Final Draft Report

Regional Economic Strategy for the Denver Regional Council of Governments

The Economics of Land Use

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1. INTRODUCTION AND BACKGROUND

The Sustainable Communities Partnership, a collaboration of the U.S. Department of Housing and Urban Development (HUD), Department of Transportation (DOT), and Environmental Protection Agency (EPA), awarded the Denver region a $4.5 million Sustainable Communities Regional Planning (SCRP) Grant. In partnership with a consortium of municipalities, counties, state agencies, housing authorities, nonprofits, philanthropic and academic organizations, the SCRP Grant will support regional, corridor, and site-level planning and implementation activities. The Denver Regional Council of Governments' (DRCOG) SCRP Grant provided funding to develop this *Regional Economic Strategy* as well as a complementary *Regional Housing Strategy*. These two studies will be used by the DRCOG Board and Staff to update Metro Vision 2040's objectives and outcomes related to 1) addressing the region's housing needs, and 2) supporting regional economic vitality and workforce development by capitalizing on the location efficiency of places that connect housing, jobs, amenities, and other quality of life resources.

The objectives of the *Regional Economic Strategy* (RES) are to determine how to integrate economic vitality principles into Metro Vision towards a broader approach to regional sustainability, and to identify appropriate roles for DRCOG in contributing to the economic vitality of the region.

Introduction

Metro Denver has a strong well organized economic development structure lead by the Metro Denver Economic Development Corporation. Metro Denver EDC is nationally recognized for fostering regional cooperation, bringing together over 70 cities, counties, and economic development organizations (EDOs) in the nine-county Metro Denver and Northern Colorado area under a single collaborative umbrella. These EDOs have been successful at attracting new businesses to Metro Denver, and supporting the growth and retention of existing businesses. Over the past 20 years, Metro Denver's economy has generally outperformed the U.S. While the economic development structure is critical to continued economic vitality it is only one aspect of the region's vision of long-term economic vitality. A broader economic vitality strategy is needed to better integrate economic development with community development.

An economic vitality strategy addresses all of the workforce, business, and quality of life requirements of a strong economy in order to enable the economy to sustain periods of growth and prosperity, and adapt to change. It should also address workforce needs (education, training, access to jobs), housing, transportation, investing in all people equally (equity), business and employer needs, quality of life, and the partnerships needed to create solutions and collaboration on challenging regional issues. Local governments make many of the day to day land use and development and investment decisions that shape the region and influence economic vitality. DRCOG's Metro Vision Plan provides a regional framework and vision to help guide local governments' short and long-term decisions. DRCOG therefore has a logical role in fostering continued regional collaboration towards sustained economic vitality.

Scope of Work

The RES research, analysis, and recommendations are presented in five chapters following this Introduction as summarized below:

- **Economic Development Stakeholder Input** – Interviews with Denver Region economic development organizations at the state, regional, county, and local level, as well as interviews with educators and non-profit workforce development experts.
- **Economic Indicators** – Identification and analysis of economic indicators that can be measured over time to track progress within the region and to compare the DRCOG region to peer and competitive cities and regions.
- **Regional Planning Agency Case Studies** – Review of how other regional planning agencies (RPAs) have integrated sustainability and economic vitality into the regional planning process, as well as other innovative approaches and best practices potentially applicable to the Denver Region.
- **Metro Vision 2040 Plan Issues** – Evaluation of issues and possible solutions related to key challenges, including Urban Centers, last mile connections, housing and access to jobs, and equity issues identified from stakeholder interviews and project research and analysis.
- **Economic Strategy Recommendations** – A preferred direction for integrating economic vitality into the regional planning process and other potential roles for DRCOG to promote sustainability and economic vitality into DRCOG plans and programs.

Summary of Recommendations

The RES provides the consultant's recommended actions and objectives for DRCOG to play a greater role in the economic vitality of the Denver region. DRCOG's Metro Vision 2040 and future updates should either contain a plan element or chapter that specifically addresses economic vitality, or should more thoroughly integrate the principles of such vitality into all relevant aspects of the Plan. DRCOG should also strengthen its work program to become the "go to" source for demographic and economic data analysis and forecasting, including more detailed data on commuting patterns. A major area of focus for DRCOG should be on expanding its involvement and engagement with local elected officials, economic developers and businesses, workforce experts and educators, and major institutions and employers to establish DRCOG as a "hub of collaboration" and idea sharing. More engagement beyond DRCOG and local planners will result in a greater shared understanding of the Denver region's strengths and weaknesses and the objectives needed to move the region forward.

Economic development markets activities, including business expansion, attraction, and recruitment (BEAR), are organized and implemented should remain under the leadership of the Metro Denver EDC and its local partner economic development organizations (EDOs). The Metro Denver EDC is nationally known as a widely successful model for regional economic development and for partnering with local communities on business development and recruitment. Therefore there is no need or precedent for DRCOG to take an active role in BEAR and in promotional activities. We recommend DRCOG focus on complementary activities. The region would however benefit from more coordination and integration of economic vitality principles into long- and short-range objectives, strategies, and plans, as recommended in this study.

Metro Vision

Metro Vision is a comprehensive, integrated regional land use and transportation plan reflecting the collective vision of DRCOG's 56 member governments. The region's cities and counties collaborated with civic, business and environmental leaders to develop the plan, which was originally adopted in 1997. Metro Vision has garnered praise both nationally and internationally for its integrated approach to transportation, land use, growth and development, and environmental planning.

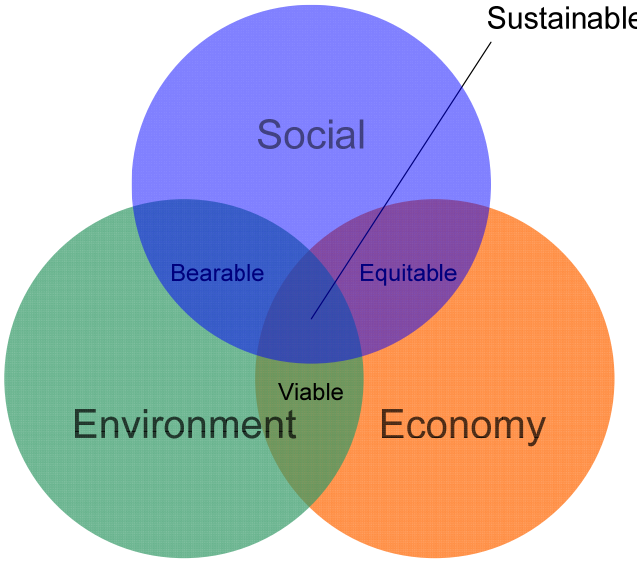
The Metro Vision 2035 Update (adopted in 2011) reflected the DRCOG Board of Directors' desire to incorporate sustainability more explicitly into Metro Vision. Through a series of workshops, scenario analyses, and extended discussions with a variety of stakeholders, the Board identified key outcomes that would define a more sustainable region and measurable goals to track regional, collaborative progress in achieving the vision. The final plan recognizes that addressing the many challenges facing the Denver region requires integrated solutions that create multiple economic, environmental, and social benefits.

Metro Vision 2035 consists of three core elements: growth and development, transportation, and environment. The plan's policies are designed to work together to address regional challenges and promote progress toward regional goals. The plan emphasizes the integration of land use and transportation by focusing transportation investments in those areas where growth is expected and promoting development patterns that maximize the benefits from those transportation investments. It is recommended that the Metro Vision 2040 plan be further revised to more comprehensively address economic vitality and sustainability, as described below.

Sustainable Development and Economic Vitality

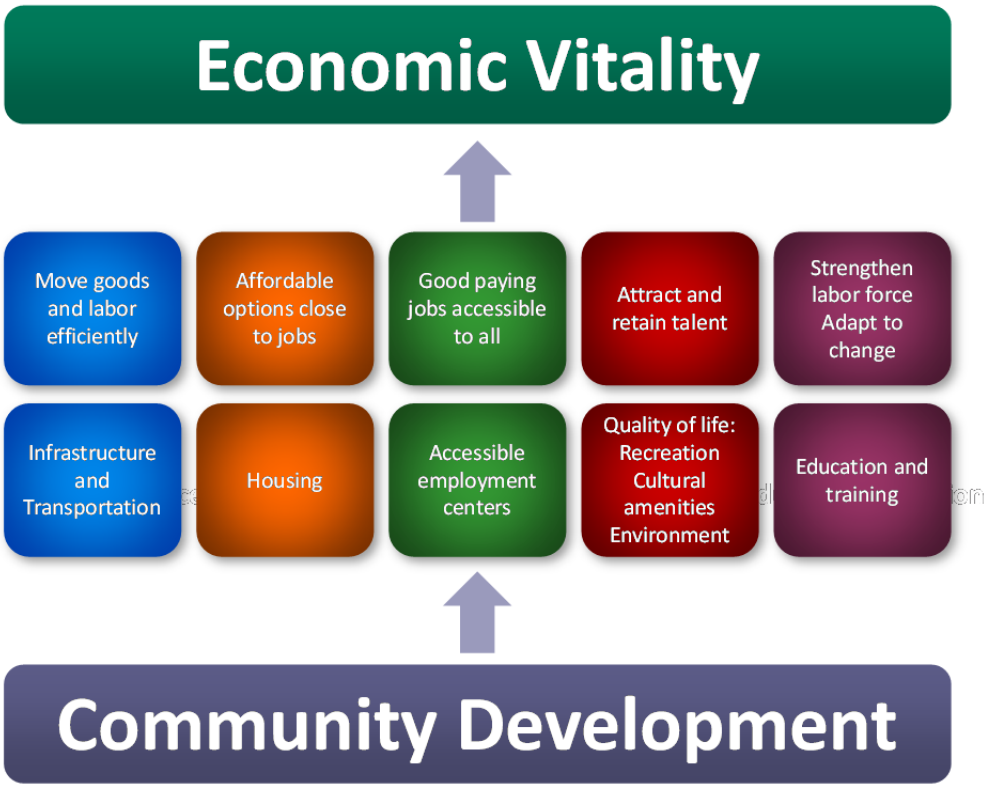
Sustainability is often described and illustrated as the interrelationship between economic, social, and environmental forces, as shown in the Venn diagram (**Figure 1**). Sustainable development seeks to achieve social and economic progress in ways that enable all people to share in the benefits and that do not exhaust natural resources or otherwise endanger the quality of the environment. A sustainable region balances economic vitality, prosperity, and social wellbeing as expressed by a high standard of living for the region's residents. Equity is therefore an important consideration of a sustainable economy and a goal in its own right, ensuring that the interests of all residents are fairly met and that the benefits of economic health, vitality, and growth are attainable across class, gender, race, ethnicity, and geography in a sustainable economy.

Figure 1
Sustainable Development



The underpinnings of a healthy and prosperous economy reflect the interdependence of the region's economic development and community development functions. Economic development efforts expand the economy through business attraction, retention, and recruitment efforts. Economic growth can also be realized through the formation of new businesses. Since a skilled labor force is at the center of every strong economy, successful economic development also requires attention to the needs of the entrepreneur and the workforce, including education and training and a built environment that supplies effective and functional transportation and infrastructure systems, high quality and affordable housing, and attractive and quality amenities such as parks, shopping areas, and other recreational attractions, as shown in **Figure 2**.

Figure 2
Foundation and Building Blocks for a Sustainable Economy



Source: Economic & Planning Systems; Development Research Partners

2. ECONOMIC DEVELOPMENT STAKEHOLDER INPUT

The Consultant Team met with and interviewed regional, county, and local economic development organizations (EDOs) in Metro Denver to gain their perspective on the region's economic strengths and weaknesses as well as how DRCOG could complement its efforts that are focused on marketing the Denver Region for economic opportunities. In a separate series of interviews, the Consultant Team interviewed organizations and other stakeholders that are focused on labor force development; access to jobs, training, and education; and other equity issues. The input of economic development professionals, workforce development professionals, and equity advocates are summarized in separate sections below. A broad range of perspectives was gathered as economic vitality and sustained economic health requires a balanced approach that addresses economic development on the employer and business side, and community development to build a strong workforce and to attract talent.

Economic Development Organizations

The EDOs interviewed included the Metro Denver EDC, the Colorado Office of Economic Development and International Trade (OEDIT), and other major EDOs at the county and city levels. Interviewees were asked to describe their roles in economic development in Metro Denver and their assessment of the region's strengths and weaknesses. The EDOs were also asked about their knowledge and level of interaction with DRCOG, as well as their suggestions for how DRCOG could better use its resources and expertise to contribute to the region's economic vitality.

Metro Denver Economic Development Structure

The Metro Denver EDC is generally recognized as the nation's first regional economic development entity, bringing together over 70 cities, counties, and economic development agencies in the nine-county Metro Denver and Northern Colorado area under a single collaborative umbrella. The Metro Denver EDC is a nonprofit investor-based organization affiliated with the Metro Denver Chamber of Commerce that supports the organization's mission to brand Metro Denver as a sustainable hub for new-economy businesses, entrepreneurs, and workers.

As a regional EDO, Metro Denver EDC works in partnership with sub-regional (city, county, and subarea) economic development groups in Metro Denver and Northern Colorado. Under the Metro Denver EDC code of ethics, partner organizations inform clients and customers about the Metro Denver region first and individual communities second. Metro Denver EDC provides extensive services to help site selectors and companies with location, expansion, and market decisions, and provide resources for companies and site selectors to complete their site search within the region online.

Economic Development Strategy

The Metro Denver EDC economic development strategy focuses on six areas to expand the regional economy:

- Mobility – create a region that proactively solves its traffic and congestion problems;

- Tax Reform – develop a tax and regulatory environment that encourages business development;
- New and Existing Business – develop and expand the region's business base;
- National Marketing – promote Metro Denver's business assets and top industries;
- Denver International Airport International Flights - develop more international flights to advance global business; and
- Targeted Opportunities – Metro Denver EDC leads three industry-focused affiliates: the Colorado Energy Coalition, the Colorado Space Coalition, and the Metro Denver Aviation Coalition. They also capitalize on other opportunities as they arise.

DRCOG is an ex-officio partner organization along with other public service entities such as the area's higher education institutions and the major utility providers. During recent years, DRCOG has had little formal engagement with Metro Denver EDC. The two organizations have partnered to support major civic initiatives including FasTracks and in establishing the Metro Mayor's Caucus. In 1997, Metro Denver EDC participated in Metro Vision 2020 and supported the then new Urban Growth Boundary policy within Metro Vision.

Metro Denver Strengths and Weaknesses

Much of the EDO discussions focused on the strengths and weaknesses of the economy in the Denver region and what should be done to improve its competitive position. The prevailing comments are summarized by major topic below.

Quality of Life – Metro Denver's high quality of life was most frequently mentioned as an asset for recruiting companies and skilled employees. The quality of life assets (regional trails, parks, open space, weather, proximity to the Rocky Mountains) and lifestyle they support were cited as key factors in attracting talented labor, particularly the 25 to 34 year old workforce. In more affluent areas of the region, quality schools were also noted as part of the quality of life and recruitment package.

Attracting Skilled Labor – The ability to attract and retain workers, especially young workers, is an important site selection criterion for businesses and is a self-sustaining activity in that it positively signals other prospective businesses. Attracting a young labor force has several benefits. First, many young workers are coming out of schools or training with knowledge of the latest state of the arts or practices in their fields and can bring this knowledge to employers or research institutions. Second, new young workers starting out in the region's industry clusters will continue to gain knowledge and training to sustain that industry as older workers retire. Members of the 25 to 34 year old age group are also at their peak household formation years (marriage, children), which translates to high spending patterns in housing, furnishings, consumer goods, services, and entertainment which supports the region's retail and service economy.

Labor Force – The region's well educated labor force was consistently cited as a strength. The region competes well for companies looking for IT and engineering talent. Opportunity was also noted in expanding the region's biomedical and bioscience industries.

FasTracks – RTD's FasTracks transit system is seen a major asset for economic development to the region as a whole. Communities on RTD rail transit system consider these investments as an asset that increases their ability to attract employers due to the greater and more convenient

labor force and job access. The perspective on the benefits of the rail transit system is not universal; there are still large areas of the region not served by the existing and planned investments that do not equally share the benefits. Many suburban communities also believe the rail system is "Denver-centric" and primarily serves downtown Denver at the expense of other Urban Centers outside the city. Communities that will soon have new commuter and light rail service see new opportunities. The Consultant Team did not get a sense that communities view the system as becoming less Denver-centric as it builds out.

Denver International Airport – The consensus was that Denver International Airport (DIA) is one of the region's most valuable economic assets—a "game changer for the region" compared to 20 years ago. DIA provides direct flights to Europe, Asia, and Central America, giving the region access to international markets, which is critical for technology, innovation, professional service, and manufacturing industries. As noted, expanding international flights is a major priority for the Denver Metro EDC.

Housing and Lifestyle Options – EDOs reported that Metro Denver offers many choices in housing types, prices, communities, and lifestyles to appeal to a broad range of workers and families. Although above the national median, Denver area home prices are lower than coastal "gateway market" cities such as San Francisco, Seattle, and Boston. Denver is therefore attractive for technology company relocations and expansions to a point, as Denver's labor market is not as thick as these "mega regions" that offer more opportunity and career mobility for highly skilled workers. With a focus on upper skill and wage jobs, housing affordability has not been a constraint identified by the majority of economic developers.

For lower income workers, housing affordability and stability was identified as a threat to economic opportunity. More affordable-priced housing is often located farther from any employment, let alone higher paying employment. Other constraints identified included a lack of entry level and workforce rental housing in suburban and exurban communities. In addition, local economic developers working in some of the region's largest employment centers, which have a mixture of high and low paying jobs, stated a need for more diverse housing options, meaning more rental and ownership options at a wider range of prices including more market rate and subsidized affordable options. The need for more diverse housing was identified as not only an affordability issue, but as a way to increase the attractiveness of suburban employment centers to younger workers.

Construction Defects Legislation - Construction Defects legislation was cited as a barrier to developing for-sale high density housing (condominiums). Particularly at TODs on FasTracks corridors where there is market demand and interest in expanding housing diversity. Urban style housing has been suggested to be an important asset that appeals to the younger labor force, as well as empty nesters who wish to downsize from their current housing. Construction Defects legislation was noted by economic developers working in both suburban and urban locations.

Education and Workforce Development – Some interviewees suggested concern that Colorado and Metro Denver "are not educating our people very well," "are not growing our own talent," and "are depending on importing talent which is not a sustainable model." Although the quality of the local workforce is a strength, relying on importing talent rather than educating our own residents makes Metro Denver (and Colorado) vulnerable if our ability to attract talent declines. Vocational technical (voc-tech) education was noted a strength by some, with OEDIT's Colorado First program pointed to as a success and instrumental in recruiting Vestas to the

State. Others noted the lack of major voc-tech institutions, however, and that it is most likely due to the lack of a robust manufacturing industry in the region. Economic developers were also aware that K-12 school quality varies widely in different locations within Metro Denver.

College and University System – While our colleges and universities are an asset, the magnitude of the region's research and development and technology transfer activities are not of the same scale as the Stanford-Silicon Valley and MIT-Cambridge-Boston Area clusters, thus there continues to be opportunity for improvement. For the same reasons, opportunities for recruiting of biomedical and bioscience industries, although present, have not been as successful as anticipated. The region generally competes well for companies looking for IT and engineering talent as younger professionals in these industries continue to flock to the region, increasing the depth and quality of the knowledge-based workforce.

Highway Network – While transit is seen as an asset by many, gaps or deficiencies in the highway network were also noted. The North I-25 and I-276 corridors were identified as major bottlenecks that affect the movement of goods and labor. Weekend congestion on the West I-70 corridor was cited as a threat to quality of life and has played into losing some recruitment prospects, most recently to Salt Lake City.

Last Mile Connections – For communities that have or will soon have light rail or commuter rail service, the "last mile connection" issue was cited as a constraint. Last mile connectivity addresses the ability to conveniently and safely get to one's final destination from a transit station. Without good connections to and from light rail stations outside Downtown Denver, the system functions, in one professional's words, "as a series of remote parking lots for downtown." For low income people who cannot afford to drive, the lack of safe and convenient non-automotive connections to and from transit stations is a major impediment to securing and maintaining any kind of employment. Improving last mile connections is a priority issue for many interviewees ranging from employers and economic developers to workforce developers, educators, and housing and disadvantaged population advocates.

