and other services are shown in **Table 15** and **Figure 14**. D/FW and Austin are relatively balanced between industrial and office accounting for approximately 35 to 40 percent of employment each as shown. Dulles Airport is more heavily office at 52 percent.

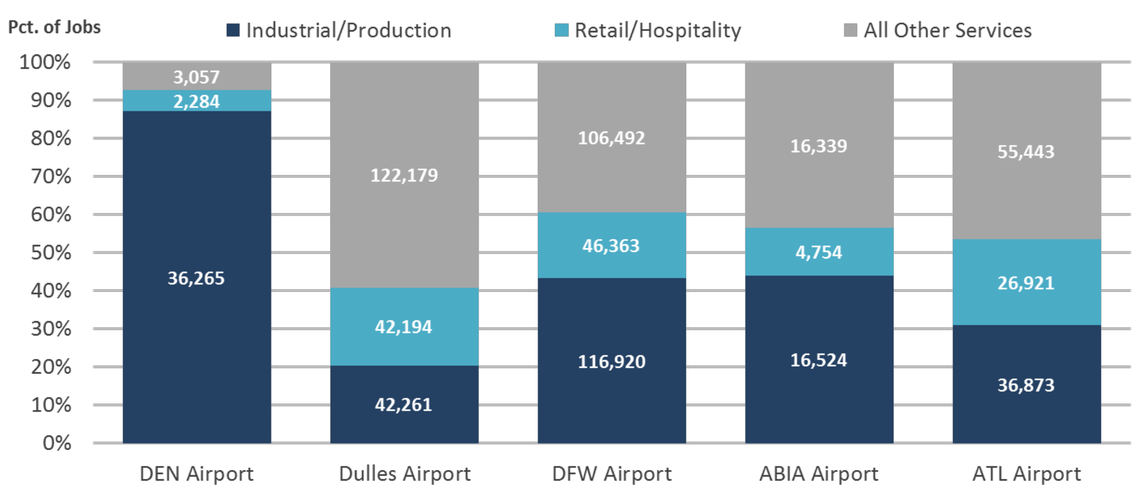
Table 15. Airport Surrounding Land Use

Description	DEN Airport	Dulles Airport	DFW Airport	ABIA Airport	ATL Airport
Airport Details					
Year Built	1995	1962	1974	1999	1961 [1]
Annual Passengers	61,379,396	22,716,399	67,092,194	13,889,305	103,902,992
Population	**20,394**	**319,915**	**308,634**	**89,978**	**244,774**
Housing Units	**6,228**	**113,729**	**132,198**	**29,117**	**111,927**
Single Family Detached	82%	43%	41%	45%	53%
Single Family Attached	6%	30%	6%	6%	6%
Multifamily	11%	26%	50%	38%	40%
Mobile Homes & Other	0%	1%	2%	12%	1%
Total Employment	**41,606**	**206,635**	**269,774**	**37,618**	**119,237**
Industrial/Production	87%	20%	43%	44%	31%
Retail/Hospitality	5%	20%	17%	13%	23%
Office	6%	52%	34%	36%	39%
Other Services	1%	7%	5%	8%	8%

[1] The ATL airport became an airfield in 1925, but the main terminal was not constructred until 1961. For the pusposes of this Study the benchmarking year for ATL airport will be 1961.

Source: ESRI Business Analyst; CoStar; Economic & Planning Systems

Figure 14. Employment by Industry, 2018



Source: ESRI Business Analyst; Economic & Planning Systems

The total amount of commercial development by type in 2018 was tracked for the same group of airports using CoStar data as shown in **Table 16**. The annual amount of retail, industrial, hotel, and office space was also estimated by dividing total space by the number of years the airport has been open.

- **Dallas/Fort Worth –** The D/FW environs have the most total nonresidential development of the airports surveyed with 159.4 million square feet of space. Industrial uses dominate with 86.9 million square feet or 54 percent of the total compared with 42.7 million square feet of office or 27 percent. In terms of annual absorption this equates to an annual average of 2.0 million square feet of industrial and 971,000 square feet of office. It is important to note that of the 42.7 million square feet of office space, 33 million of that is located in Las Colinas which was developed separately as a standalone master planned community. The nexus between office development in Las Colinas and DFW Airport is weak.
- **Dulles** – The area around Dulles has 124.1 million square feet of nonresidential space that is predominately office with 53.3 million square feet or 43 percent of the total compared to 45.6 million square feet of industrial space or 37 percent. In terms of annual absorption this equates to an annual average of 952,000 square feet of office and 815,000 square feet of industrial space since the airport opened.
- **Atlanta-Hartsfield –** The Atlanta airport is the oldest opening originally in the 1920s but becoming an international airport with a new terminal in 1961. The surrounding area is more industrial dominated with 66.7 million square feet out of total nonresidential space of 102.9 million square feet or 65 percent compared to just 10.8 million square feet of office or 10 percent. In terms of annual absorption this equates to an annual average of 1.2 million square feet of industrial space compared to just 189,000 square feet of office.
- **Austin-Bergstrom –** The mix around Austin-Bergstrom is also more heavily weighted to industrial uses with 13.6 million square feet of space or 72 percent of the total of 18.7 million square feet. Office space accounts for just 13 percent of the total with 2.4 million square feet. Annual absorption equals 714,000 square feet of industrial and 126,000 square feet of office.