Tax and Fiscal Structure – From a business perspective, taxes are often contentious, but like traffic congestion, the tax burden is a relative issue and can be considered a constraint only compared to a specific competitor. Business and personal property taxes (BPPs), were cited as a competitive disadvantage, particularly for portions of the region focused on manufacturing. BPPs are a property tax on the value of business property, established at the city level and paid according to the mill levies (tax rates) from each taxing district in which the facility is located, e.g., local government, school district, county, and any special taxing districts like a metropolitan district or business improvement district. While Colorado's overall business tax rates are roughly average compared to other states, the BPP becomes a point of confusion and is often interpreted as an anti-business attitude from local governments. The BPP generally affects capital intensive industries (e.g., manufacturing) more than office-based employment. It is therefore a larger concern in portions of the region focusing on industrial and manufacturing industries which are an important source of middle skill jobs.

Colorado's overall tax structure was noted by a few as a threat to economic and social sustainability. The Tax Payer Bill of Rights (TABOR) amendment to the State Constitution limits State and local government revenue collections to a formula based on population growth and inflation. These revenue limitations affect the State's ability, and the ability of local governments who have not voted to remove their TABOR limits, to fund services and infrastructure needed to

maintain quality of life. Similarly, the impacts of the Gallagher Amendment whereby commercial property has an assessment value of 3.6 times greater than residential property (29 percent of market value compared to 7.96 percent) creates at least the impression of an anti-business climate, even if in aggregate property tax rates are still at average rates nationally and more favorable than for selected competitive regions.

Middle Skill Jobs – Middle skill jobs are those that require education or training above a high school diploma but below a four-year college degree. These jobs are generally concentrated in the manufacturing and advanced manufacturing, allied health care fields, services, and energy. Middle skill jobs pay a living wage of approximately $15 to $20 per hour or higher. The Denver region was identified as not having an adequate base of, or creating enough new middle skill jobs–especially in suburban locations.

Aging Population – Several EDOs expressed concern about the growth of the over 65 population and its impact on the labor force. The baby boomer generation is reaching retirement age and unless there are an equal number of younger workers to take their place, there will be potential employee deficits. From a community services perspective, local planners noted a lack of information and data and an understanding of the needs of this population, and on the tools and resources available to local governments to help serve them. DRCOG is collaborating with county and local governments under its Boomer Bond program to increase understanding of the issues and available resources.

Interaction with DRCOG

There was a wide variance of understanding and knowledge of DRCOG and its roles. Private EDOs tend not to be as aware of DRCOG but indicated an interest in knowing more. County and city-level EDOs tend to be closer to the ground, engaged in site selection and providing development and redevelopment assistance, and thus work closer and jointly with city and county planners on local land use decisions. They are therefore more aware of Metro Vision and DRCOG's other growth, development, and transportation activities.

A theme that emerged in the interviews is the natural division of roles in planning and economic development based on time horizons. Planners typically work on long-term projects while economic developers are focused on more immediate prospects. Economic developers indicated a desire to better understand the planning process that may affect their ability to grow jobs, and some commented on the need for planners to consider impacts on economic development.

Metro Vision Plan

Metro Vision is generally viewed in a positive light, and most EDOs recognize the role that Metro Vision has in guiding regional growth and transportation investments. However, some interviewees did not understand the role of Metro Vision nor did they distinguish it from DRCOG's Transportation Improvement Program (TIP) funding process. Some communities without FasTracks service seemed to associate Metro Vision, particularly the Plan's emphasis on attracting growth to Urban Centers, with their communities' challenges in securing transportation funds for high priority but non-transit projects.

Workforce Development and Equity Perspectives

The Consultant Team coordinated with Mile High Connects, a partner in DRCOG's Sustainable Communities Regional Planning Grant and in this study, interview workforce organizations, educators, and advocates for low-income and disadvantaged residents to seek their input and perspective on how access to jobs and education and training affect the economic health sustainability of the region. The major themes of these interviews are summarized below. While these topics are broad and complex, stakeholders were asked to focus on areas where DRCOG and local governments have some ability to influence outcomes.

Transportation – Interviewees pointed out that reliable transportation to work can be a major impediment to employees securing and maintaining employment. Transportation is therefore an essential link to raising incomes and reducing poverty and reliance on public services. For employers, reliable transportation to work is needed to reduce employee turnover for lower income or transit dependent workers. Several barriers to employee transportation were identified including the ability to afford vehicle ownership (purchase, maintenance, fuel, insurance); an expensive fare structure on the RTD rail system; and a need for better and more frequent transit service in suburban and low income areas.

Last Mile Connections – A related transportation issue mentioned several times was the importance of good last mile connections. For low income households that cannot afford a car, the lack of safe and convenient non-automotive connections to and from transit stations to housing and employment is a major impediment to securing and maintaining any kind of employment. Stakeholders also expressed a need for more services such as food or groceries and childcare in well-connected locations so that home-work trips can be combined with these other trips needed to serve a family.

Workforce Development and Education – Interviewees noted that Metro Denver has wide differences in education levels and high school completion rates, school quality by income, race and ethnicity, location or neighborhood. This is resulting in a growing population of under educated residents that is reducing the native pool of skilled labor needed to replace retiring workers. In addition, people with low education levels are more likely to live in poverty. It was also reported that Colorado has very limited resources for adult education, which is needed to help recent immigrants and non-native English speakers enter the workforce. Workforce shortages in construction, manufacturing, and health care were reported as a result of an aging labor force and a lack of younger skilled workers to support the industries growth and replace retiring workers.

Opinions were mixed on the effectiveness of the Workforce Investment Boards, which are intended to link employers and the skills in demand with educators. Better and more frequent interaction between educators and the private sector could improve workforce development by creating career pipelines between educators and employers. It was reported that the University of Colorado Denver's Health Professions Workforce Initiative has been a major success. It is a partnership between the major health care systems, the County Workforce Investment Boards, the Colorado Urban Workforce Alliance, and CU Denver.

Access to Job Resources – On a practical level, it was pointed out that for low income and disadvantaged populations, simply accessing information about where and how to find a job is a challenge. County workforce centers are understaffed and not always located near the

populations that need them. Public libraries have become an important resource as libraries evolve from places to get books to community space, but it is reported that funding for jobs programs has been cut.

Demographic Shifts and Suburban Poverty – There is concern among workforce experts, educators, housing advocates, demographers, and economic developers about the spread of poverty away from Denver's urban core into parts of Aurora, Adams County, Southwest Denver, and eastern Jefferson County. While Denver still has areas of concentrated poverty, the concern is that in the more suburban communities there is less political will and fewer financial resources to address the challenges. In addition, the increase in racial and ethnic diversity and shifting locations of poverty is occurring in areas where there are few good paying jobs and poor transit service to access better job and education opportunities.

Conclusions and Recommendations

The EDOs and other equity-oriented stakeholders were also asked for their input on roles or functions that DRCOG could assume to improve regional economic health, sustainability, and competitiveness. Suggestions from these stakeholders are summarized below.

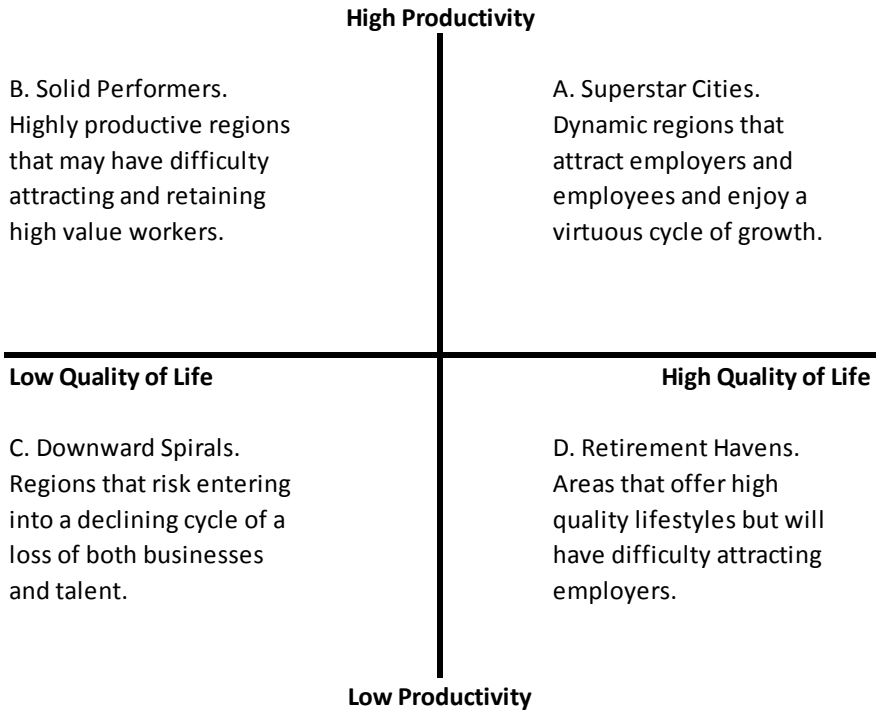
- Strengthen DRCOG's role as a regional data provider and be an expert on the region's economic and demographic conditions.
- Enable local jurisdictions and economic developers to have input into the regional land use and socioeconomic forecasts as part of the balancing of long-term regional planning and shorter term local and regional economic development objectives.
- Increase DRCOG's presence at economic development meetings and in local communities.
- Look for ways to inject a shorter term economic development perspective in policies and funding decisions.
- Provide technical assistance in pursuing grants and other funding sources for local projects.
- Support legislation and policy changes that benefit the region and state. Areas could include tax/fiscal policy, education, workforce development, and transportation funding.
- Provide more emphasis in Metro Vision on access to opportunity and jobs and the challenges of disadvantaged populations.
- Support the need for more diverse housing options, including workforce housing, in major employment centers and around transit stations.
- Help local governments and property owners solve the last mile connectivity challenges.
- Raise awareness of the suburbanization of poverty and major socioeconomic trends that threaten the region's economic sustainability. Help the region find solutions that are not perceived as "urban solutions" being forced on local jurisdictions.
- Provide a process or venue for incorporating the perspectives of disadvantaged populations into DRCOG's regional planning and transportation investment functions.

3. ECONOMIC INDICATORS

This chapter presents an analysis of economic and community development indicators for the Denver region and a comparison of Metro Denver's performance to its primary economic development competitors. Additionally, several indicators of economic vitality in the Denver region are analyzed to evaluate the issues identified by the economic development and labor force stakeholders.

How well a region can assemble its community development, infrastructure, education, and quality of life assets affects its performance and ability to compete on the national and global scale. However, a competitive sustainable regional economy cannot be built solely on quality of life assets. There is some concern that Metro Denver (and Colorado, more broadly) have been relying heavily on quality of life in driving economic development and not enough on the labor force aspects (education and training). Without equal attention to the community development and infrastructure, and labor force aspects of the economy, the region risks declining from a "Solid Performer" or even a "Superstar City" to a region with high quality of life, for those who can afford it, but low productivity and economic opportunity (**Figure 3**).

Figure 3
Quality of Life, Productivity, and Regional Economies



Source: Luis, Michael, 2009. A Tale of 10 Cities: Attracting and Retaining Talent. International Regions Benchmarking Consortium.

Economic Indicators

Part of evaluating Denver's economic health and success is comparing the region's performance relative to its regional and national competitors. Broadly, economic opportunities, business costs, the quality of the education system, an efficient and convenient transportation system, and a high quality of life are important factors in business and individual location decisions. The 14 indicators, developed in conjunction with the Metro Vision Plan Advisory Committee (MVPAC), represent baseline economic conditions as well as those that may help to identify and track Metro Denver's competitive position with respect to the primary business location factors. The indicators selected are also related to and provide potential measures of DRCOG's role in promoting and sustaining a vibrant environment for businesses and the workforce.

The Consultant Team compared traditional economic indicators in Metro Denver against the six regions which Denver competes with most frequently for business expansions and relocations. The selected metropolitan area competitors were identified from Metro Denver EDC's prospect database. Listed in order of frequency of competition they include: Phoenix, Arizona; Dallas, Texas; Salt Lake City, Utah; Austin, Texas; Atlanta, Georgia; and Portland, Oregon. While main competitor locations vary according to the type of industry, these metro areas were selected because they are ones that have been the successful location for company expansions in a variety of industries in which Metro Denver was also a contender, or they appeared on the "short list" of cities considered by companies planning to relocate or expand operations.

An additional set of socioeconomic indicators and trends for Metro Denver were also analyzed to highlight important economic and demographic trends affecting the region including job growth by wage level, educational attainment by race and ethnicity, and increasing racial and ethnic diversity. The full Indicators Report is provided in the Appendix. The following summary describes the strengths and weaknesses of a Metro Denver location compared with these six metro areas for key indicators.

Summary of Analysis

Metro Denver generally fares well against its competitors for the metrics analyzed. Among the competitor City regions, Metro Denver has the highest levels of educational achievement and the highest median household income. Metro Denver is second in its population growth rate, amount of population growth from net migration, and has the second lowest percentage of commuters by single occupancy vehicle (**Table 1**). Metro Denver falls in the "middle of the pack" in the number of poor air quality days, roadway congestion, nonstop international flight destinations, and the proportion of middle wage jobs.

Metro Denver ranks lower in a few areas. It has longer commute times, although commutes are still less than 30 minutes on average. Metro Denver has the second highest housing costs, after Portland, OR. The total cost of living in Metro Denver is only 4 to 5 percent above the U.S. average, while the competitor cities with the exception of Portland, OR, are all below the U.S. average. As of 2012, Denver's median home price was the highest among the competitor cities at $252,400 compared to $232,900 in Portland, OR, and $206,000 in Austin, TX.

Table 1
Competitor City Rankings

Description	Denver	Atlanta	Austin	Dallas	Phoenix	Portland	Salt Lake City
Highest Percentage of the Population 25+ with a Bachelor's or Higher Level Degree, 2012	**1**	3	2	6	7	4	5
Highest Median Household Income, 2012	**1**	6	3	5	7	4	2
Fastest Population Growth, 2007 to 2012	**2**	7	1	3	6	5	4
Highest Net Migration, 2012 to 2013	**2**	6	1	5	3	4	7
Fewest Workers Commuting by Driving Alone, 2012	**2**	6	4	7	5	1	3
Lowest Number of Days of Unhealthy Air Quality, 2008-2013 Average	**3**	4	1	6	7	2	5
Lowest Roadway Congestion Index, 2011	**3**	7	1	6	5	4	2
Most Nonstop International Flight Destinations, 2014	**3**	1	7	2	4	6	5
Highest Proportion of Mid-Level Wage Jobs, 2012	**4**	1	7	2	5	6	3
Shortest Average Commute Time, 2012	**5**	7	3	6	4	2	1
Most Affordable Median Home Price, 2012	**6**	1	4	2	3	7	5*
Lowest Housing + Transportation Index, 2012	**6**	7	5	2	3	4	1
Lowest Cost of Living, 2013	**6**	3	1	4	5	7	2
Lowest Business Cost Index, 2014	**7**	1	4	4	3	6	2

Note: 1 is the most favorable ranking. Salt Lake City median home price based on 2011 data.

Source: Development Research Partners

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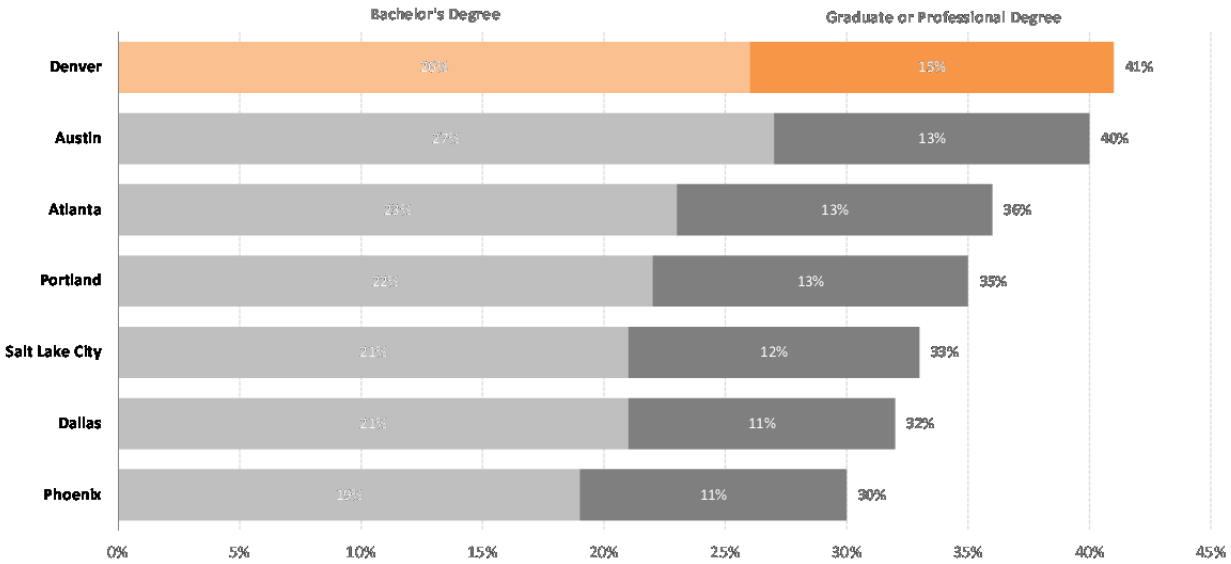
Key Indicators

Metro Denver's clearest business advantage is the quality of its workforce as measured by educational attainment. Metro Denver has the highest percentage of its population 25 years and older with a bachelor's or higher level degree among the competitor cities (**Figure 4**). Metro Denver also has the highest percentage of advanced degree holders among the competitor cities. While Metro Denver has a well-educated workforce, educational achievement is higher for non-native Coloradoans compared to native Coloradoans, and lower for people of color including people of Hispanic or Latino origin as discussed in the next section of this Chapter.

Figure 4
Educational Attainment, Population 25 Years and Older, 2012



Source: U.S. Census Bureau; Development Research Partners

Metro Denver had the second fastest growing population of the competitor cities, with an 8.5 percent increase in population from 2007 through 2012, compared to 15.1 percent in Austin, 8.2 in Dallas, 6.0 percent in Salt Lake City, and 5.3 percent in Portland. Notably, Denver also had second highest level of net migration since 2007.

Population growth is comprised of the natural increase (births minus deaths) plus net migration. Net migration is the number of people moving into an area minus the number of people moving out. Net migration is an important indicator, as it reflects a region's attractiveness to labor, especially skilled labor that tends to be highly mobile. It is also a reflection of quality of life and economic opportunity. As a component of population change, Metro Denver had the second highest percentage of net migration among the competitor cities from July 1, 2012 to July 1, 2013. At 61.8 percent, Denver trailed only Austin (65.1 percent) and was followed by Phoenix (56.9 percent), Portland (51.7 percent) and Dallas (48.2 percent), as shown in **Table 2**. By far, the most migration to Denver is from other U.S. states. Domestic migration in Denver is larger than international migration by 5 to 1 and is proportionally similar to Austin and Phoenix.

Table 2
Components of Population Change, 2012-2013

MSA	Natural Increase	Domestic Migration	International Migration	Net Migration	Total Pop. Change[1]
Total					
Atlanta	39,737	11,020	16,910	27,930	**68,513**
Austin	16,660	25,908	5,322	31,230	**47,941**
Dallas	56,731	32,641	19,501	52,142	**108,112**
Denver	18,573	26,536	4,868	31,404	**50,782**
Phoenix	29,279	32,014	8,437	40,451	**71,130**
Portland	11,607	7,901	5,280	13,181	**25,516**
Salt Lake City	12,739	1,227	2,562	3,789	**16,540**
Percent of Total					
Atlanta	58.0%	16.1%	24.7%	40.8%	---
Austin	34.8%	54.0%	11.1%	65.1%	---
Dallas	52.5%	30.2%	18.0%	48.2%	---
Denver	36.6%	52.3%	9.6%	61.8%	---
Phoenix	41.2%	45.0%	11.9%	56.9%	---
Portland	45.5%	31.0%	20.7%	51.7%	---
Salt Lake City	77.0%	7.4%	15.5%	22.9%	---

[1] Total population change includes a residual that cannot be attributed to any component of change.