Table 16. Commercial Development

Description	DEN Airport		Dulles Airport		DFW Airport		ABIA Airport		ATL Airport	
	Total	Annual	Total	Annual	Total	Annual	Total	Annual	Total	Annual
Year Built	**1995**	**23 years**	**1962**	**56 years**	**1974**	**44 years**	**1999**	**19 years**	**1961 [1]**	**57 years**
Commercial Development										
Office	109,791	4%	53,301,966	43%	42,705,471	27%	2,388,513	13%	10,774,185	10%
Industrial/Flex	619,799	21%	45,628,518	37%	86,851,957	54%	13,566,648	72%	66,721,595	65%
Retail	490,883	16%	17,106,599	14%	20,987,198	13%	1,244,469	7%	17,501,786	17%
Hotel	1,774,612	59%	8,100,201	7%	8,828,087	6%	1,517,067	8%	7,859,428	8%
Total	**2,995,085**	**100%**	**124,137,284**	**100%**	**159,372,713**	**100%**	**18,716,697**	**100%**	**102,856,994**	**100%**

[1] The ATL airport became an airfield in 1925, but the main terminal was not constructred until 1961. For the pusposes of this Study the benchmarking year for ATL airport will be 1961.

Source: ESRI Business Analyst; CoStar; Economic & Planning Systems

Master Planned Areas

EPS tracked the amount of development that has occurred in the Denver Tech Center since its inception in 1962 as a case study of the first and most prestigious suburban office park in the Denver metro area. The development history and capture of the larger South I-25 Corridor is also tracked.

Denver Tech Center

Denver Tech Center

The Denver Technological Center in Denver was established in 1962 when George Wallace acquired 40 acres at the intersection of I-25 and I-225 just south of the city and moved his company from downtown Denver. Today Denver Tech Center (DTC) encompasses 909 acres, with 14.0 million square feet of total space and 9.4 million square feet of office space accommodating over 1,000 companies and 35,000 employees. It has also become more mixed use in recent years and contains 3,300 housing units, three hotels, and a modest amount of retail space.

The DTC has 11.0 million square feet of commercial space including 9.3 million square feet of office, 1.0 million square feet of office, and 600,000 square feet of retail space as shown in **Table 17**. There are also approximately 3,300 residential housing units, predominately apartments and condominiums.

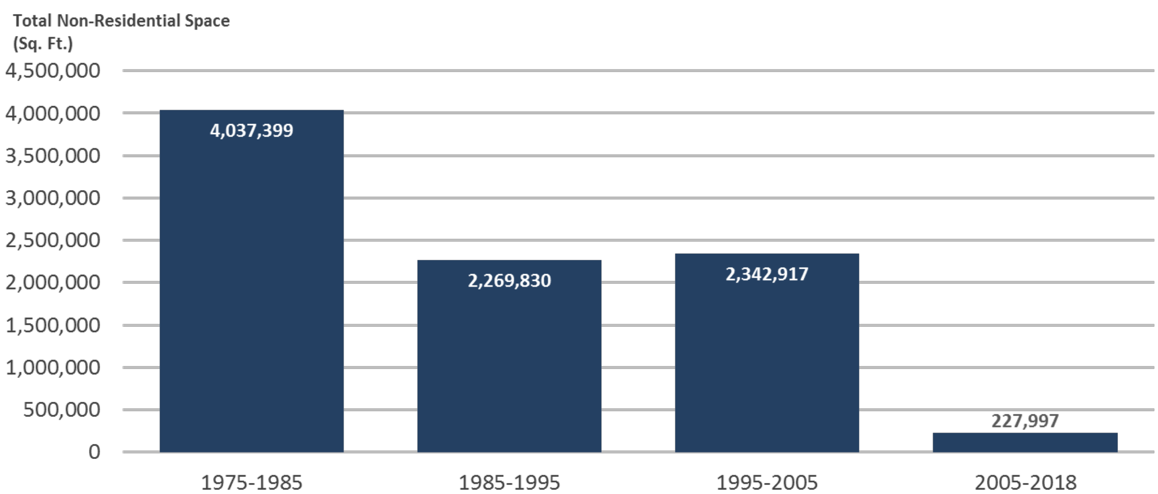
Table 17. DTC Commercial Development, 1975-2018