Source: U.S. Census Bureau; Economic & Planning Systems

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Metro Denver has also been successful in attracting young people as its population grew faster than most of the competitor cities in two of the younger age cohorts including 0 to 14 years and 25 to 34 years. As mentioned in Chapter 2, attracting a young labor force is important site selection criterion for businesses and is a self-sustaining activity in that it positively signals other prospective businesses. Among the competitor cities, Denver had one of the fastest rates of growth in the 0 to 14 year age group and the 25 to 34 year age group (**Table 3, Figure 5**). Denver's 0 to 14 year demographic grew by 5.4 percent, second only to Austin (10.9 percent) and Denver's 25 to 34 year age cohort grew by 8.5 percent compared with Austin's 14.3 percent growth. The fastest growing age groups in the competitor cities were the 55 to 64 year age group and the 65 years and older age group. Each metro area had double-digit percent change in these age groups from 2007 to 2012.

Table 3
Population by Age Group, 2012

Age Group	Atlanta	Austin	Dallas	Denver	Phoenix	Portland	Salt Lake City
Under 14	1,176,392	388,336	1,524,445	590,693	928,312	440,046	286,943
15 to 24	744,575	269,346	914,586	376,901	601,796	284,512	167,481
25 to 34	768,525	313,792	985,411	440,953	610,747	342,812	193,778
35 to 44	832,391	279,517	976,250	425,534	585,068	332,527	158,175
45 to 54	788,406	237,964	930,432	412,164	558,135	317,430	136,410
55 to 64	594,767	185,969	690,195	347,784	472,769	290,809	114,841
Over 65	537,057	159,379	626,177	317,720	572,707	281,515	104,087
Subtotal	**5,442,113**	**1,834,303**	**6,647,496**	**2,911,749**	**4,329,534**	**2,289,651**	**1,161,715**
2007 to 2012 Percent Change	**3.2%**	**15.1%**	**8.2%**	**8.5%**	**3.6%**	**5.3%**	**6.0%**

Source: U.S. Census Bureau; Colorado State Demography Office; Development Research Partners

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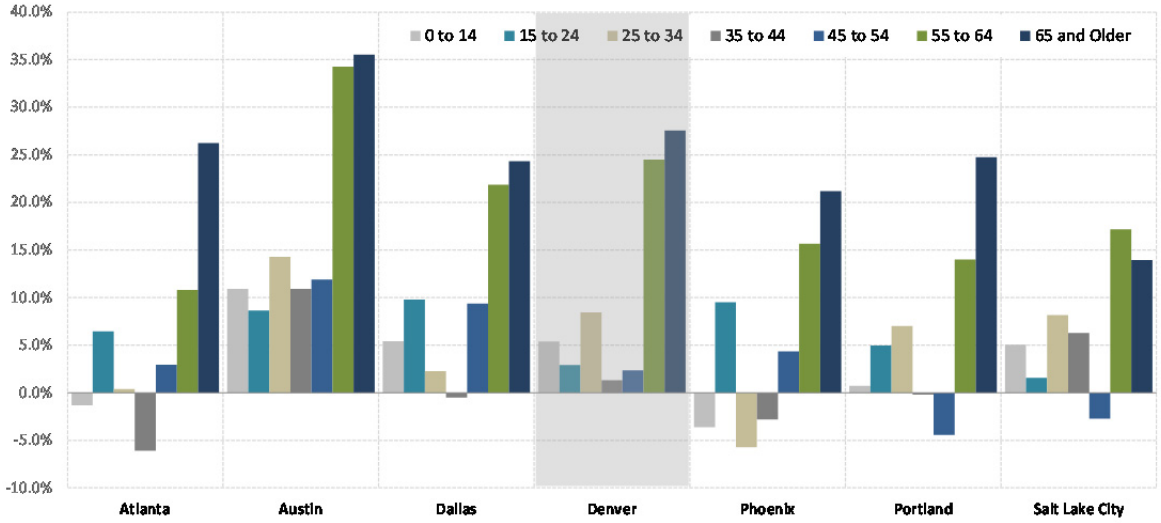
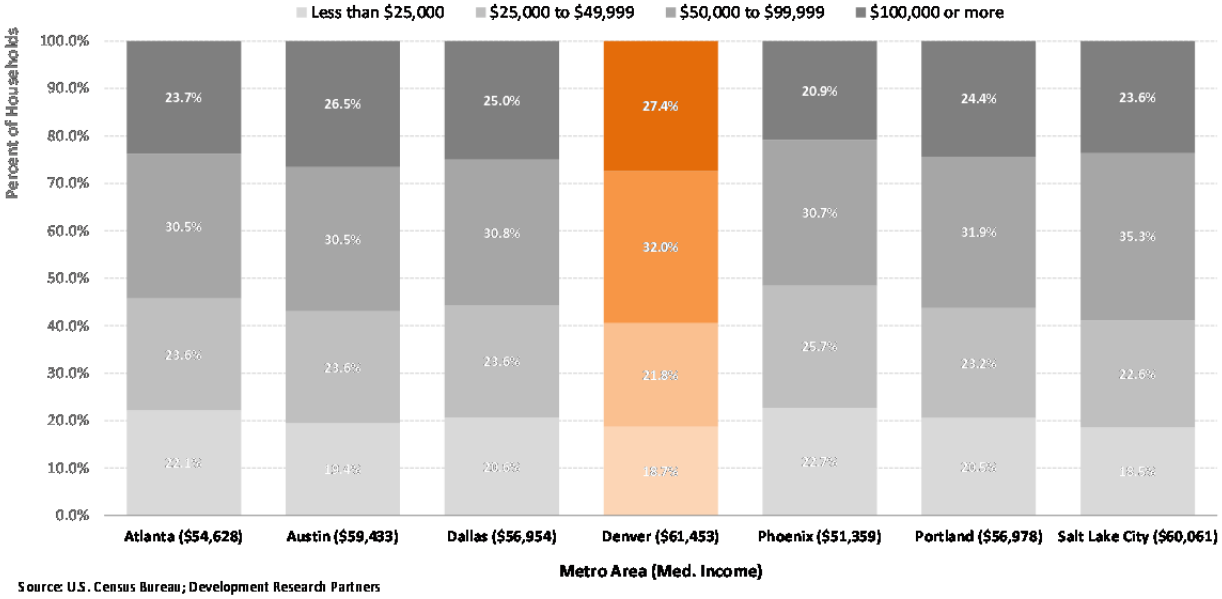
Figure 5
Percent Change by Age Group, 2007-2012



Source: U.S. Census Bureau; DOLA; Development Research Partners

Metro Denver's median household income in 2012 was the highest among the competitor cities and nearly 20 percent higher than the U.S. median. Metro Denver also had the highest percentage of households earning over $50,000 (**Figure 6**). In addition, more than 27 percent of households in Metro Denver earned more than $100,000 compared with about 21 percent in Phoenix, the lowest among the competitor cities. Phoenix was also the only competitor city with a median household income less than the U.S. median.

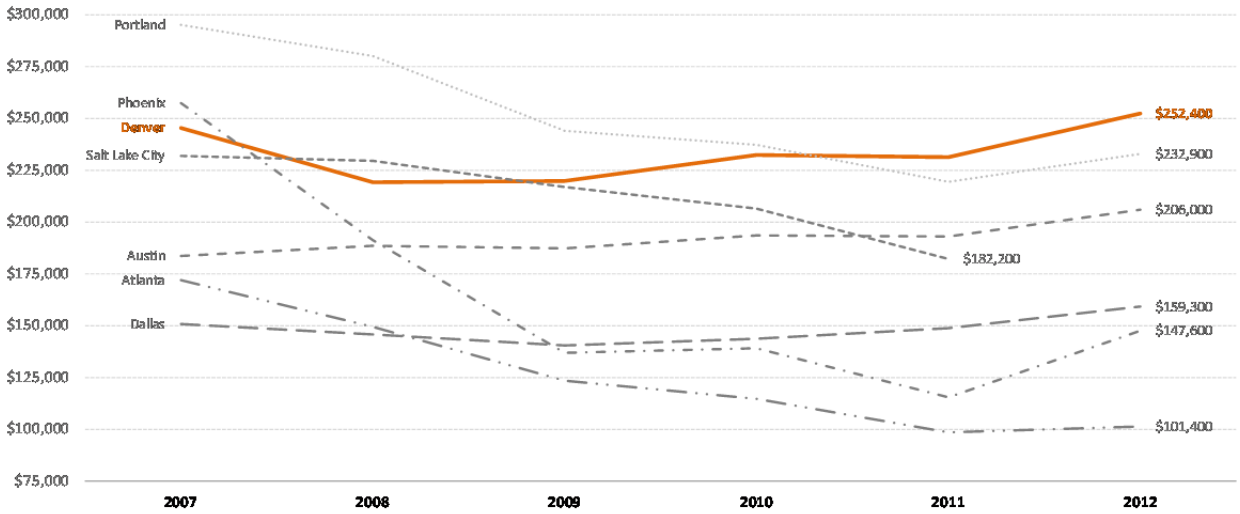
Figure 6
Median Household Income and Income Distribution, 2012



Source: U.S. Census Bureau; Development Research Partners

Related to its high income levels and economic success, Metro Denver also has higher home prices than most of the competitors. Due to the collapse of the housing bubble and the impacts of the Great Recession, median home prices declined in four of the seven competitor cities from 2007 to 2012, and increased in Denver, Austin, and Dallas. In Denver, the median price increased each year since 2008 and surpassed Portland in 2011 as the highest among the competitor cities (**Figure 7**). In Austin, the median price grew consistently throughout the recession and subsequent recovery, dipping slightly in 2009. In Dallas, the median price troughed in 2009 and by 2012 increased to $159,300. While the median price in each of the metro areas increased from 2011 to 2012, several of the areas have had steep price declines since 2007. The steepest decline was in Phoenix (-42.7 percent), followed by Atlanta (-41 percent) and Portland (-21.1 percent). Across the U.S., prices declined 18.7 percent from $217,900 in 2007 to $177,200 in 2012.

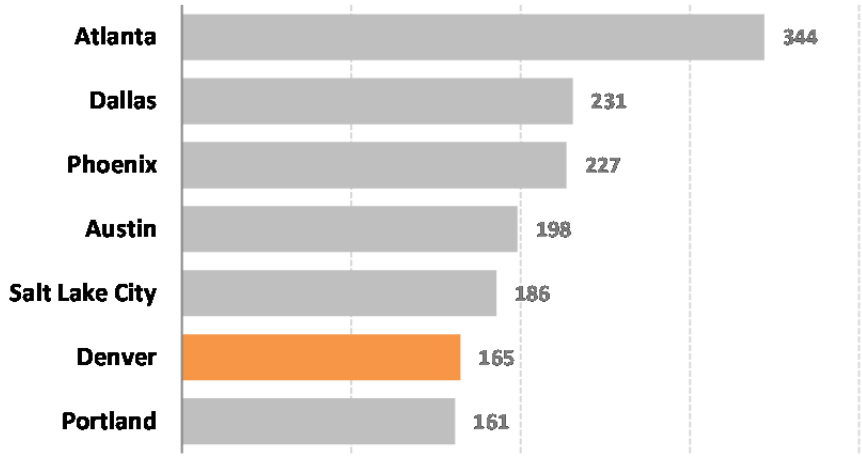
Figure 7
Median Single-Family Home Price, 2007-2012



Source: National Association of Realtors; Development Research Partners

Despite a large decline in price, Portland was the least affordable competitor city in 2012. However, Portland's home affordability index (161.5) was only slightly lower than in Metro Denver (164.6) as shown in **Figure 8**. Salt Lake City has the third least affordable market with an index value of 185.7. The most affordable markets among the competitor cities were also the ones with the largest drops in price. The most affordable markets in 2012 were Atlanta (344) and Phoenix (227.2).

Figure 8
Home Affordability Index, 2012



Source: National Association of Realtors; Development Research Partners

Socioeconomic Indicators

The Consultant Team also conducted an analysis of important economic and demographic issues and themes that were identified in the interview process, recognizing that many of these issues are complex, interrelated, and potentially worthy of their own specific studies. This analysis was performed to verify some of the issues identified by interviewees and to highlight key demographic and economic trends that relate to economic vitality.

Transit Accessible Jobs

The importance of improving access to good paying jobs—and of attracting more living wage jobs to transit accessible locations—is highlighted by the fact that wage levels surrounding many FasTracks stations are already at or above the self-sufficiency benchmark of $15 to $20 per hour. To better understand wage and employment characteristics on the RTD rail system, EPS analyzed the Colorado Department of Labor's establishment level Quarterly Census of Employment and Wages (QCEW) Microdata for existing and planned station areas on FasTracks corridors. The data is subject to confidentiality restrictions, as it contains employment, wage, and other information on individual businesses that cannot be reported individually.

As expected, Downtown Denver[1] has the largest number of jobs at approximately 100,000. While there is a wide range of wage levels in Downtown, the overall average wage is $38.57 per hour (**Table 4**). Outside Downtown, many stations have average wages above $15 per hour. The highest wages outside Downtown Denver are on the Southeast Line, where station area wages are on average above $30.00 per hour. The average for East Line stations is $25.53 per hour. North Metro line station areas (under construction) have average wages of $20.41 per hour, and the Northwest corridor has wages averaging $21.48 per hour. On the Southwest line, station area wages are $21.05 per hour on average.

These corridor averages mask some low wage levels (below approximately $15 per hour) that exist at individual stations. Lower wage stations include Central Park Boulevard Station on the East Line at $15.09 per hour, although this station is targeted for higher wage office development. Others with lower wage levels include Olde Town Arvada on the Gold Line; US-36 and Church Ranch Boulevard on the Northwest Corridor; Southmoor Station on the Southeast Line; and Lamar Street, Sheridan Boulevard, and Wadsworth Boulevard stations on the West Line. Many of the stations with lower wages are in locations where the primary commercial land uses and business types are retail and retail-type services.

While there are many living wage and higher paying jobs within a half-mile radius of transit stations, this analysis does not mean that these jobs are all easily accessible by transit. This analysis highlights the importance of connecting jobs to transit stations and the opportunity that better connections will create.

[1] Downtown is defined as the area bounded by Speer Boulevard on the west, Colfax Avenue on the south, I-25 on the north, and Broadway on the east.

Table 4
Average Wages by FasTracks Corridor and Station

Corridor or Segment and Station	# of Businesses	# of Employees	Avg. Ann. Wage	Avg. Hourly Wage
Downtown	**4,121**	**101,847**	**$80,221**	**$38.57**
Welton Corridor	**686**	**7,047**	**$50,826**	**$24.44**
Central Corridor: Broadway to Auraria	**701**	**13,248**	**$42,979**	**$20.66**
I-225				
13th Avenue Station	30	447	$49,410	$23.75
2nd Avenue / Abilene Station	90	2,345	$39,652	$19.06
Aurora City Center Station	179	7,388	$39,400	$18.94
Colfax Station	16	503	$44,387	$21.34
Dayton Station	24	74	$38,035	$18.29
Florida Station	170	2,442	$47,309	$22.74
Iliff Station	150	3,157	$38,023	$18.28
Montview Station	60	17,797	$75,858	$36.47
Nine Mile Station	176	2,095	$49,742	$23.91
Total / Average	**895**	**36,248**	**$58,517**	**$28.13**
Southeast				
Arapahoe at Village Center Station/Orchard Station	1,217	30,750	$80,499	$38.70
Belleview Station	547	13,456	$95,015	$45.68
Colorado Station/Yale Station	864	11,935	$50,001	$24.04
County Line Station	414	8,651	$39,168	$18.83
Dry Creek Station	311	8,437	$77,343	$37.18
Lincoln Station	159	5,622	$94,604	$45.48
Louisiana / Pearl Station/University of Denver Station	350	2,000	$38,917	$18.71
RidgeGate Parkway/Sky Ridge/Lone Tree City Center	149	2,270	$67,898	$32.64
Southmoor Station	125	1,970	$23,416	$11.26
Total / Average	**4,136**	**85,092**	**$72,298**	**$34.76**
Southwest				
Englewood Station/Oxford-City of Sheridan Station	506	9,343	$46,114	$22.17
Evans Station	223	2,325	$41,609	$20.00
Intermediate Station	22	501	$41,116	$19.77
Littleton / Downtown Station	335	7,426	$38,756	$18.63
Littleton / Mineral Station	80	909	$21,902	$10.53
Lucent Station	69	990	$85,938	$41.32
Total / Average	**1,235**	**21,494**	**$43,778**	**$21.05**
West				
Federal Boulevard/Knox Court/Perry St	144	7,279	$59,276	$28.50
Federal Center Station	354	8,006	$69,889	$33.60
Garrison Street Station	154	1,276	$35,848	$17.23
JeffCo Government Center Station	117	4,761	$53,491	$25.72
Lamar Street Station	124	2,490	$29,061	$13.97
Oak Street Station	142	3,796	$66,010	$31.74
Red Rocks Community College Station	45	1,567	$35,682	$17.16
Sheridan Boulevard Station	95	963	$29,111	$14.00
Wadsworth Boulevard Station	193	3,021	$28,724	$13.81
Total / Average	**1,368**	**33,160**	**$53,834**	**$25.88**

Source: CO Dept of Labor QCEW Mircrodata; DRCOG; Economic & Planning Systems

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Table 4 (continued)
Average Wages by FasTracks Corridor and Station

Corridor or Segment and Station	# of Businesses	# of Employees	Avg. Ann. Wage	Avg. Hourly Wage
East Line				
38th / Blake Station	213	2,447	$44,915	$21.59
40th / Airport Station	15	500	$87,530	$42.08
Central Park Blvd Station	81	2,355	$31,396	$15.09
Colorado Boulevard Station	103	1,940	$39,495	$18.99
DIA Station	80	10,874	$62,806	$30.20
Peoria Station	178	3,478	$45,840	$22.04
Total / Average	**670**	**21,594**	**$53,100**	**$25.53**
Gold				
41st Avenue Station	112	2,176	$39,753	$19.11
Arvada Ridge Station	95	1,485	$47,076	$22.63
Federal Boulevard Station	45	364	$42,624	$20.49
Olde Town Station	240	2,414	$25,781	$12.39
Pecos Station	30	1,317	$41,148	$19.78
Sheridan Boulevard Station	99	2,109	$47,375	$22.78
Ward Road Station	228	2,609	$58,883	$28.31
Total / Average	**849**	**12,474**	**$43,441**	**$20.89**
North Metro				
104th Avenue Station	64	625	$25,770	$12.39
112th Avenue Station	53	370	$39,392	$18.94
124th Avenue Station	39	243	$43,006	$20.68
144th Avenue Station/162nd Avenue Station	33	55	$70,973	$34.12
72nd Avenue Station	21	485	$62,122	$29.87
88th Avenue Station	32	373	$36,552	$17.57
National Western Stock Show	66	1,514	$44,136	$21.22
Total / Average	**308**	**3,665**	**$42,462**	**$20.41**
Northwest				
1st / Terry Station	296	8,204	$38,110	$18.32
30th / Pearl Station	443	5,490	$43,324	$20.83
41st Avenue Station	112	2,176	$39,753	$19.11
71st Ave / Lowell Station	135	1,950	$29,995	$14.42
Flatiron / 96th St Station	186	3,686	$30,635	$14.73
Gunbarrel Station	107	4,248	$88,593	$42.59
Louisville Station	229	1,918	$34,722	$16.69
Pecos Station	30	1,317	$41,148	$19.78
U.S. 36 / Church Ranch Station	85	2,974	$41,198	$19.81
Total / Average	**1,623**	**31,963**	**$44,680**	**$21.48**

Source: CO Dept of Labor QCEW Mircrodata; DRCOG; Economic & Planning Systems

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Job and Wage Growth

From 2001 through the second quarter of 2013, there were major job losses in industries that pay living wages but do not necessarily require a 4-year degree (i.e., "middle skill jobs"). Construction lost over 27,000 jobs and manufacturing lost over 26,000 jobs; both industries have average wages over $20 per hour (**Table 5**). These trends are not unique to Metro Denver, as these industries had large job losses nationally as well during the Great Recession.

Table 5
Wage and Salary Employment, 2001-Q2 2013, 7-County Metro Area

Industry Sector	Q2 2013 Avg. Wage [1]	2001	Q2 2013	Change #	Change Ann. %
Agriculture	$12.69	2,588	2,638	50	0.2%
Mining	$62.64	5,526	10,577	5,051	5.8%
Utilities	$42.74	4,233	4,130	-103	-0.2%
Construction	$24.47	98,864	71,406	-27,458	-2.8%
Manufacturing	$31.68	107,457	80,952	-26,505	-2.4%
Wholesale Trade	$35.63	73,981	70,464	-3,517	-0.4%
Retail Trade	$13.70	141,624	142,198	574	0.0%
Transportation and Warehousing	$24.57	59,823	51,864	-7,959	-1.2%
Information	$43.56	82,539	52,440	-30,099	-3.9%
Finance and Insurance	$37.84	74,106	73,853	-253	0.0%
Real Estate and Rental and Leasing	$25.05	29,156	26,179	-2,977	-0.9%
Professional and Technical Services	$40.77	113,021	138,427	25,406	1.8%
Management of Companies and Enterprises	$55.10	14,379	29,382	15,003	6.4%
Administrative and Waste Services	$16.83	94,190	96,302	2,112	0.2%
Educational Services	$18.94	45,375	58,769	13,394	2.3%
Health Care and Social Assistance	$23.27	111,214	157,499	46,285	3.1%
Arts, Entertainment, and Recreation	$16.54	18,130	25,130	7,000	2.9%
Accommodation and Food Services	$8.94	108,805	132,629	23,824	1.7%
Other Services, Except Public Administration	$17.45	40,560	43,519	2,959	0.6%
Government and Government Enterprises	$28.27	54,519	64,072	9,553	1.4%
Other/Unclassified	$25.14	72,305	94,299	21,994	2.3%
Total	**$25.82**	**1,352,395**	**1,426,730**	**74,335**	**0.5%**

[1] Annual wage divided by 2,080 hours per year.

Source: Bureau of Labor Statistics; Economic & Planning Systems

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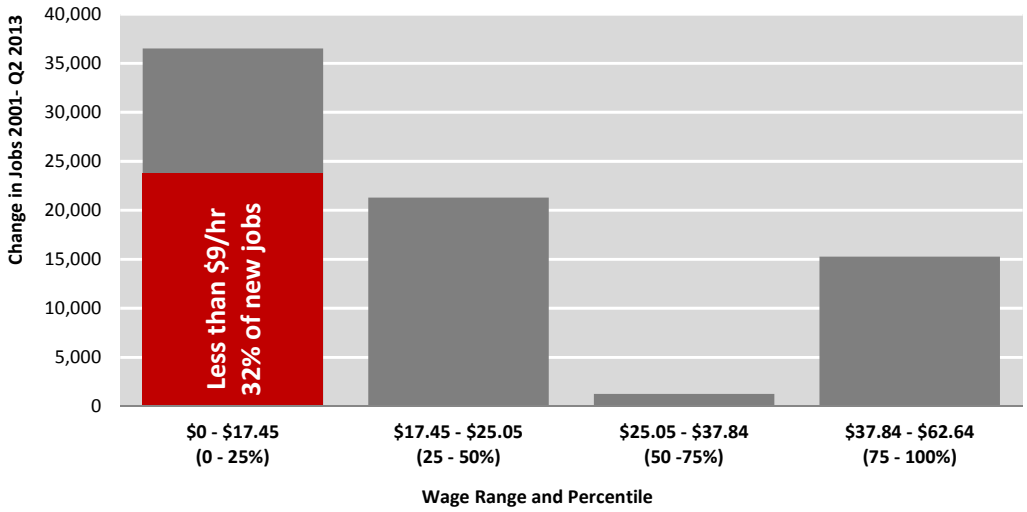
While there has been net job growth since 2001, nearly half of the job growth has been in lower wage industries below $17.45 per hour and approximately one third was in jobs that pay $9.00 or less. From 2001 through the second quarter of 2013, 49 percent of new job growth, or 36,250 jobs, were in industries that pay less than $17.45 per hour ($36,000 per year). Jobs that pay less than $17.45 per hour are in the bottom 25th percentile of jobs by wage level. Within this bottom 25th percentile, the accommodations and food services industry added 23,800 new jobs at an average of $8.94 per hour (not including gratuities). The 25th to 50th percentile wage jobs, shown here in approximately the $17 to $25 per hour range, accounted for 21,000 jobs, or 29 percent of new job growth (**Figure 9**). The 75th percentile wage jobs made up 20 percent of new jobs, or 15,000.

There was negligible job growth in the 50 to 75th percentile wage jobs ($25.05 and $37.84 per hour). The industries in this wage range include the real estate, government, manufacturing, wholesale trade, and finance and insurance industries which were severely impacted by the Great Recession. In addition, real wages (adjusted for inflation) have declined in most industries that pay average wages below $25 per hour.

Figure 9
Change in Employment by Wage Range and Quartile, 7-County Metro Area, 2001-Q2013



Source: Colorado Department of Labor; Economic & Planning Systems

Enrico Moretti's *New Geography of Jobs, 2012* explores the bifurcation of the economy into high and low wage job in greater detail. A key recommendation from his work is the importance of developing an export based advanced manufacturing sector to support more jobs in the middle wage and skill levels.

Racial and Ethnic Diversity

Metro Denver has been undergoing major demographic and socioeconomic shifts, especially an increase in racial and ethnic diversity. From 2000 through 2010, nearly half of new Metro Denver residents were of Hispanic or Latino origin (white and non-white Hispanics and Latinos). Non-whites accounted for another third of new residents (**Table 6**). Racial and ethnic diversity is increasing faster in suburban communities than in Denver's urban core based on an analysis of U.S. Census data. In Adams County, the Hispanic and Latino population increased by 63.6 percent (+65,000) from 2000 through 2010, by 83.2 percent in Arapahoe County (+48,000), and by 45.8 percent in Jefferson County (+24,000). In Denver, the Hispanic and Latino population increased by 8.7 percent (+15,000).

Table 6
Population by Race and Hispanic Origin, Metro Denver, 2000-2010

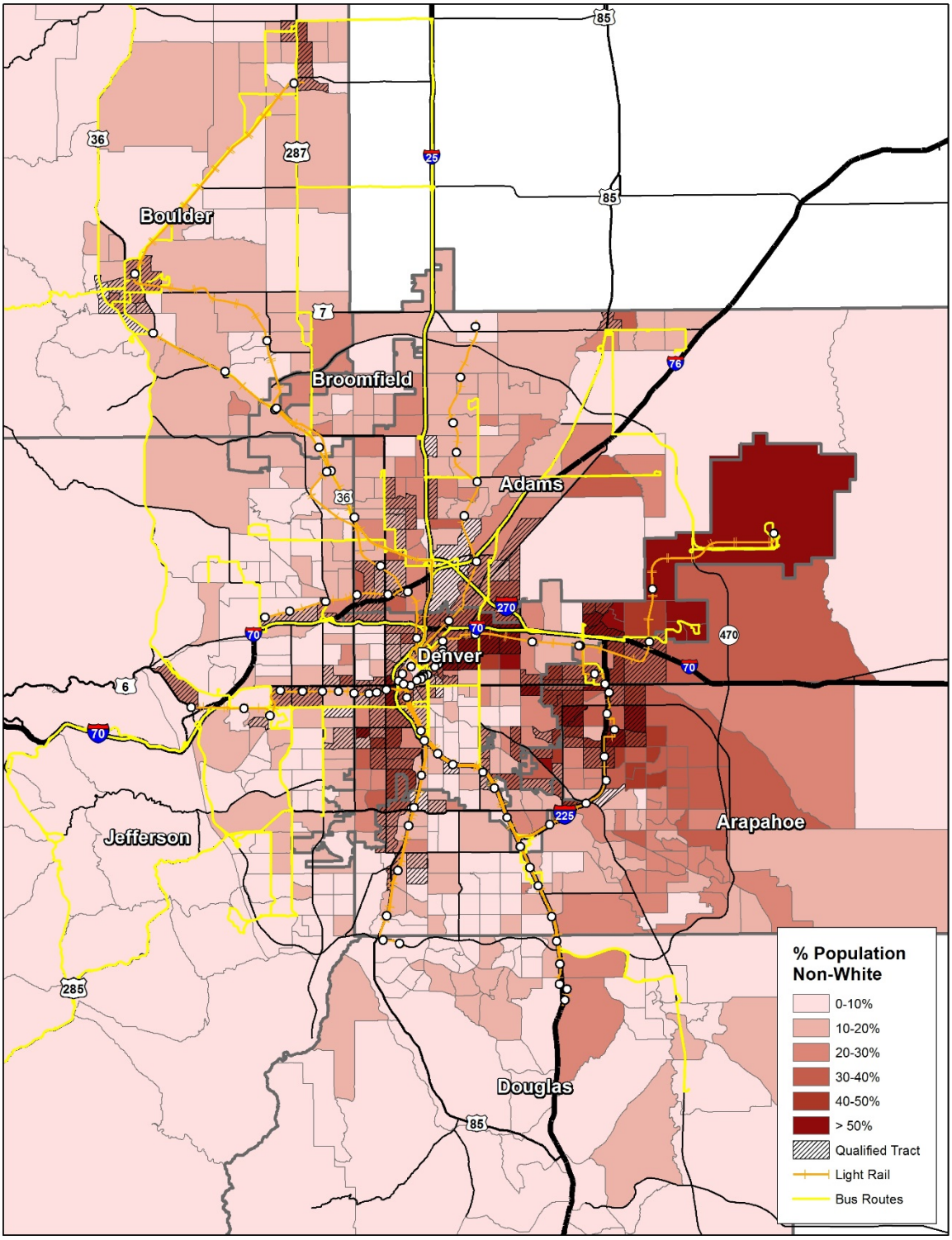
			Change		
Race or Hispanic Origin	**2000**	**2010**	**# Change**	**Pct. Change**	**Share of Change**
Total Population	**2,414,649**	**2,798,757**	**384,108**	**15.9%**	**100.0%**
White	1,945,359	2,202,502	257,143	13.2%	66.9%
Black or African American	118,858	145,427	26,569	22.4%	6.9%
American Indian and Alaska Native	21,426	26,697	5,271	24.6%	1.4%
Asian	71,954	105,862	33,908	47.1%	8.8%
Native Hawaiian and Other Pacific Islander	2,357	3,216	859	36.4%	0.2%
Some other race	184,483	216,978	32,495	17.6%	8.5%
Two or More Races	70,212	98,075	27,863	39.7%	7.3%
Total Population	**2,414,649**	**2,798,757**	**384,108**	**15.9%**	**100.0%**
Hispanic or Latino Origin, Any Race	**428,255**	**608,390**	**180,135**	**42.1%**	**46.9%**
Percent of Total					
White	80.6%	78.7%			
Black or African American	4.9%	5.2%			
American Indian and Alaska Native	0.9%	1.0%			
Asian	3.0%	3.8%			
Native Hawaiian and Other Pacific Islander	0.1%	0.1%			
Some other race	7.6%	7.8%			
Two or More Races	2.9%	3.5%			
Total Population	**100.0%**	**100.0%**			
Hispanic or Latino Origin, Any Race	**17.7%**	**21.7%**			

Source: US Census; Economic & Planning Systems

\\epsdc02\Proj\143011-DRCOGEquitableGrowthEvaluation\Data\[143011-Demo.xlsx]RaceTrend_Summary

Metro Denver's non-white population is concentrated in areas defined by HUD as "Qualified Census Tracts." Qualified Census Tracts are locations where the poverty rate exceeds 25 percent, or half or more of the households earn less than 60 percent of the Area Median Income (AMI) (**Figure 10**). The federal poverty rate is $24,000 per year for a family of four and $16,000 per year for a 2-person household. Sixty percent of AMI is $46,000 for a family of 4, or approximately $39,000 for an average household size of 2.5.

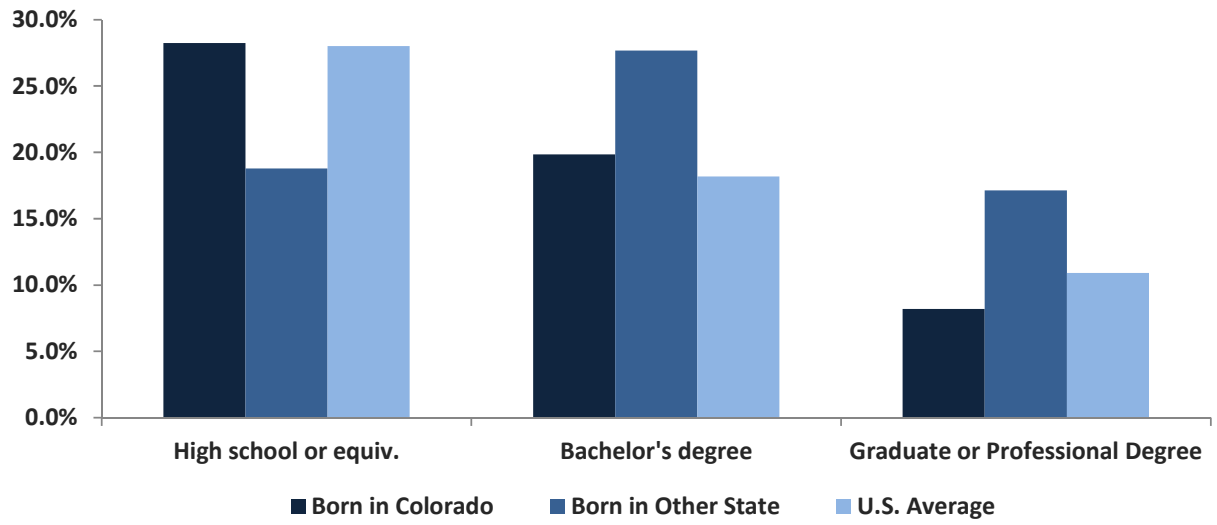
Figure 10
Percentage Non-White Population by Census Tract, 2012



Educational Attainment

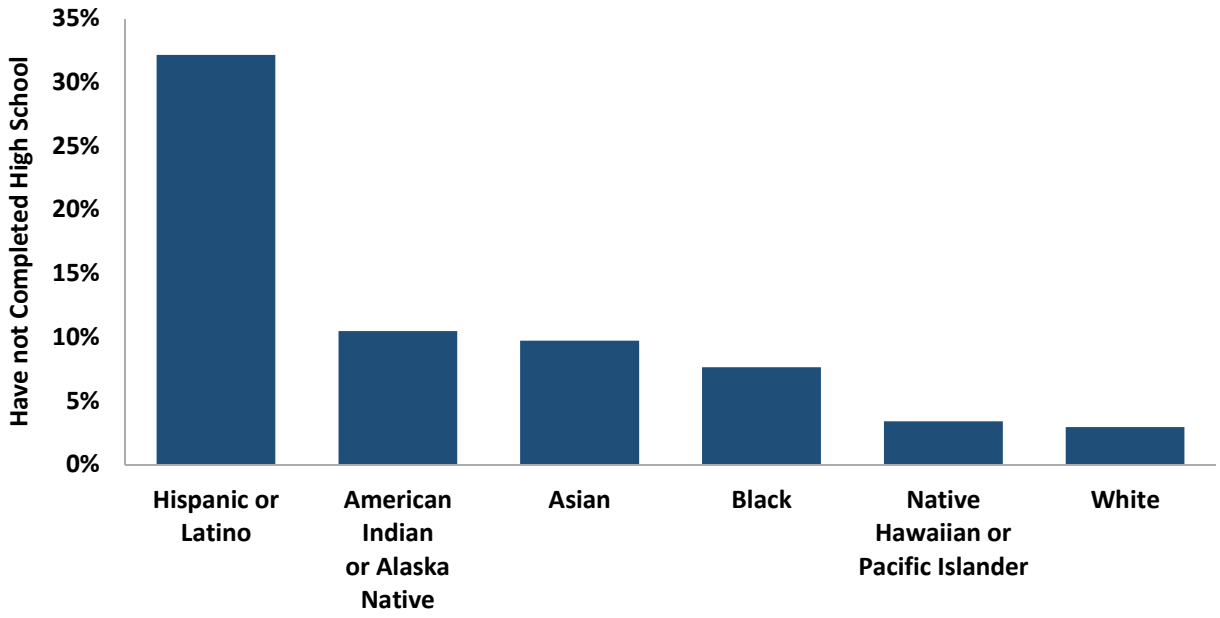
Stakeholder comments that Metro Denver is reliant on imported talent are supported by data from the U.S. Census supplied to EPS by the Colorado Department of Local Affairs, State Demographer's Office. Colorado residents born in another state have higher rates of attaining bachelor's degree and an advanced degree. Twenty-eight percent of Colorado residents born in another state have a Bachelor's degree compared to 20 percent of native Coloradoans. Coloradoans born in another state also have higher rates of achieving an advanced degree, at 18 percent compared to 8 percent of native Coloradoans (**Figure 11**). The Denver Business Journal has also reported recently on the concerns of economic development leaders, educators, and executives on the difficulty in finding local talent and the risks of relying on imported talent *(Ed Sealover, Denver Business Journal, Collision Course, June 20-22, 2014)*.

Figure 11
Educational Attainment by Place of Birth, State of Colorado



Data from the U.S. Census show that there are wide gaps in educational attainment in Metro Denver according to race and ethnicity, and place of residence. People with low education levels are not prepared to enter the labor force, which reduces Metro Denver's pool of skilled labor and correlates with poverty and related social issues. Metro Denver's Hispanic and Latino populations have some of the lowest levels educational attainment, with 32.2 percent having less than a high school diploma (**Figure 12**). Recent figures from the US Census estimate that over 80,000 Hispanics and Latinos have not completed high school. The white population is the most highly educated, in which less than three percent have not completed high school. The percentage of the population without a high school diploma for other people of color ranges from 3.4 percent for native Hawaiians and Pacific Islanders to 7.6 percent for Blacks and African Americans, and 10.5 percent for American Indians and Native Alaskans.

Figure 12
Percentage of Population with less than a High School Diploma, DRCOG Region



High school dropout rates are lower for younger Hispanics and Latinos than the average figure cited above, but they are still higher than non-white Hispanics or Latinos and other non-whites. Seventeen percent of Hispanics and Latinos between the ages of 20 and 24, and 16 percent of those ages 25 to 29 have not completed high school, compared to 32.2 percent of all people of Hispanic or Latino origin. This is an important trend to monitor for all races and ethnicities. A fast growing population not completing high school will not be prepared to enter the labor force for well-paying jobs.

Conclusions and Recommendations

Neither the Metro Denver EDC nor DRCOG have engaged in a regularly updated, formal analysis of economic indicators comparing Metro Denver with its key competitor regions. This study has included an initial analysis of competitive indicators that shows that Metro Denver generally fares well against its competitors for the metrics analyzed. Metro Denver's clearest business advantage is the quality of its workforce as measured by educational attainment.

- Metro Denver has the highest percentage of its population 25 years and older with a bachelor's or higher level degree among the competitor cities. Isolating the analysis to the most highly educated, Metro Denver also has the highest percentage of advanced degree holders among the competitor cities.
- Metro Denver had the second fastest growing population and second highest level of net migration since 2007 among the competitor cities.
- Metro Denver has also been successful in attracting young people as its population grew faster than most of the competitor cities in two of the younger age cohorts including 0 to 14 years and 25 to 34 years. Metro Denver has the highest median household income among the competitor cities, something that helps attract talented workers and residents. However, Metro Denver also has higher home, housing plus transportation, and other costs of living than most of the competitors.
- Among the competitors, Metro Denver has one of the least affordable median home prices and a slightly higher ratio of housing and transportation costs to income; it also has the second highest cost of living among the competitor cities. Metro Denver ranks among the top three cities in three of four transportation access indicators: lowest roadway congestion (third), fewest workers commuting by driving alone (second), and the most nonstop flight destinations (third). Metro Denver ranks fifth in shortest average commute times, but most of the competitor cities have comparable commutes except for Atlanta, where nearly half of its workers have commutes longer than thirty minutes.
- Metro Denver's main competitive disadvantage was a higher cost of business than the other cities, although Metro Denver's business costs still rank below the U.S. average.