Description	1975	1985	1995	2005	2018
Office	471,201	4,508,600	6,778,430	9,121,347	9,349,344
Retail	38,062	330,198	330,198	528,126	600,220
Hotel	0	470,605	826,069	1,079,984	1,079,984
Total	**509,263**	**5,309,403**	**7,934,697**	**10,729,457**	**11,029,548**

Source: CoStar; Economic & Planning Systems

The project is largely mature with a modest amount of infill development taking place. The average annual absorption of office space has been 167,000 square feet per year since project inception. During the peak development years, from 1975 to 2005, DTC developed an average of 288,000 square feet of office space per year, as shown in **Figure 15**.

Figure 15. DTC Office Space by Year Built, 1975-2018



Source: CoStar; Economic & Planning Systems

South I-25 Corridor


Inverness Hotel and Conference Center

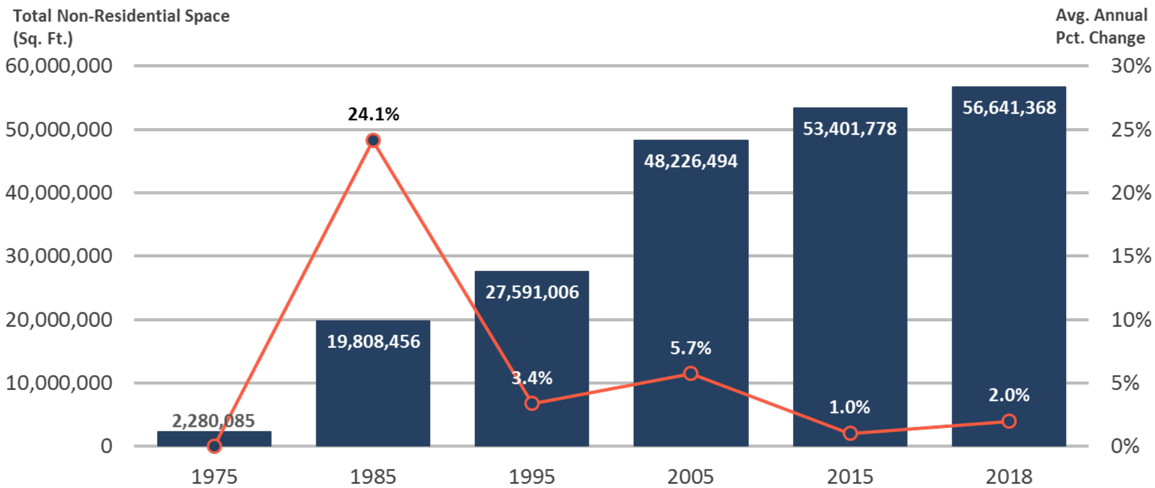
The larger South I-25 Corridor includes the major business and office parks fronting I-25 from DTC at I-225 south to RidgeGate at E-470. DTC was followed by Inverness Business Park which was started in 1971 with the purchase of 640 acres east of I-25 at Dry Creek Road. By 1983 the park expanded by an additional 340 acres to reach at total of 970 acres.

Meridian was the third major business park built in the South I-25 Corridor located at the confluence of I-25 and E-470 immediately south of Centennial Airport. The fledging park was acquired by DTC Corporation in 1984 and expanded in 1985 to 1,630 acres including a Jack Nicklaus designed golf course Unlike, DTC, Meridian is largely corporate and regional headquarters including such companies as EchoStar, First Data, American Family Insurance, Liberty Media, Western Union, and CH2M.

The South I-25 Corridor has continued to grow with a number of smaller office and business parks developing around the major business parks, including Panorama Business Park and Palazzo Verde, as well as the location of major Class A office buildings along the I-25 frontage, principally at major interchanges. The corridor has also been extended south with the inclusion of the 3,000 acre RidgeGate planned community south of Lincoln and I-25 with major business park elements in both the 900-acre RidgeGate West portion (west of I-25) that is largely built out and the 1,800 acre RidgeGate East development (east of I-25) that is just now beginning to be developed around investment in RTD's Southeast Extension of the light rail line.

Today, the South I-25 Corridor (as defined by the SPIMD boundary) totals 7.294 acres and has a total of 56.6 million square feet of commercial development as shown in **Figure 16**. Office uses comprise 37.4 million square feet of space which is 66 percent of the total. The corridor is becoming more mixed use with about 10,000 housing units in 2018 and approximately 6,000 built since 2010.