While Metro Denver generally competes well, there are wide differences in economic vitality and access to opportunity within the Region, as summarized below.

- Concentrated poverty has shifted from Denver's urban core to Adams County, Aurora, Commerce City, eastern Lakewood, Southwest Denver, far northeast Denver, and parts of the Longmont area. These areas are farther from jobs, services, and high frequency transit that provide access to jobs than more affluent neighborhoods.
- The non-white and Hispanic and Latino population are concentrated in areas with high poverty rates and low levels of educational attainment.
- Thirty-two percent of people of Latino or Hispanic origin have not completed high school compared to three percent of whites. The Hispanic and Latino population comprised 42 percent of the population growth in the Denver region from 2000 through 2010.

We recommend that DRCOG track two sets of indicators: one on competitiveness compared to other U.S. metro areas and another to measure economic vitality and equity conditions within the Denver Region. These indicators would track important measures of economic and social health and the differences by location within Metro Denver to inform the equitable distribution of resources and investment.

4. REGIONAL PLANNING AGENCY CASE STUDIES

This chapter summarizes regional approaches to economic development in other metro areas and a recent study on Regional Planning Agency (RPA) roles in economic vitality and competiveness. The plans and programs of five RPAs determined to have a meaningful role in regional economic health, sustainability, and equity are reviewed, focusing on best practices and innovative processes. The chapter concludes with identification of key findings of relevance to DRCOG's economic strategy evaluation.

San Diego Association of Governments

The San Diego Association of Governments (SANDAG) is the regional planning agency and MPO with regional land use, growth management, and transportation planning and funding responsibilities for the San Diego region consisting of 18 city and county jurisdictions. SANDAG's Land Use and Regional Growth Program include growth forecasts, administering housing programs, and authoring the regional comprehensive plan. SANDAG has an Economics and Finance Program that is responsible for tracking data and preparing reports on the fiscal stability and economic prosperity of the region.

Regional Economic Prosperity Strategy

SANDAG completed an economic analysis and strategy titled *Building a Foundation to Achieve Global Competitiveness* in 2008, including two reports, *San Diego Regional Prosperity Strategy (Volume I)* and *Evaluating the Competition and Assessing our Strategic Position (Volume II).* Over the last two decades, San Diego recovered from the recession of the 1990s, diversified its economy, and transformed itself into one of the most innovative regions in the country with over 3,000 technology-producing companies. In 2006 SANDAG convened the Regional Economic Evaluation and Prosperity Strategy Working Group (Committee) to evaluate the current state of the regional economy and proactively work towards continued growth and prosperity.

Relevance to DRCOG:

- Regional Prosperity (Economic) Strategy
- Indicators and Benchmarking
- Regional data provider
- Partnerships with economic

The strategic assessment started with an evaluation of the region's economic health by using economic indicators to compare San Diego to other similar regions as well as against statewide and national trends as presented in the "Strategic Evaluation" report. The report identifies the region's strengths, weaknesses, challenges, and opportunities through a strategic evaluation of the regional economy against a total of 24 indicators in four major categories: Economic and Social Performance, Business Vitality, Resources for Business Growth, and Regional Infrastructure Capacity. The evaluation determined that the San Diego region was not keeping pace with its peers based on an analysis of key economic indicators including real (inflation adjusted) per capita income growth. The research also pointed out that San Diego was not adequately equipped or prepared to compete in an increasingly global marketplace.

The Prosperity Strategy sets an overall goal for the region to be more competitive in the global market, attract and retain technology based companies, and raise the standard of living for all residents. The strategy takes a comprehensive view of exogenous forces and regional conditions including Energy, Water, Transportation, Education, Workforce Development, and Housing, as shown in **Figure 13**. There are 10 strategic goals and 27 specific actions including:

- Adopt a more balanced approach to public investments by investing in clusters that offer higher paying jobs;
- Develop a goods moving strategy to improve capabilities to participate in international trade;
- Prepare the labor force to be competitive for jobs created by the changing economy; and
- Continue to monitor and report on the region's progress in meeting its challenges and goals.

There are similarities between the economic strategies employed by the Metro Denver EDC and the San Diego Regional Economic Development Corporation. Both have an economic development strategy organized around industry clusters. Infrastructure and transportation are a focus for both groups. San Diego is working to leverage its port and trade with Asia. Metro Denver EDC, the I-70 Regional Economic Advancement Partnership, and others are working to leverage Denver International Airport. Both regions continue to adjust to a shrinking military presence.

Figure 13
SANDAG Regional Planning and Economic Framework

Regional Economic Structure

Through its Economics and Finance Program, SANDAG has also assumed responsibilities for tracking data and preparing reports on the fiscal stability and economic prosperity of the region, including updates to *the Strategic Evaluation and Benchmarking Study*. SANDAG has conducted two major economic strategies in the last 20 years, first in the 1990s and most recently in 2008.

The San Diego Regional Economic Development Corporation is a private non-profit corporation funded by more than 150 companies and public partners committed to maximizing the region's economic prosperity and global competitiveness by: providing assistance with expansion plans and programs to retain business; leading attraction efforts to bring new investment and new companies to the region; collaborating with industry associations and economic development partners to develop cohesive approaches to regional issues; and marketing the region to highlight the talent available and quality of life that keeps them.

With funding from CalTrans, SANDAG has contracted a Border Health and Equity Study to address congestion, mobility, air quality, and health issues in the border crossing areas of south San Diego County.

Central Puget Sound Regional Council

The Puget Sound Regional Council (PSRC) is the regional transportation, economic development, and growth management planning organization for the Central Puget Sound region comprised of King, Kitsap, Pierce, and Snohomish Counties and including 73 cities and towns. *Vision 2040* is PSRC's integrated, long range vision for maintaining a healthy region, promoting the well-being of people and communities, economic vitality, and a healthy environment. The theme of *Vision 2040* is based on the concept of people, prosperity, and planet, and takes an integrated approach to social, cultural, economic, and environmental benefits in land use, growth, and transportation decisions. It contains an environmental framework and six policy sections including Environment, Development Patterns, Housing, Economy, Transportation, and Public Services. *Transportation 2040* is the region's long range transportation plan showing needed transportation investments to accommodate the anticipated growth.

Relevance to DRCOG:

- Integration of a sustainable economy in regional plan
- Economy plan element
- Annual strategic action plan
- Partnerships with economic developers
- Sunset clause in Prosperity Partnership (extended)

The Economy Policy section of *Vision 2040* takes an equally broad and integrated perspective with an overall goal: "The region will have a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people, sustaining environmental quality, and creating great central places, diverse communities, and a high quality of life." It includes separate policy groupings for Business, People, and Places, and therefore gives equal attention to the labor force as well as the employer.

Regional Economic Strategy

PSRC is the District Organization for the Economic Development District (EDD) established under the U.S. Economic Development Administration (EDA) and prepares a Comprehensive Economic Development Strategy (CEDS). PSRC uses the CEDS as a strategic document, however, not simply as a vehicle to receive federal funding, and aligns the CEDS with *Vision 2040*.

In 2004, the PSRC created the Prosperity Partnership housed within PSRC, a coalition of over 300 government, business, labor, and community organizations to promote the region to become more competitive in national and international economies. With this overall goal, the Partnership initiated preparation of the Regional Economic Strategy for the Central Puget Sound Region that was adopted by the EDD. The Regional Economic Strategy is the region's federally required CEDS as well as the basis for the Economy element of *Vision 2040*. In 2012, the Prosperity Coalition adopted a new updated version of the CEDS. The Prosperity Partnership also aligns PSRC's statutory transportation and land use authority with economic development and promotes the Puget Sound region through research, analysis, and publishing of economic and workforce indicators.

Developed under EDA guidelines, the Regional Economic Strategy is a short-term five-year action plan. However, it takes a broader, more holistic view of components of the economy than in other CEDS reviewed. CEDS are often limited to strategies addressing target industries and economic diversification. Underpinning the Plan are five goals to improve the foundations of the economy:

- Ensuring that residents have access to family wage jobs and that employers have access to world class talent;
- Fostering a regional business climate that supports high quality investment and job creation;
- Harnessing the entrepreneurship and technology innovation assets in the region;
- Advancing the region's infrastructure to meet the demands of a globally connected modern economy; and
- Ensuring a healthy and beautiful environment, vibrant and thriving communities, and a high quality of life for all the region's residents.

PSRC and the Partnership also create an annual economic development action plan that identifies short-term investments, recruitment targets, and policy initiatives aimed at strengthening the region's economy, workforce, cultural assets, and general social equity and well-being. The Action Items identify the responsible party for following through on the Action Items, which is in many cases not the PSRC.

During the formation of the Prosperity Partnership, there was concern that PSRC would be competing with existing EDOs when PSRC took a more active role in economic development and established the Prosperity Partnership. To address these concerns, the Prosperity Partnership had a two-year sunset clause when it was formed. The PSRC Board continued the Prosperity Partnership because it was judged to be a success.

Regional Economic Structure

Compared to Metro Denver, the Seattle region's economic development environment is more fragmented. It consists of PSRC, the Greater Seattle Chamber, and County level EDOs. The Greater Seattle Chamber of Commerce is a private business member organization that covers the three-county region. It plays a role in economic development as a "one-stop shop for the

tools that businesses need to grow." It does not play the more direct role in business recruitment that is played by the Metro Denver EDC within the umbrella of the Metro Denver Chamber of Commerce, which has many programs to help grow business including a Small Business Development Council and business training, workshops, and market intelligence briefings.

There is no regional EDO representing the three-county region. King County economic development efforts are handled by the Economic Development Council of Seattle and King County, a public-private economic development partnership encompassing King County and its 39 cities. Formerly known as enterpriseSeattle, the EDC helps businesses seeking to establish, expand, or relocate to Seattle and King County. The EDC also aligns its five-year work plans with the policies and objectives of the Prosperity Partnership and the Regional Economic Strategy. The Economic Development Board of Pierce County handles economic development marketing and recruitment in partnership with Pierce County and 22 municipalities, many of which have city economic development departments. The EDB also references its partnership with the PSRC Prosperity Partnership. In Snohomish County, the Economic Alliance of Snohomish County is the primary organization for economic development advocacy and recruitment activities for the County and its 24 municipalities.

Equity Partnerships and Actions

PSRC's equity related activities are largely related its Growing Transit Communities Program funded by the region's Sustainable Communities Regional Planning (SCRP) Grant. Like DRCOG's SCRP Grant, Growing Transit Communities is focused on leveraging the economic and social benefits of expanding greater Seattle's transit network. Within this program, PSRC formed a Regional Equity Network lead by Impact Capital, a Community Development Financial Institution (a non-profit entity authorized to receive federal community development grant funds).

The Regional Equity Network aims to "ensure [that] a social equity framework is used in all aspects of Growing Transit Communities," link community and equity organizations, increase engagement and capacity of disadvantaged and underrepresented populations, and change policies to "promote equitable outcomes." Additional principles include:

- Promote living wage jobs and entrepreneur opportunities;
- Prevent displacement;
- Practice meaningful community engagement;
- Create healthy and safe communities including schools, parks, complete streets, and health care; and
- Eliminate disproportional environmental burdens.

To date, $450,000 has been invested in community organizations along the existing and planned transit corridors. Recipients have included Hispanic and Latino, East African, Somali, bicycle advocacy, and youth organizations.

Recognizing the importance of industrial jobs in providing "family wage" jobs, PSRC is also sponsoring an update to its Industrial Lands Analysis. The study will document the importance of industrial lands to the regional economy, determine if the region has an adequate and appropriate supply of industrial land for the future, and identify land use or transportation planning policies and investments that need to be addressed. This is an example of a relevant project that DRCOG could partner with local jurisdictions on, such as Adams County, Denver, Commerce City, and Aurora, which are the primary industrial locations in Metro Denver.

Metropolitan Council of Minnesota

The Metropolitan Council of Minnesota (Met Council) is the RPO, MPO, and regional policy-making body for the Minneapolis-St. Paul metro area comprised of seven counties and 182 communities encompassing 3,000 square miles. The Met Council is unique because it is not only a regional planning organization but also a service provider that operates the Metro Transit bus and rail system, provides water and wastewater services, manages the regional parks and trails system, and operates affordable housing. Met Council's 17 member Board is appointed by the Governor; thus the goals and culture of the organization can shift with changing administrations. The Agency's current priorities are to create a financially sustainable 21st century transportation system, promote dynamic housing opportunities, and leverage investments that drive economic development.

Relevance to DRCOG:

- Economics integrated in Regional Plan
- Focus on quality of life and economic sustainability linkages
- Studying economic sustainability and competitiveness rolls.
- Exploring partnerships with

Regional Plan

Under state law, the Met Council prepares a long-range plan for the Twin Cities region every 10 years. *Thrive 2040* is the new regional plan currently under development; it includes a vision for the region over the next 30 years and policies providing direction to the development of the Council's systems and policy plans, which include the Transportation Policy Plan, the Water Resources Policy Plan, Regional Parks Policy Plan, and the Housing Policy Plan. These plans address regional investments that provide an economic foundation for the region's prosperity. A draft is now out for review and comment. The draft plan is a broad vision document organized around five desired outcomes: Stewardship, Prosperity, Equity, Livability, and Sustainability; it also contains plans, policies, and projects in each category.

- Stewardship – addresses the Council's mission of orderly and economic development by responsibly managing the region's natural and financial resources.
- Prosperity – is fostered by investments in infrastructure and amenities that create regional economic competitiveness, thereby attracting and retaining successful businesses, a talented workforce, and consequently wealth.
- Equity – connects all residents to opportunity and creates viable housing and transportation options for all races, ethnicities, incomes, and abilities.
- Livability – focuses on the quality of life and how places and infrastructure create and enhance the quality of life in the region.
- Sustainability – means protecting the region's vitality for future generations by preserving capacity to maintain and support the region's well-being and productivity over the long term.

The draft plan does not specifically have an economic health or sustainability element; nevertheless these themes permeate the document, as the Plan integrates the recommendations of the Planning for Regional Competitiveness study described below. The document emphasizes that Met Council's traditional and ongoing roles of planning and investing in infrastructure, amenities, and quality of life are key to prosperity for the region.

Regional Economic Strategy

The Met Council has recently engaged in two studies that examine the best ways for the Council to help boost the Twin Cities' economic strength for the future and to develop a plan for future economic prosperity and to recommend steps that can fit together into an overall economic strategy for the region.

The first study, *Planning for Regional Competitiveness,* was funded by the McKnight Foundation and completed by MZ Strategies and the National Association of Regional Councils (NARC). Its stated purpose was to chart a course for integrating economic development with existing regional planning activities and policies and to understand how other regional planning agencies engage directly, or in partnership with others, on designing and implementing regional economic strategies. Key findings from this study are summarized in a separate section within this chapter.

For the Met Council, the study made five key recommendations to enhance regional economic performance in the Twin Cities region:

- Establish ownership, clarify roles, and prioritize actions around a single economic strategy. Decide who takes the lead for coordinating the effort to develop and carry out a strategy. Specify roles, responsibilities, strategies and action steps.
- Define and monitor performance of regional goals for equitable economic growth. Use social and economic metrics to shape the regional strategy and drive policy and investment decisions. Include ways to deal with regional disparities.
- Give high priority to the needs of the region as a whole to successfully compete in a global market place. Minimize the competition for jobs and growth within the region and commit to what makes the entire region more competitive.
- Focus economic and workforce development around core industry clusters. Build on existing research that identifies these clusters in laying the foundation for an economic strategy. The Metro Denver EDC's strategy is organized around eight targeted industry clusters.
- Give high priority to public investments in infrastructure, education and quality of life. All three are crucial to attract and retain workers and businesses.

The second study, completed by Economic Development Services, Inc., identifies three major topic areas of activity to advance economic competitiveness including economic development, community development, and workforce development. The study recommends the Met Council continue to focus on community development, but also to provide a leadership role to create a partnership of organizations united around implementing the recommendations of the MZ Strategies/NARC study.

Regional Economic Structure

The Minneapolis Saint Paul Regional Economic Development Partnership (Greater MSP) is a private non-profit organization (501C3) dedicated to economic development services for the 16-County Minneapolis Saint Paul region. Similar to Metro Denver EDC, Greater MSP with its economic development partners throughout the region is advancing a coordinated regional economic development strategy, a coordinated regional brand to promote the region's assets, and a coordinated regional business retention, expansion, and recruitment program to stimulate capital investment and job creation. Greater MSP is focused on five target clusters for the region: Headquarters and Business Services, Health and Life Sciences, Agriculture and Water Technology, Information and Technology, and Financial Services.

Greater MSP was on the advisory council for the *Planning for Competitiveness* study and is on the planning committee for the *Thrive MSP 2040 Plan.* The Twin Cities region is therefore undergoing a similar process as the Denver region in evaluating how to integrate economic health considerations into the regional plan and what role the regional planning agency should play in contributing to the economic health and prosperity of the region.

Equity Partnerships and Actions

The Met Council's major initiative in equity and regional capacity building is the Partnership for Regional Opportunity (PRO), formerly the Corridors of Opportunity initiative. PRO is tightly linked to the planning and construction of the Twin Cities' transit system, as it seeks to "accelerate the build out of a regional transit system for the Twin Cities [to] advance economic development and ensure people of all incomes and backgrounds could share in the resulting opportunities." PRO receives funding from the McKnight Foundation and other philanthropic partners.

PRO is governed by a policy board consisting of 26 representatives from economic development, local government, real estate, non-profit and philanthropic, academic, and transportation organizations. The Chair of the Met Council also serves as the Chair for PRO and the Director is from the McKnight Foundation.

Due to the Met Council's role in the regional transit system, PRO is directly involved in planning and implementing projects. However, there are related activities that may be of more relevance to DRCOG:

- **Regional Equity and Community Engagement** – The RECE is creating a toolkit for regional organizations and audiences. It will include fact sheets, a process guide, and best practices.
- **Shared Prosperity** – This working group is focused on an "urban competitiveness strategy" for the urban core areas of Minneapolis and Saint Paul, and for the rail transit corridors to achieve "socially equitable and environmentally sustainable" economic growth.
- **Regional Success Indicators** – The Shared Prosperity working group is producing an indicator dashboard to track social, economic, and environmental measures. This working group has stated that the dashboard "is not a marketing tool, it's a regional improvement tool."
- **Equity Analysis and Indicators** – As noted above, Thrive MSP 2040 contains data on disparities within the region within the Equity Outcome plan element. The Regional Success indicators described above is planned to be an ongoing program to track progress on economic, environmental, and social well-being. In addition, PRO is tracking social and economic indicators for the rail transit corridors.

Mid America Regional Council

The Mid America Regional Council (MARC) is the MPO and COG for the nine-county two-state Kansas City region that includes 119 cities. As the MPO, MARC is responsible for transportation planning for the region and produces the long-range transportation plan, *Transportation Outlook, 2040* and the short-range TIP. As the RPA, MARC also oversees a large number of planning programs including workforce development, council on aging, homeland security, and natural resource management. MARC has also been the regional provider of economic data analysis and forecasting.

Relevance to DRCOG:

- Respected "convener and analyst"
- Planning, studies, and analysis in support of economic development
- Strong economic indicators program
- Partnerships with economic developers

Regional Plan

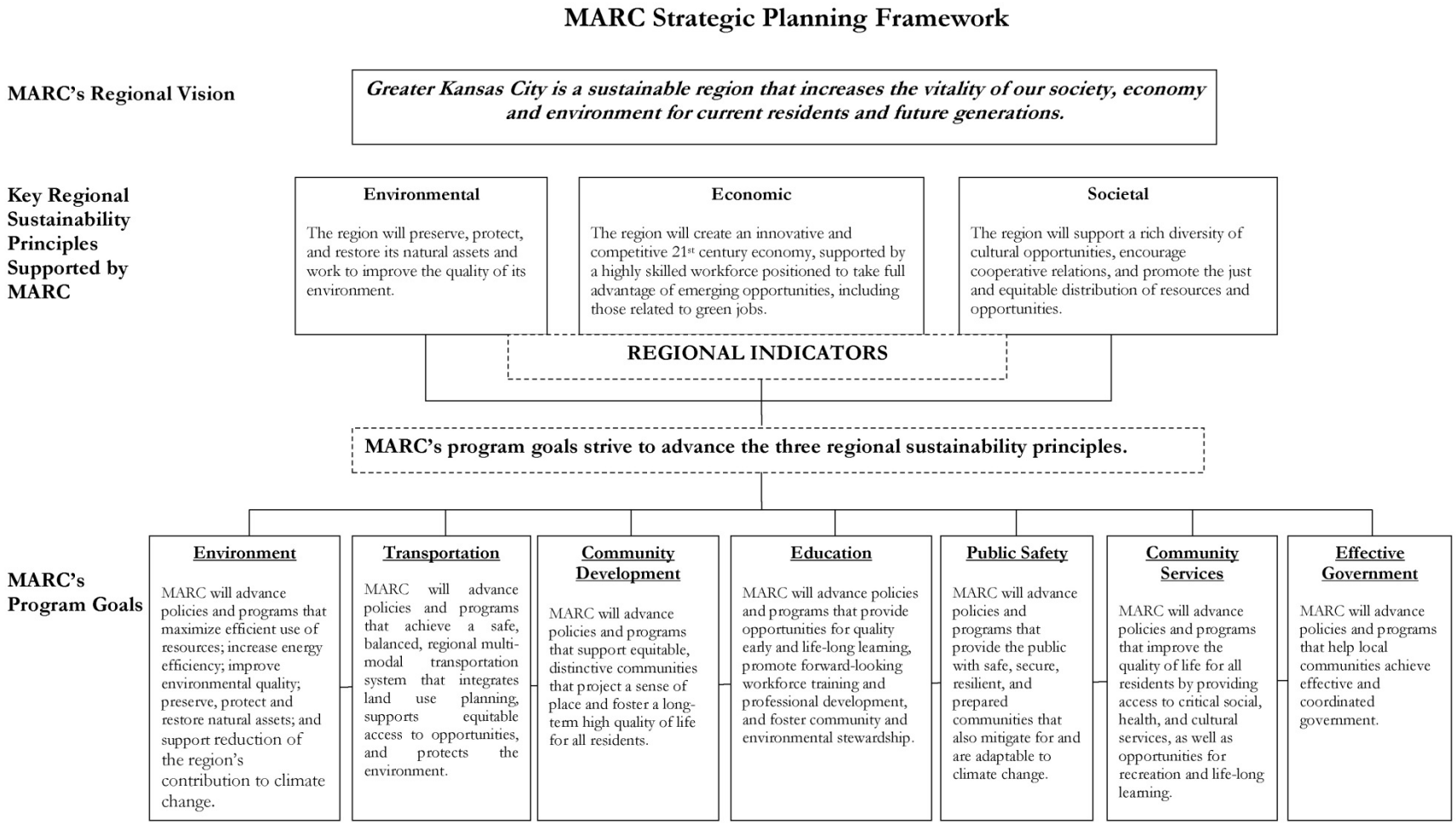
MARC's regional land use and transportation plan Smart Moves focuses largely on transportation demand related to future land use and growth. However, MARC recently adopted in 2012 and updated in 2014 a Regional Plan for Sustainable Development (RPSD). The 2014 update ("V2.0") added specific elements for Social Equity, Public Health, Workforce Development, and Communities for All Ages. The RPSD also incorporates an Equity Profile Report and integration of social equity considerations into all plan elements.

The RPSD includes a Social Equity Lens that contains strategies for engaging diverse populations, evaluating policies and investments for their impact on "education achievement and success," access to a healthy environment, attracting a range of job opportunities for a range of skill levels, providing a clear jobs training and career pipeline, and supporting housing choice. It also emphasizes the need for a transportation system that connects residential populations with jobs, including regional transportation and improving neighborhood access to jobs. MARC is now working to better integrate Smart Moves with the RPSD.

Prior to the RPSD, MARC adopted a Strategic Planning Framework in 2010 as part of its Creating Sustainable Places initiative, for which it received a $4.5 million SCRP Grant. The Strategic Planning Framework includes programmatic goals for the environment, transportation, community development, education, public safety, community services, and effective government. Under the Societal Principles, the Strategic Planning Framework states: "the region will support a rich diversity of cultural opportunities, encourage cooperative relations, and promote the just and equitable distribution of resources and opportunities" (**Figure 14**).

MARC also created a new interactive website (www.sustainable-kc.org) with indicators that can be used to track the region's progress towards becoming more sustainable and help quantify whether or not its actions are creating a vibrant, connected, and green region.

Figure 14
MARC Strategic Planning Framework



Regional Economic Strategy

MARC is a qualified EDD established through EDA and has adopted a Comprehensive Economic Development Strategy. The CEDS is designed to bring the public and private sectors together for the creation of an economic roadmap to diversify and strengthen the regional economy. The Strategy includes an analysis of the regional economy including the benchmarks that were incorporated into the Strategic Planning Framework and establishes goals and objectives, an action plan, and investment priorities and funding sources. The Plan is the result of a continuing economic development planning process developed with broad-based public and private participation.

As noted, the benchmarks and indicators are published on an interactive website in nine categories including Population, Economy, Health, Housing, Construction, Transportation, Education, Social Equity, and Green. In each category there are 6 to 15 data points that are tracked as indicators of the economic health of the region and/or economic benchmarks comparing the Kansas City area to other U.S. metro areas. In the Economy category, the metro area indicators include:

- Kansas City tract level data for median household income;
- Households income over $100,000;
- Household income as % of Kansas City metro median;
- Job density by industry;
- Jobs-housing balance;
- Percent of households below the poverty rate;
- Unemployment by race and ethnicity; and
- GDP per Employee.

Regional Economic Structure

The Kansas City Area Development Council (KCADC) is the primary regional economic development entity for the two-state 18-county, greater Kanas City region. KCADC was created in 1976 by the Chamber of Commerce as a separate non-profit entity to promote economic development for the area. The Agency's mission is to:

- Brand the region as one product to stimulate economic growth;
- Enhance awareness of metro area assets to create positive perceptions;
- Promote the region as a business location of choice;
- Position the region competitively against other metro areas for the retention, expansion, and attraction of jobs and investments;
- Equally support all regional communities;
- Assist companies from outside the region to find the best KC location for their needs; and
- Facilitate final negotiations between the company and the selected community.

KCADC therefore plays a similar role to the Metro Denver EDC to market and promote the region as a whole and supported by the EDCs or economic development departments within cities in most of the major cities of the region.

While it does not directly engage in recruitment and marketing, MARC has positioned itself as an important agency in economic development and sustainability, focusing on regional economic assets, infrastructure, labor force, and regional cooperation. According to MARC staff

interviewed, MARC "stepped in to fill a gap in strategic regional economic development." MARC describes the role as an "Analyst and Convener" that builds on its history of regional transportation planning and technical assistance functions in a two-state region. In its Sector Partnerships, MARC takes an active role in workforce development by working with the private sector, the Workforce Development Boards, KCADC, and educational institutions to ensure that the skills needed by the private sector are being supplied by the education and training institutions. MARC also partners with the KCADC on grant applications.

Equity Partnerships and Actions

MARC also engages in several activities around equity and societal well-being, as described below.

- **Environmental Justice** – All MPOs have an environmental justice requirement to demonstrate to the Federal Government that federally funded transportation projects do not have a disproportionate impact on low income populations. MARC has gone further than the required analysis has completed studies documenting high accident rates in environmental justice Census Tracts, and the distribution of transportation spending compared to household income levels.
- **Equity Network** – Related to MARC's SCRP Grant, MARC has partnered with several organizations to engage people from diverse backgrounds and apply a Social Equity Lens (included in the RPSD) to regional and transportation corridor planning. These groups include the Metropolitan Organization for Racial and Economic Equity (MORE2), the Latino Civic Engagement Collaborative, and the Urban League of Greater Kansas City.
- **Green Impact Zone** – MARC was instrumental in establishing the Green Impact Zone with the City of Kansas City, MO. The Green Impact Zone is located Kansas City's urban core, an area that has experienced severe disinvestment and abandonment. It is a targeted area for investment in affordable housing, weatherization, workforce development, food access, transportation infrastructure, and public safety. MARC staffs an office in the Green Impact Zone that includes neighborhood outreach and capacity building specialists, a workforce and jobs access specialist, and weatherization work crews. MARC also supports grant funding applications and funding distribution.
- **Equity Analysis and Indicators** – MARC partnered with Policy Link, a non-profit national research and advocacy institute, and the Program for Environmental and Regional Equity at the University of Southern California to produce An Equity Profile of the Kansas City Region. It is an extensive analysis of racial and ethnic change, income and poverty, job growth, unemployment, income distribution, travel time to work, and other metrics by race and ethnicity and geography within the Kansas City region.

Maricopa Council of Governments

The Phoenix area's Maricopa Association of Governments (MAG) is the designated RPA and MPO for the Maricopa County region comprised of Maricopa and Pinal Counties, 27 incorporated cities and towns, and three Native American nations. MAG's primary function is transportation planning, but has also been designated by the Governor to serve as the principle planning agency for the region in a number of other areas, including air quality, water quality and solid waste management. In addition, through an Executive Order from the Governor, MAG develops population estimates and projections for the region. The Regional Council is the appointed governing and policy making body for the Agency comprised largely of city mayors, County board of supervisors, and governors of Native American communities. MAG produces the federally mandated transportation plan for the region. It does not produce a traditional regional land use plan as found in most other regions surveyed.

Regional Economic Programs

About 20 years ago, MAG reexamined its approach and mission and evolved from a traditional MPO and COG focused on transportation into an integrated collaborative organization. MAG staff identifies its role in the region as a "Hub of Collaboration." One of the key steps was to engage city, town, counties, and Indian nations on several levels. The elected officials are involved as an appointed board which is customary, but they have also engaged city managers into policy decisions not only for visioning and planning, but also development and investments.

MAG has also begun to address regional land use and economic development through a public/ private partnership in the form of an Economic Development Committee made up of business, university, and economic development leaders, as well as city managers and elected officials. The role of the Economic Development Committee (EDC) is to develop an opportunity-specific and action-oriented plan that fosters and advances infrastructure in the MAG Region, especially transportation infrastructure that would further economic development opportunities. The EDC consists of 26 members and includes 14 MAG member agency elected officials appointed by the MAG Regional Council, including the Central City, Maricopa County, six West Valley, and six East Valley representatives. The committee also includes 11 business representatives and one representative from the Arizona Department of Transportation. MAG's approach is in contrast to DRCOG and most other MPO/RPAs where the city/county interaction funnels back to communities through the planning and public works staffs that participate on agency committees.

Equity Partnerships and Actions

MAG convenes several committees that collaborate on understanding and finding solutions to regional social issues including homelessness, aging, and disabled access to transit. The homelessness committee includes local elected officials, representatives of the Governor's Office, service provider agencies, business representatives, funders, the Department of Economic Security (AZ Department of Labor), formerly homeless individuals, and advocates. The Homelessness Committee creates a plan to address homelessness in the region and applies for and administers HUD funding for homeless assistance.

National Association of Regional Councils Study

The National Association of Regional Councils and the McKnight Foundation sponsored a study in 2013, *Planning for Regional Competitiveness*. The Study was prepared for the Metropolitan Council of Minnesota, as noted earlier in this chapter. The NARC study surveyed other regional planning organizations, including DRCOG, regarding how each addressed regional economic vitality. It analyzed the responses from 16 RPAs and highlights best practices that strengthen economic competitiveness and the lessons learned from experiences of other regions around the country. The major findings are listed below:

- A large majority of [the RPOs] who responded are doing some type of direct engagement on regional economic performance, but wide variation exists in terms of direct implementation authority tools and in the level of engagement and committed leadership by the private sector.
- Three-fourths of those surveyed have a Comprehensive Economic Development Strategy (CEDS) in place, and one (Salt Lake City region) is in the process of becoming an EDA-designated region.
- Industry clusters provide a manageable and focused strategy for coordination between industry sectors and jurisdictions on workforce development; infrastructure; and business marketing, expansion and retention needs.
- Of the surveyed regions, 75 percent track metrics to evaluate and inform regional economic performance, but only 50 percent use metrics to prioritize investments.
- Overall, the regions that are administering economic development programs are doing so either via a federally-required CEDS structure or other committee structure comprised of local elected officials, business leaders and planning professionals.
- Committed leadership and private-sector involvement is essential, but can be challenging during the implementation phase unless a clear regional vision and action plan is established that clarifies roles and responsibilities.
- Those who report that they are integrating across transportation, economic development and housing are also recipients of a HUD Sustainable Communities Regional Planning (SCRP) Grant; this work provided a catalyst of funding for integrating this planning, though was not the only motivating factor.
- Only eight regions report that social equity goals are included in their economic planning, and these are regions receiving HUD SCRP Grant, so experience in applying metrics or informing investments is limited.

Although the report highlighted that the Twin Cities region was the only one without a regional economic strategy this does not necessarily mean that it is the only RPA without one. In Denver, Salt Lake City, Phoenix, and the Delaware Valley, the regional economic strategy was developed by another organization. In Metro Denver, the Metro Denver EDC is responsible for the economic development strategy.

EDA Economic Development Districts

Several of the regions profiled above have established federal Economic Development Districts (EDDs), administered by the Economic Development Administration (EDA) Department of Commerce within the U.S. Department of Commerce in order to be eligible for additional funding for infrastructure, strategic planning, and other technical assistance. The EDA's primary goals are job creation and workforce training, with a focus on regionalism. Regionalism is encouraged through the funding of Economic Development Districts where coalition building and collaboration between local governments is seen as desirable. An Economic Development District is a region that is covered under a single Comprehensive Economic Development Strategy (CEDS) that meets EDA's requirements for such a plan.

To qualify for EDD certification, the region must meet two criteria: (1) the 24-month average unemployment rate must be at least 1 percent greater than the national average; and (2) per capita income must be less than 80 percent of the national rate. To be eligible, the region must have at least two Census tracks that meet these criteria. The existence of blighted areas and other detrimental conditions can also be considered by the EDA in approving an application. EDA offers planning grants to develop the CEDS (or adapt an existing economic strategy to meet EDA CEDS criteria) and, if certified, provides annual grant funding to update the CEDS and maintain it as a living document. Other benefits of being an EDD are priority status for EDA infrastructure and economic development grants for major projects within the EDD.

Many of regions of size and economic vitality comparable to Denver have qualified as EDDs and capitalized on associated EDA funding and technical assistance. A cursory look at the EDA criteria for the Denver region indicates that the region as a whole would not qualify under current economic conditions, but that parts of the metro area might meet the criteria. A challenge is to position the EDD application in a way that demonstrates that distressed areas will benefit from region-wide economic development efforts.

DRCOG and its economic development and local government partners could explore EDD designation for distressed areas of the region. The cities of Englewood and Aurora have used EDA infrastructure grants, but there has been no entity in metro Denver that has pursued EDD status.

Conclusions and Recommendations

Several regions have made positive steps towards addressing economic and social sustainability, incorporating these elements into regional plans, and forming partnerships between traditional economic development organizations and other agencies involved in the economic health and vitality of the region. These efforts are being made by RPAs without direct involvement in traditional economic development recruitment and business development activities carried out by existing EDOs. The RPA was not the primary economic development or marketing entity in any of the regions surveyed in the NARC *Planning for Regional Competitiveness* study.

The key findings from the *Planning for Regional Competitiveness* report prepared for the Met Council concluded that many of the regional planning agencies engaged directly in economic development planning are doing so as the District Organization responsible for implementing an EDA designated economic development district and preparing comprehensive economic development strategies. With respect to the agencies profiled above, PSRC in Seattle and MARC in Kansas City are each the agency responsible for implementing the requirements of an EDA Economic District designation.

Some RPAs are integrating economic considerations into the regional plan and planning processes. Three of the four agencies profiled (PSRC, Met Council, and MARC) have initiated an effort to convene public and private sector economic leaders to address economic health and prosperity issues. The Met Council's *Planning for Regional Competitiveness* study noted that the RPAs that are integrating transportation, economic development, and housing were doing so largely as a result of HUD SCRP Grant. MARC has created a role as a "Convener and Analyst" on economic development, sustainability, and equity issues. MARC has also had successes in its Sector Partnerships and workforce development projects. A summary of the traditional transportation, regional planning and expanded economic health and sustainability functions of the MPOs profiled is shown in **Table 7**.

RPOs are also increasingly devoting more time and resources to equity issues and considering the impacts of planning decisions and investments on disadvantaged populations. The PSRC and Met Council, like DRCOG, are currently focused on implementing new transit lines and maximizing their economic and community benefits, and have received SCRP Grants to assist with implementation planning on these new corridors. PSRC and Met Council have created formal partnerships with groups representing a cross section of small and local businesses, minority populations, educators, housing advocates, economic development and workforce, and real estate interests to incorporate more diverse perspectives in planning and investment decisions and to help distribute the benefits of economic success more equally. MARC engages with minority groups on a broader range of issues (as opposed to single transportation corridors). Through this engagement MARC has adopted a "Social Equity Lens" included in its Regional Plan for Sustainable Development, which is applied to land use and transportation planning.

Regional Plans are also increasingly incorporating equity considerations, either in specific plan elements or by weaving in an equity perspective throughout the plan. Several RPAs have also created Equity Profiles or Equity Assessments for their regions, either as standalone documents or as part of the Regional Plan. The RPAs profiled also track equity indicators to measure progress within their region and in specific areas of their region on housing affordability, transit access, household income, wages, job access, educational attainment, and racial and ethnic

diversity. DRCOG has contributed to the Denver Regional Equity Atlas prepared by Mile High Connects, Reconnecting America, and the Piton Foundation. The Equity Atlas is a regional snapshot of job access, poverty, affordable housing, health, demographics, and education differences in the region.

Providing economic data and forecasts, and specifically economic indicators is also an activity shared by a number of the agencies profiled. MARC is the primary economic data provider for the Kansas City region and has been so since its inception. MARC has also recently engaged in a comprehensive analysis of regional economic conditions and disparities as well as a benchmarking comparison to other metro areas. SANDAG has also focused on benchmarking the region's performance against its identified competitive cities. Met Council is developing an indicator dashboard to track social, economic, and environmental measures.

These case studies show that there are several opportunities, and precedent, for DRCOG to strengthen its role in regional economic vitality, and to develop a stronger presence among economic and community development organizations, and with local and state elected officials. As described in the Economic Strategy Recommendations Chapter and summarized below, DRCOG can and should consider several roles and partnerships that could increase regional collaboration on economic vitality issues.

- DRCOG can engage more with economic development stakeholders to identify growth and development issues of common interest, and where DRCOG and local governments can play a greater role.
- A committee within DRCOG could be a venue for regular discussions and information sharing.
- DRCOG can also position the organization as a "Hub of Collaboration" by engaging with a wide cross section of groups and officials representing broader economic vitality issues than land use and transportation, such as education, workforce development, minority population, housing, and education experts and stakeholders.
- A key area of engagement could be with local officials and senior staff such as mayors and city managers.
- DRCOG should also determine if it can play a role in forming, or if there is a benefit to forming, an Economic Development District with local partners and other economic development organizations.