Figure 16. Total Non-Residential Square Feet, 1975-2018



Source: CoStar; Economic & Planning Systems

Las Colinas

Las Colinas is an upscale, master planned community located in Irving, Texas adjacent to the DFW International Airport. Developed in 1973, Las Colinas was one of the first planned communities in the United States. Encompassing over 12,000 acres the development includes corporate offices, luxury hotels, private country clubs, 125-acre Lake Carolyn, trails, parks, museums, and high-end townhomes and single-family residences. The community offers easy connections to the DFW Airport and is a 20 to 30-minute drive to both DFW and Love Field airports. The Dallas Area Rapid Transit (DART) Orange Line connects Las Colinas to downtown Dallas, and other areas of the region.

In 1975 the Quail Run Apartments with 332 units and the first phase of the Walnut Hill Distribution Center were the first buildings developed on the land as part of the master plan. During this time North Lake College was under construction.

Las Colinas currently has a population of about 54,000 people living in 30 residential neighborhoods and 27 homeowner sub-associations. There are over 190 acres of parks and greenbelts, 17 miles of canal waterways and 10 miles of trail following the river.

Business is a major part of the development and offers employment for nearby residents. The first office space was built in 1976 by The Associates North America, which opened its new headquarters in Las Colinas at the time. By 1977 Las Colinas was the regional headquarters location of five companies. In the mid 1980's office grew to 13 million square feet, as shown in **Figure 17**. Currently, there are 33 million square feet of office, 21.3 million square feet of industrial and flex, 5.5 million of hotel and 2.9 million square feet of retail, as shown in **Table 18**. Las Colinas houses 2,000 corporations with over 34,000 employees, including four Fortune 500 global headquarters. The largest industry at 20 percent of total employment is professional, scientific, and technical services. Retail trade is the second largest industry at 10 percent of total employment.

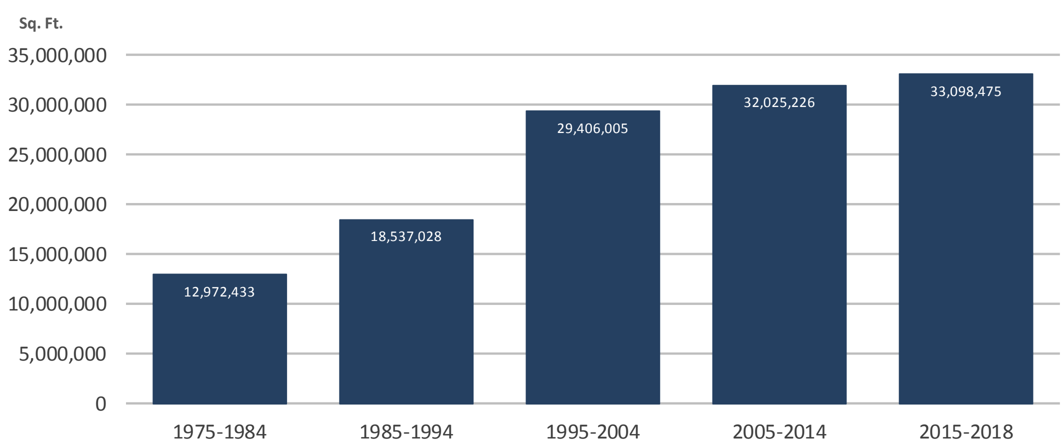
The Las Colinas community includes cultural and institutional uses such as Northlake College, the University of Dallas, the Las Colinas Medical Center, and the Irving Arts Center. Additionally, there are 26 hotels, over 100 restaurants, four golf courses, three private clubs, and an equestrian center. The Toyota Music Factory is a live music entertainment center consisting of 250,000 square feet with an indoor-outdoor amphitheater and an event plaza. Events are hosted here throughout the year and include farmers markets, food festivals, fashion shows, and concerts. The Mandalay Canals wind throughout the Urban Center and provides gondola rides to the surrounding offices, shops, restaurants, and residences.

Table 18. Las Colinas, 2018

Description	Total	% of Total
Population	53,986	
Housing Units		
Single-Family Detached	3,960	17.0%
Single-Family Attached	1,196	5.1%
Multifamily	18,006	77.5%
Other	85	0.4%
Total	**23,247**	**100.0%**
Employment	34,173	
Commercial Development		
Office	33,098,475	52.7%
Industrial	21,325,434	33.9%
Retail	2,900,991	4.6%
Hotel	5,538,030	8.8%
Total	**62,862,930**	**100.0%**

Source: ESRI; CoStar; Economic & Planning Systems

Figure 17. Office Square Footage, 1975-2018



Source: CoStar; Economic & Planning Systems