Table 7
Summary of MPO Transportation, Land Use, and Economic Functions

Agency	Regional Planning Functions	Manages EDA Economic Development District?	Economic Functions and Partnerships	Lead Economic Development Agency	Equity Functions and Partnerships
Denver Regional Council of Governments (DRCOG)	• Metro Vision 2040 (Regional Plan) • Area Agency on Aging • Firefighter Intraregional Recruitment Program	• No EDD in Metro Denver (N/A)	• Land use and transportation planning in support of broad quality of life objectives. • To be determined	• Metro Denver Economic Development Corporation	• Co-Author and support of Regional Equity Atlas • Area Agency on Aging, Boomer Bond Program • Mile High Connects partnership
San Diego Association of Governments (SANDAG)	• San Diego Forward: The Regional Plan • Technical assistance (housing, smart growth, grant funding) • MPO	• No • EDDs within San Diego County administered by EDCs	• Economic Strategy Plan • Indicators and Benchmarking • Economics and Finance Program: data and reporting	• San Diego Regional Economic Development Partnership	• Border Health and Equity Study • Biennial monitoring report tracks housing, education, poverty, and other indicators
Central Puget Sound Regional Council (PSRC)	• Vision 2040 Regional Plan • Certifies local comprehensive plans as part of Growth Management Act • MPO	• Yes • PSRC is District Organization • *Prosperity Partnership Regional Economic Strategy*	• Authors CEDS • Active in economic development recruitment and retention	• Chamber of Commerce • Multiple County Economic Development Corporations	• Regional Equity Network • Engagement with disadvantaged populations • Equity grant program • Adopted a social equity framework • Equity themes in Regional Plan
Metropolitan Council of Minnesota (Met Council)	• Thrive MSP 2040 • Public Housing Agency • Water and wastewater provider • Regional parks and trails management • MPO	• No • Hennepin County is the District Organization	• Economic themes integrated into Thrive MSP 2040 • Exploring economic sustainability roles like DRCOG • Partnered with Greater MSP on Thrive MSP 2040	• Greater MSP	• Partnership for Regional Opportunity • Engagement, process, and best practices toolkit • Engagement with disadvantaged populations • Regional Success Indicators Dashboard • Equity themes in Regional Plan
Mid America Regional Council (MARC)	• Regional land use plan is less specific than Metro Vision • Technical assistance on sustainability and smart growth associated with SCRP Grant (Creating Sustainable Places) • Other planning committees/coalitions • MPO	• Yes; MARC is District Organization • *Comprehensive Economic Development Strategy Plan*	• Workforce Intelligence project • Regional and specific studies and implementation actions • Federal and state economic development grants (KC Jobs Accelerator) • Partners with KCADC, workforce providers, private industry on workforce and infrastructure issues • "Convener and Analyst"	• Kansas City Area Development Council	• Adopted Social Equity Lens framework, and Strategic Planning Framework • Engagement with disadvantaged populations • Equity themes in Regional Plan for Sustainable Development

5. METRO VISION 2040 PLAN ISSUES

Metro Vision 2035 contains three main elements: Growth and Development, Transportation, and Environment. The Consultant Team was asked to evaluate four existing policy areas related to Metro Vision from an economic vitality perspective and make recommendations on how they might be modified to better address economic sustainability and regional equity. These issue areas are Urban Centers, Last Mile Connections, Housing, and Equitable Growth.

Urban Centers

Urban Centers were established to promote the development of location efficient, higher density development with a diversity of land uses that can be served by high frequency transit. The 104 existing Urban Centers are intended to develop with mixed use, higher density employment, housing, retail, and service uses. Metro Vision has an objective of locating 50 percent of new housing *in the region*, and 75 percent of "new jobs" *in the region* in designated Urban Centers (the "50/75 Goal").

The Consultant Team has analyzed data on employment and housing growth as a way of measuring progress towards the Urban Centers goals and to evaluate the economic characteristics and impacts of Urban Centers.

Employment Trends

An analysis of employment data by DRCOG staff shows that more than half of the region's employment growth has occurred in Urban Centers over the 2005 through 2013 time period. Over this time period, the DRCOG region had total job growth of 124,068 jobs while Urban Centers accounted for 67,921 of the new jobs, or 54.7 percent of the job growth (**Table 8**). Although short of the 75 percent goal, this analysis shows that Urban Centers are capturing the majority of the region's employment growth and suggests that the 75 percent goal is a reasonable goal for long range planning purposes.

The total percentage of jobs in Urban Centers only increased slightly during this time period, from 36.0 percent to 37.6 percent. The goal of capturing 75 percent of new jobs will therefore take some time to significantly "move the needle" in terms of the distribution of total jobs in the region.

Table 8
Urban Centers Employment Growth, 2005-2013

Location	2005	2013	Change	Share of Change
Job Totals				
Total DRCOG Region	1,288,880	1,412,948	124,068	100.0%
Jobs in Urban Centers	463,511	531,432	67,921	54.7%
Jobs Outside Urban Centers	825,369	881,516	56,147	45.3%
Percentages				
Total DRCOG Region	100.0%	100.0%	---	
Jobs in Urban Centers	36.0%	37.6%	1.6%	
Jobs Outside Urban Centers	64.0%	62.4%	-1.6%	

Source: DRCOG

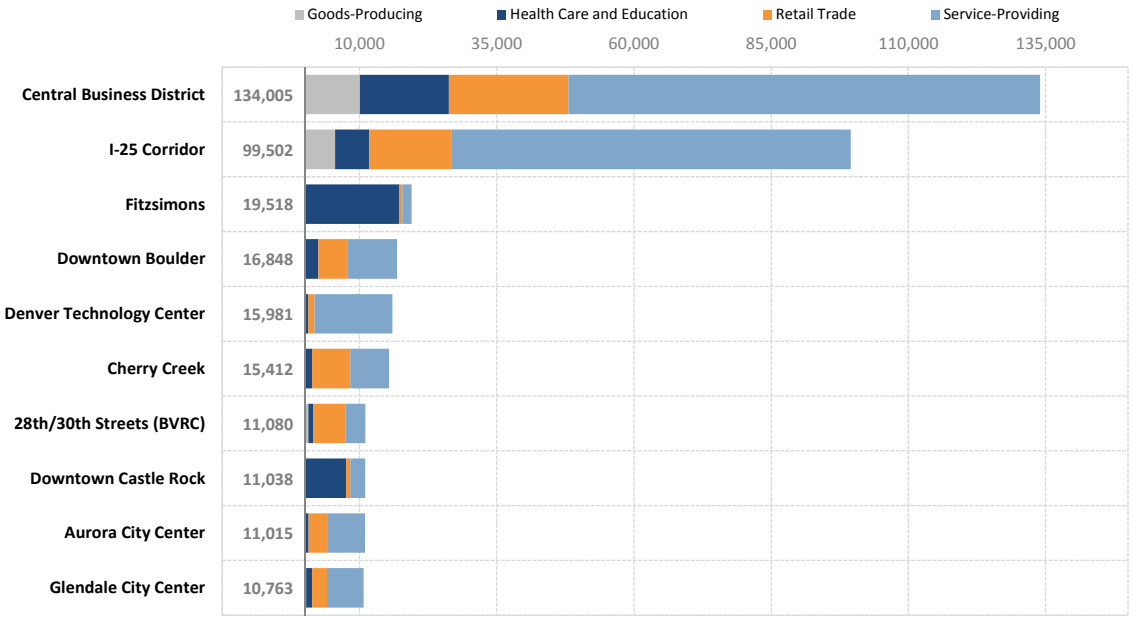
H:\133065-Denver DRCOG Regional Economic Strategy\Data\[133088 Job_Growth_Urban_Centers_08-22-2014.xlsx]Table V2

A total of 21 out of 104 Urban Centers have more than 5,000 jobs as of 2013, and 10 have more than 10,000 jobs (**Figure 15, Appendix Figure A17**). The bottom half of the Urban Centers by size chart contains a number of newly designated locations at an early stage of development including a number of FasTracks station areas (e.g., Central Park Boulevard Station, Belleview Station) with Station Area plans and/or zoning and market potential to be significant employment centers in the future. However, there are many Urban Centers that (based on the Consultant Team's knowledge of regional market dynamics and interviews with developers) are not likely to support higher densities or mixed use development in the foreseeable future. Looking at the change in employment from 2005 through 2013, three Urban Centers—Denver Central Business District, Fitzsimmons, and the Southeast I-25 Corridor—accounted for 70 percent of the job growth in Urban Centers with more than 48,000 out of 70,000 new jobs (**Figure 16, Appendix Figure A18**). The remaining 101 added approximately 22,000 jobs.

EPS further analyzed employment data by industry to determine if the mix of jobs located at Urban Centers was consistent with the Plan's intent of locating mixed use development in Urban Centers. The employment by industry data were aggregated into four super-groupings of two-digit NAICs categories including Goods Producing; Health Care and Education; Retail, Accommodations, and Food Services; and Other Services.

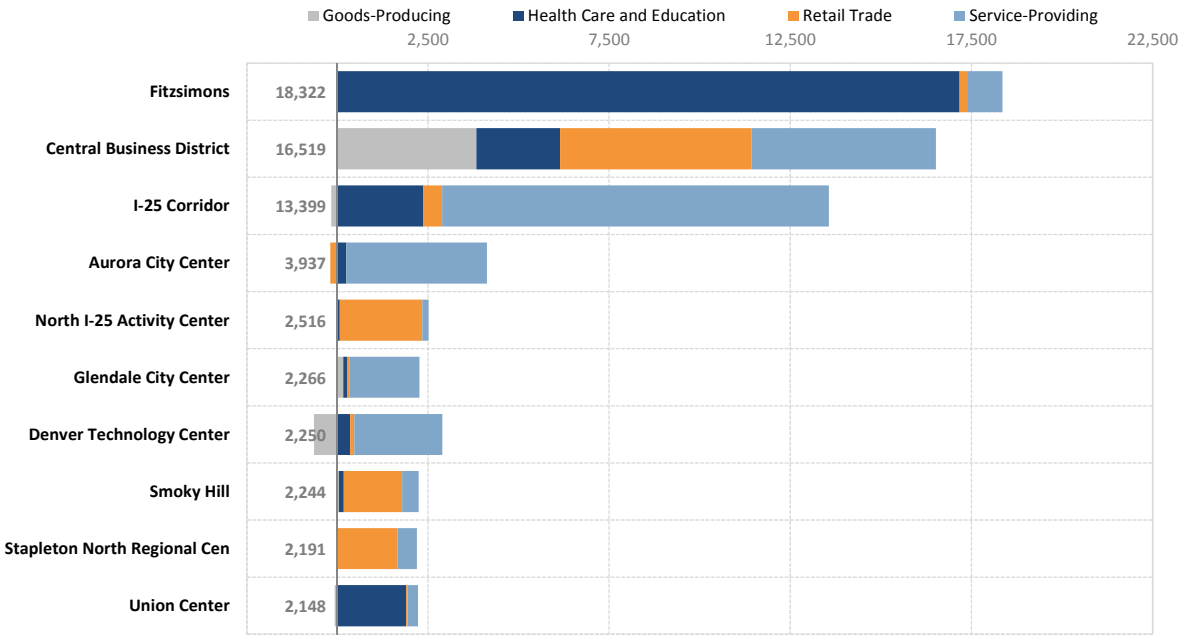
The employment mix in the top 20 quartile of Urban Centers (based on total employment) is truly mixed use with a variety of office, retail, hospitality, and production jobs). The industry mix in second quartile of Urban Centers is less mixed use and less diverse, containing a large number of centers with Retail, Accommodations, and Food Services jobs as the largest industries. These smaller Urban Centers are functioning as retail and household service locations for a community level trade area rather than regional economic engines with a high concentration of economic base jobs.

Figure 15
Employment by Industry, 10 Largest Urban Centers by Number of Jobs, 2013



Source: Economic & Planning Systems

Figure 16
Top 10 Urban Centers for Employment Growth, 2005-2013



Source: Economic & Planning Systems

Urban Centers are important to many of the objectives of Metro Vision, including reducing vehicle miles traveled and single occupancy vehicle use, increasing regional density, improving air quality, and providing diverse housing options. The concentration of job growth – 70 percent of the DRCOG region's job growth - in three Urban Centers illustrates the regional benefits the Urban Centers can create. With good transit and multimodal access, impacts to the region's roadways and environment are minimized. A more dense development pattern and vertically integrated mixed use reduces land and other resource consumption. While difficult to quantify, numerous economists have identified the benefits of agglomeration economies – faster and efficient knowledge sharing and business to business interactions that can occur in dense urban environments.

Housing Growth

Data on housing unit growth in Urban Centers is not readily available for the same 2005 through 2014 time period analyzed for employment growth, but is available for from the Metro Vision 2035 benchmark (starting point) of 2005 through 2010. Over this time period, Urban Centers captured 21.1 percent of housing growth in the DRCOG region. From 2005 through 2010, 18,550 housing units were constructed in Urban Centers while 87,798 were constructed outside Urban Centers (**Table 9**).

The 2005 through 2010 time period may not be indicative of long term trends because it includes the 2008 through 2010 housing recession. The boom in apartment construction that has occurred from approximately 2010 through at least 2014 will likely increase the amount of housing in Urban Centers during these years, but the recent trend is unlikely to be sustainable. As single family housing construction recovers, the portion of housing built in urban centers will decline.

Table 9
Urban Centers Housing Unit Growth, 2000-2010

Year	Total number of units built that year in urban centers	Total number of units built in that year in region	Percent of units built in that year in urban centers
2005	3,996	26,636	15.0%
2006	3,565	22,417	15.9%
2007	3,277	16,026	20.4%
2008	3,660	12,673	28.9%
2009	3,501	8,903	39.3%
2010	551	1,143	48.2%
2005-2010 Totals	**18,550**	**87,798**	**21.1%**

Source: DRCOG; Economic & Planning Systems

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Recommendations

The objective of capturing 75 percent of the jobs in Urban Centers is aggressive but reasonable for long range planning purposes, given that 55 percent of new jobs have located in Urban Centers from 2005 through 2013. However, a small number of Urban Centers have captured the vast majority of job growth. The purpose of Urban Centers is to promote higher density, mixed use, transit accessible places with diverse housing choices. Based on the data shown above, only a small number of Urban Centers are being built in this manner. The Urban Centers policy should accommodate emerging centers with the potential to be major employment and housing locations. However some additional criteria may be needed to ensure that Urban Centers have a reasonable potential to become true Urban Centers as originally envisioned. DRCOG should also determine whether alternative ways of measuring this objective are needed, such as moving from to a percentage of regional jobs based metric, rather than the 75 percent of new jobs metric that is difficult to measure as defined.

The goal of locating half of the DRCOG region's new housing in Urban Center's may be overly aggressive, given that only 21 percent of new housing has occurred in Urban Centers since 2005. DRCOG should consider revising this goal and how it is measured to account for the types of housing mostly likely to be built in, and most appropriate to be in Urban Centers. Single family (detached and attached) housing is not the most efficient use of land in Urban Centers, and does not generally contribute to transit ridership as much as condominium or apartments. Single family housing has historically been 60 to 70 percent of the region's housing construction, leaving 30 to 40 percent multifamily (condo and apartment) housing. Going forward, the single family portion of the market may decline, but it is not likely to go below 50 percent of the market on a long term basis.

A revised objective could be considered to target a percentage of new multifamily housing in Urban Centers. If this objective is 75 percent of new multifamily housing, and multifamily housing is estimated at 50 percent of the total, the objective would equate to 37.5 percent of total housing growth (50 percent X 75 percent = 37.5 percent).

Last Mile Connections

FasTracks has greatly expanded regional mobility by transit. However, connections from many regional transit stations (express bus and rail) to the ultimate destination or origin of a trip (a job, place of residence, or other service) need to be improved. The economic benefit of the regional mass transit system is not being fully realized without better access and connections for the "first and last mile" of a transit trip. With more convenient and safer access, stations will be more attractive to developers and employers, which will further increase the number of jobs and homes easily accessed from transit. The labor force will benefit from easier commutes, and the region will be more attractive to employers and employees who value transit access. Being able to safely access transit stations and jobs that are accessible by transit is important to all workers, especially those who cannot drive due to ability or income.

The importance of improving last mile connections is highlighted in the analysis of wage levels within a half-mile radius of FasTracks stations presented in Chapter 3. The majority of existing and planned FasTracks stations, including those under construction, already have a large number of jobs and employers that pay living wages. Thus there is a major opportunity to expand access to good paying jobs by improving last mile connections.

The last mile issue has been noted at all levels including regional and county EDOs, local planners, employers and real estate interests, and RTD at the transit corridor and station level. Several interviewees simply stated "solve the last mile problem."

Solutions to the last mile problem are localized as they depend on the specific conditions at each station and include property ownership, infrastructure locations and barriers, existing and planned development, the overall land use pattern, and the number and type of trips (home-work or non-work). Last mile solutions need to be implemented at the local jurisdiction and station level. The parties needed to support last mile solutions at a transit station include property owners, real estate developers, employers, local planners and engineers, and local elected officials.

Recommendations

Last mile connections are largely a local economic development, transportation, and land use planning problem. Cumulatively, however, the lack of good last mile connections affects the regional economy. The solutions, funding, and implementation steps need to happen largely at the local level through partnerships with property owners and developers, employers, local governments, transportation management authorities (TMAs), transportation service providers (car and bike share services), and RTD. While DRCOG will not likely be involved in direct implementation roles, it can assist in supporting and expanding the region's understanding of the challenges and best practices for addressing those challenges.

- Include an outcome and objective in Metro Vision related to improving station connections to jobs, housing, and services.
- Work with RTD to track progress on last mile connections and build on the work that RTD has begun in this area. RTD is developing and beginning to track metrics that measure qualitative and quantitative urban design characteristics, and quantitative market and economic measures of TOD performance at stations. The metrics include mode of travel to stations, travel times to stations, miles of sidewalk, miles of bike lanes and off-street paths, street grid density, walk and bicycle access scores, and socioeconomic statistics.
- Establish a technical committee charged with identifying best practices and funding sources to supplement local and DRCOG funds for implementing last mile solutions. Determine if DRCOG can access additional funding such as Transportation Alternatives Programs (TAP) or CMAQ funds to apply to last mile projects.
- Consider an adjustment to the TIP scoring criteria to favor projects that address last mile issues, as opposed to general roadway projects, with economic development and equity benefits.

Housing

Housing is a broad topic that affects people and employers in different ways and depends largely on income and socioeconomic status. Housing is a critical link in economic self-sufficiency and ultimately regional economic sustainability.

- Affordable housing concentrated in Denver and Adams County, far from jobs and good schools.
- Good housing/ lifestyle options for middle and high wage workers.
- Suburban employment centers need more diverse and affordable housing options.

For economic developers and employers focused on middle to high wage jobs, it was suggested that Metro Denver has a variety of good housing and lifestyle options close to jobs and within a reasonable commuting distance. However, for lower wage workers, disadvantaged populations, and first generation Americans, equity-oriented interviewees noted that suitably priced housing is often located farther from good paying jobs and educational opportunities. Transit access, especially rail, does not serve these areas as well as it does the more affluent neighborhoods and white collar employment districts.

The Regional Housing Strategy (RHS) completed for DRCOG by BBC Research found that the region's rental housing affordable to households earning less than $25,000 per year is concentrated in the City and County of Denver County (22 percent) and Adams County (15 percent). In addition, homes priced under $250,000 are concentrated in areas with low quality elementary schools. Most affordable housing is also located far from major employment centers. Lower income residents therefore have poor access to the foundational education needed to build a strong regional labor force, and poor access to job opportunities.

Economic developers working in Metro Denver's major employment centers and corridors, and real estate developers working on FasTracks corridors noted that Colorado's construction defects legislation is a constraint to expanding for-sale housing options (condominiums) with transit access. Economic developers and employers report that more diverse housing options, including higher density ownership and rental options are needed outside Downtown Denver to attract younger skilled workers, and to provide options for older employees who seek smaller lower maintenance housing options.

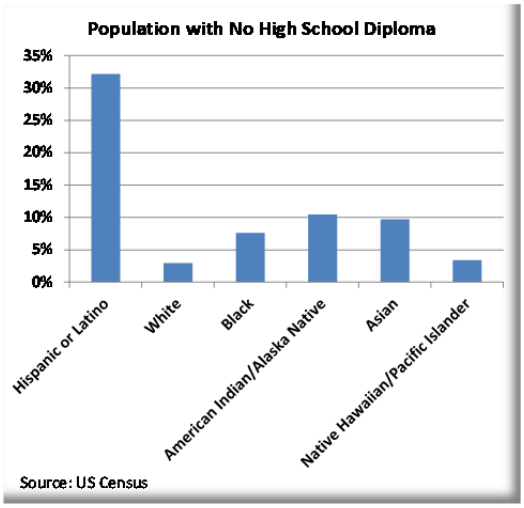
Recommendations

- Metro Vision 2040 should include a Housing Element that addresses all aspects of housing as it relates to regional equity, opportunity, and economic sustainability.
- Metro Vision 2040 should elevate the need to expand housing diversity and provide more affordable options in job rich centers with little or no housing.
- DRCOG's role in studying the effects of the construction defects legislation was an effective engagement in regional and state legislation and policy. DRCOG should continue to engage in legislative and policy issues that affect economic sustainability and equity.
- Infrastructure conditions at many transit stations need to be improved in order to make them attractive to residential developers and residents. DRCOG's and RTD's role in finding solutions to the last mile problem will also help to increase the housing supply around transit stations.

Equitable Growth

Chapters 2 and 3 of this report identified several demographic and socioeconomic trends occurring in the DRCOG region that are threats to economic vitality. They include:

- The spread of poverty to suburban locations;
- Low educational attainment in the Hispanic and Latino population, the fastest growing segment of our population;
- The reliance on importing skilled labor and the related lower education levels of native Coloradoans compared to non-native Coloradoans; and
- In low income areas, generally poor access to jobs, job resources, and services needed to enable people to enter the labor force (e.g. affordable and accessible childcare).



Poverty, while still extensive in Denver and Original Aurora, has spread to much broader geographic areas in suburban communities. This should concern regional and local officials as the demand for social services and affordable housing will further constrain local budgets and detract from quality of life.

The gaps in education across races and native and non-native Coloradoans suggest that the education system is not keeping pace with the needs of the workforce. An untrained workforce will be a hindrance on the economy. Social service demands could increase, diverting public funds from more productive uses. A regional a statewide effort is needed to improve the quality, availability, and accessibility of K-12 and beyond education, including better career pipeline development between educators and employers, and more resources for adult education.

Solving last mile problems, increasing service in lower income areas, providing reduced fares based on income, expanding affordable housing, and creating more transit accessible affordable housing close to jobs are part of a comprehensive regional strategy towards more equitable distribution of economic growth and opportunity. More resources and more locations for job search assistance and job training are also needed.

Recommendations

- DRCOG could consider forming an Equity Committee to elevate equity issues in the long-term planning and short-term TIP processes. This Committee could also be a forum for additional regional partnerships and information sharing. Other MPOs profiled in this research engage with housing advocates, homeless advocates, minority populations, educators, and workforce developers to give them a voice in processes and decisions.
- DRCOG could convene periodic meetings or presentations on equitable job and opportunity access issues to highlight the work that is being done by other organizations in Metro Denver, and to identify areas where DRCOG could assist in its role as a regional data provider and convener.
- DRCOG could support a study of changes in the RTD fare structure to provide more flexibility to low income riders. A funding source may need to be identified if the increase in riders resulting from a reduced fare does not offset the decrease in the fare.
- DRCOG could consider an element or sidebar summary in Metro Vision 2040 that highlights the pressing equity needs at the regional level. Alternatively, equity considerations could be woven into each element of Metro Vision 2040. DRCOG should continue to support and build on the indicator work contained in the Regional Equity Atlas being carried forward by DRCOG and the Piton Foundation. Indicators could be published annually by DRCOG on the locational and transit accessibility of services, locations of affordable childcare, living wage jobs, job search resources, and education and training facilities that are accessible from transit. Graduation rates, educational attainment by race, poverty, and other metrics could also be included to track the region's progress.

6. ECONOMIC STRATEGY RECOMMENDATIONS

The recommendations outlined below are based on input from economic development organizations, RPAs, and other stakeholders, a review and analysis of Metro Vision 2035, and research into how other regions and regional planning agencies have integrated economic health and vitality into their regional plans and processes. The recommendations are grouped in three major topic areas: Metro Vision Plan, Economic Data and Analysis, and Partnerships and Collaboration.

Metro Vision Plan

1. ***Integrate into Metro Vision the principles of economic vitality and prosperity, environmental quality, and social wellbeing and equity.***

   Metro Vision 2040 should expand on the importance of the economy to the overall sustainability of the region. Economic vitality can be addressed by policies that support the region's quality housing choices, Urban Center development, and first and last mile connections to and from mass transit stations.

   Most if not all of the other RPAs receiving HUD Sustainable Communities Regional Planning Grants have embraced a broad definition of sustainability including economic vitality, social well-being, and environmental preservation into their regional plan's overall vision, goals, and principles. One of the best examples is the Puget Sound Regional Council's *Vision 2040* plan which is an integrated, long range vision for maintaining a healthy region and for promoting the well-being of people and communities, economic vitality, and a healthy environment. The theme of *Vision 2040* is based on the concept of people, prosperity, and planet, and takes an integrated approach to social, cultural, economic, and environmental benefits in land use, growth, and transportation decisions.

2. ***Include an economic sustainability element in Metro Vision.***

   Metro Vision 2040 should include detailed outcomes and objectives supporting regional economic development and workforce development by capitalizing on the location efficiency of places that connect housing, jobs, amenities, and other quality of life resources. The Plan should therefore include an economic element based on sustainable development principles of economic health and vitality. The economic element should have its own outcomes and objectives, and there should be equal attention paid to economic vitality development, business, and workforce needs. The objectives should address the relationship of the region's critical assets to economically healthy and prosperous region, including transportation and other infrastructure, education and workforce development institutions, quality built environment, housing affordability and choice, environmental protection, and overall quality of life.

   The Economy Policy section of PSRC's *Vision 2040* takes a broad and integrated perspective with an overall goal: "The region will have a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people, sustaining environmental quality, and creating great central places, diverse communities, and a high quality of life."

3. ***Urban Centers have been effective in attracting employment to transit-accessible locations, but less effective in shifting regional housing growth patterns. Of the 104 designated Urban Centers, only a few so far have attracted mixed use employment and housing development at a regionally significant scale.***

   Urban Centers are intended to be "active, pedestrian-, bicycle-, and transit-friendly places that are more dense than their surrounding areas". They are also intended to be connected by a "robust multimodal [transportation] network". Promoting these types of places supports many Metro Vision objectives including improving access to employment for all ages and abilities, reducing land and resource consumption, respecting existing neighborhoods, and promoting several environmental quality objectives related to reducing single occupancy vehicle use.

   Within the Urban Centers policy there is an objective to capture 75 percent of new jobs and 50 percent of new housing, at the regional level, in Urban Centers. From 2005 through 2013 55 percent of the region's change in employment occurred in Urban Centers, indicating that 75 percent goal for employment is a reasonable long range planning objective. However, three Urban Centers accounted for 70 percent of the job growth while the remaining 101 Urban Centers accounted for the remaining 30 percent. This suggests that, while the Plan should accommodate emerging Urban Centers, there are designated Urban Centers that may not develop in the manner envisioned in the foreseeable future.

   DRCOG should determine if the object of locating 50 percent of new housing in Urban Centers needs to be revised or measured differently. Only 21 percent of new housing has occurred in Urban Centers since 2005, compared to 55 percent of the change in employment. A revised objective and metric could account for the types of housing mostly likely to be built in, and most appropriate to be in Urban Centers. A revised objective could be considered to target a percentage of new multifamily housing in Urban Centers, as multifamily housing is a more efficient use of land in Urban Centers than single family housing, and typically supports more transit ridership, and can provide more affordable options.

Economic Data and Analysis

4. ***Increase DRCOG's interaction with local communities to review socioeconomic data and forecasts.***

   DRCOG is now using a new land use forecasting model, UrbanSim, for population and employment forecasts at the transportation analysis zone (TAZ) level to replace an outdated spreadsheet based model. These forecasts provide the land use inputs to DRCOG's Focus and Compass transportation models. The UrbanSim model's forecasts are based on development trends, development capacities, local zoning, and planned development. DRCOG has recently worked with local jurisdiction planners to calibrate the land use inputs to UrbanSim. However, the perception that "DRCOG's data is wrong" still persists among economic developers. As the new model techniques and processes mature, economic developers and planners will become more familiar with the new model and data. Nevertheless, DRCOG should ensure that there is a process for local jurisdictions to provide their input into the regional model, and that there is a process for DRCOG to communicate and explain the results and methodologies and the need to maintain reasonable control totals at the regional level. This will likely increase acceptance and understanding of the model among planners and economic developers.

5. Strengthen DRCOG's economic analysis program and include key indicators to measure changes in economic vitality and performance within the region.

A number of EDOs interviewed felt DRCOG should provide more economic data analysis and forecasts for the region. Many RPOs are the "go to" source for economic data in their region while DRCOG relies on the State Demographer's Office in the Colorado Department of Local Affairs (DOLA) for county level population, household, and employment data. DRCOG should partner with DOLA to provide accepted trend data and forecasts for Metro Denver and the nine-county DRCOG region, and position itself as the source for Metro Denver economic and socioeconomic data. DRCOG is already taking steps toward this objective; constructing a new macroeconomic forecasting model for the region is in the work program for 2014 and 2015.

We recommend that DRCOG track two sets of indicators: one on competitiveness compared to other U.S. metro areas, and another to measure economic vitality conditions within the Denver Region. Neither the Metro Denver EDC nor DRCOG have engaged in a regularly updated formal analysis of economic indicators comparing Metro Denver to its primary competitor regions. This Study includes a preliminary analysis of traditional economic indicators in Metro Denver and its primary competitors. The analysis shows that Metro Denver competes well in educational attainment, quality of life, and in attracting skilled labor. Metro Denver's main competitive disadvantage was a higher cost of business than the other primary competitors, although Metro Denver's business costs still rank below the U.S. average.

In order to better measure economic vitality within the Denver region and to track progress on equity issues, a different set of economic indicators should be developed. These indicators would track important measures of economic and social health and the differences by location within Metro Denver to inform the equitable distribution of resources and investment. Indicators or metrics could include household income, employment productivity, average wage levels, unemployment, educational attainment, and any number of social health and equity indicators. DRCOG's collaboration with Mile High Connects, Reconnecting America, and the Piton Foundation on the Regional Equity Atlas is a productive partnership. DRCOG should continue to promote and contribute to this work so that it stays relevant. A number of the more progressive RPOs provide economic sustainability indicators and benchmarks including SANDAG, MARC, and Met Council.

6. Complete a comprehensive study of commuting patterns for major employment centers.

A number of EDOs indicated that more detailed commuting data for major employment centers is needed to understand the specific commute patterns and needs. These data would inform regional transportation planning, last mile solutions, and employer activities such as EcoPass participation, ridesharing, and other transportation demand management (TDM) programs. This study would require additional resources to complete a comprehensive survey on a periodic basis. While some of this information can be obtained from the U.S. Census Transportation Planning Package, the information is dated and difficult to work with for non-technical staff.

Partnerships and Collaboration

7. Create an economic development committee to elevate the dialogue on economic health and sustainability in the region.

This Study initiated a discussion with economic development stakeholders around growth and development issues of common interest between economic development and community and infrastructure development organizations. The outcome of these discussions was acknowledgement that although the roles and time orientation of each sector are different (i.e., short-term vs. long-term), there is a common interest in maintaining and growing the economic health and vitality of the region.

We have observed from other RPAs that more direct engagement with local, state, and regional economic developers can result in successful plans, infrastructure projects, and partnerships that contribute to regional economic development and sustainability. The drafting and implementation of Metro Vision 2040 as well as the discussion of other regional growth issues will therefore benefit from expanding these dialogues and partnerships. While an economic development committee or partnership at DRCOG might not have final say in funding or planning decisions, its input would provide an economic lens through which decisions would be viewed and improve collaboration between DRCOG, the private sector, and economic developers.

8. Strengthen DRCOG's role as a convener of forums on regional growth and development issues.

Staff from other RPAs interviewed for this study described their organizations' roles in the economy as "a hub of collaboration" or "conveners and analysts." There is an opportunity to strengthen DRCOG's role and visibility in Metro Denver by engaging and collaborating with a wider cross-section of groups and interests beyond the infrastructure and land use planning realm. Other RPAs profiled in this research engage with major public, private, and non-profit institutions; professional economic development organizations; and the equity community composed of housing advocates, homeless advocates, minority populations, educators, and workforce service providers. While the RPAs are not typically involved in direct implementation and funding actions, they serve to help identify innovative work or successes in their regions, connect people with expertise on similar issues, and generally increase the visibility of sustainability and economic vitality issues and solutions.

9. Convene a regular meeting of mayors, city and county managers, and other important city and county staff or elected officials.

The Maricopa Association of Governments (MAG) reported that one of its most successful partnerships has been regular meetings with mayors and city managers to discuss regional issues and solutions. Mayors and city managers work in both the long-term horizon of city planners and the shorter term horizon of economic developers and elected officials. Bringing this perspective together has helped the MAG region gain a collective understanding of common regional issues, identify strategic planning projects, and inject a shorter term perspective into long range planning and transportation planning and funding actions. DRCOG could explore implementing a similar process in Metro Denver to build on or collaborate with the Metro Mayors Caucus.

10. Explore the feasibility of designating economically distressed areas of the region as an Economic Development District under the Federal Economic Development Administration.

Many of regions of size and economic vitality comparable to Denver have qualified as EDDs and capitalized on associated EDA funding and technical assistance. A cursory look at the EDA criteria for the Denver region indicates that the region as a whole would not qualify under current economic conditions, but that parts of the metro area might meet the criteria.

11. Look for additional opportunities to partner with and provide technical assistance to communities, building on the popularity of DRCOG's Boomer Bond Program.

DRCOG's Boomer Bond initiative is helping local governments around the region create age-friendly physical and social environments that allow older adults to remain in their homes and communities for as long as they desire. With support from numerous stakeholders and AARP-Colorado, DRCOG created the Boomer Bond Assessment Tool to help communities evaluate existing resources, programs, and infrastructure. Several communities around the region have started the process to evaluate their community's capacity to support healthy and successful aging. A companion toolkit of best practices is currently being developed and will be available by the end of 2014.

12. Facilitate public/private partnerships to improve last mile connections at regional transit stations.

Economic developers and businesses have stated that poor first and last mile connections to transit stations are an impediment to realizing the economic benefits of the region's developing transit system. DRCOG's survey of local governments also identified this as a priority issue. From RTD's perspective, improving last mile connections will increase ridership, system revenues, and financial sustainability. The ability to safely and conveniently get to mass transit stations affects all workers and residents regardless of socioeconomic status.

Improving last mile connections must take into account localized conditions around stations including: the street grid, bike and pedestrian system, property ownership, infrastructure locations and barriers, and existing and future development plans. DRCOG can provide an important role as a convener and facilitator between local communities, station area developers, and RTD. DRCOG could form a technical committee charged with identifying best practices and funding sources for implementing last mile solutions. This would also result in more information sharing and highlighting of best practices, thereby raising the collective knowledge on how to address last mile challenges in their local communities.

Appendix

Economic Indicators Report
Employment by Industry, DRCOG Urban Centers, 2013
Change in Employment in Urban Centers, 2005-2013
List of Stakeholders Interviewed

ECONOMIC INDICATORS

Indicators Selected

Part of defining a role for DRCOG is evaluating how Metro Denver compares to other successful regions in North America and potentially other global cities. Broadly, we know that economic opportunities, business costs, the quality of the education system, an efficient and convenient transportation system, and a high quality of life are important factors in business and individual location decisions. This section offers a concise summary of the economic, quality of life, and transportation attributes of Metro Denver and its competitive metro areas to inform this project.

The indicators selected for the benchmarking analysis, developed in conjunction with the Metro Vision Planning Advisory Committee (MVPAC), are a combination of those that represent baseline economic conditions, as well as those that may help to identify and track Metro Denver's competitive position. Further, the indicators selected are related to and provide potential measures of DRCOG's role in promoting and sustaining a vibrant environment for businesses and individuals. The indicators selected for this analysis are:

- Employment and Business Assets
  - The proportion of jobs in low, mid, and upper level wage industries
  - Educational attainment of the population 25 years and older
  - Business cost index
- Population and Quality of Life Assets
  - Population growth by age cohort
  - Net migration
  - Median household income and income distribution
  - Median single-family home price and home affordability index
  - Housing and transportation (H+T) affordability index
  - Cost of living index
  - Air quality
- Transportation Access
  - Roadway congestion index
  - Commute by means of transportation
  - Average commute time and distribution of workers by commute time
  - Nonstop domestic and international flight destinations

Competitor Cities

Through the interview process and an analysis of prospect data for the period from 2003 – 2013 provided by the Metro Denver Economic Development Corporation, we identified six regions with which Metro Denver competes frequently for business expansions and relocations. These six cities are (in order of frequency of competition):

- Phoenix, Arizona
- Dallas, Texas
- Salt Lake City, Utah
- Austin, Texas
- Atlanta, Georgia
- Portland, Oregon

While main competitor locations vary according to the type of industry, these cities were selected because they are ones that have been the successful location for company expansions in a variety of industries in which Metro Denver was also a contender, or they appeared on the "short list" of cities considered by companies planning to relocate or expand operations. The following analysis describes the strengths and weaknesses of a Metro Denver location compared with these six cities for each of the indicators.

Methodology

The analysis of each indicator highlights why the indicator is important and describes how Metro Denver compares with the competitor cities. The analysis includes the most current data for the indicator and, when applicable, a comparison of the data for the past five years. A description of the indicator detailing the data source and data specifics is also provided so that the indicator may be updated on a regular basis.

Unless otherwise indicated, data is presented for the metropolitan statistical area that includes the named central city. Specifically, the areas are defined as follows:

City	Metropolitan Statistical Area (MSA)	Counties Included
Atlanta	Atlanta-Sandy Springs-Roswell, GA MSA	29 Counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton
Austin	Austin-Round Rock, TX MSA	5 Counties: Bastrop, Caldwell, Hays, Travis, and Williamson
Dallas	Dallas-Fort Worth-Arlington, TX MSA	13 Counties: Collin, Dallas, Denton, Ellis, Hunt, Kaufman, Rockwall, Hood, Johnson, Parker, Somervell, Tarrant, and Wise
Metro Denver	Denver-Aurora-Lakewood, CO MSA + Boulder, CO MSA	11 Counties Total: 10 County Denver MSA: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, and Park PLUS 1 County Boulder MSA: Boulder
Phoenix	Phoenix-Mesa-Scottsdale, AZ MSA	2 Counties: Maricopa and Pinal
Portland	Portland-Vancouver-Hillsboro, OR-WA MSA	7 Counties: Clackamas, Columbia, Multnomah, Washington, Yamhill, Clark, and Skamania
Salt Lake City	Salt Lake City, UT MSA	2 Counties: Salt Lake and Tooele

This report concludes with a summary table displaying Metro Denver's rank compared with the other competitor cities for each indicator.

Part of evaluating Denver's economic health and success is comparing the region's performance relative to its regional and national competitors. Broadly, economic opportunities, business costs, the quality of the education system, an efficient and convenient transportation system, and a high quality of life are important factors in business and individual location decisions. The 14 indicators, developed in conjunction with the Metro Vision Plan Advisory Committee (MVPAC), represent baseline economic conditions as well as those that may help to identify and track Metro Denver's competitive position with respect to the primary business location factors. The indicators selected are also related to and provide potential measures of DRCOG's role in promoting and sustaining a vibrant environment for businesses and individuals.

The Consultant Team compared economic indicators in Metro Denver against the six regions which Denver competes with most frequently for business expansions and relocations. The selected metropolitan area competitors were identified from Metro Denver EDC's prospect database. Listed in order of frequency of competition they include: Phoenix, Arizona; Dallas, Texas; Salt Lake City, Utah; Austin, Texas; Atlanta, Georgia; and Portland, Oregon. While main competitor locations vary according to the type of industry, these metro areas were selected because they are ones that have been the successful location for company expansions in a variety of industries in which Metro Denver was also a contender, or they appeared on the "short list" of cities considered by companies planning to relocate or expand operations. The following analysis describes the strengths and weaknesses of a Metro Denver location compared with these six metro areas for each of the indicators.

The analysis of each indicator highlights why the indicator is important and describes how Metro Denver compares with the competitor metro areas. The analysis includes the most current data for the indicator and, when applicable, a comparison of the data for the past five years. A description of the indicator detailing the data source and data specifics is also provided so that the indicator may be updated on a regular basis.

Employment and Business Assets

1. Proportion of Jobs in Low, Mid, and Upper Level Wage Industries

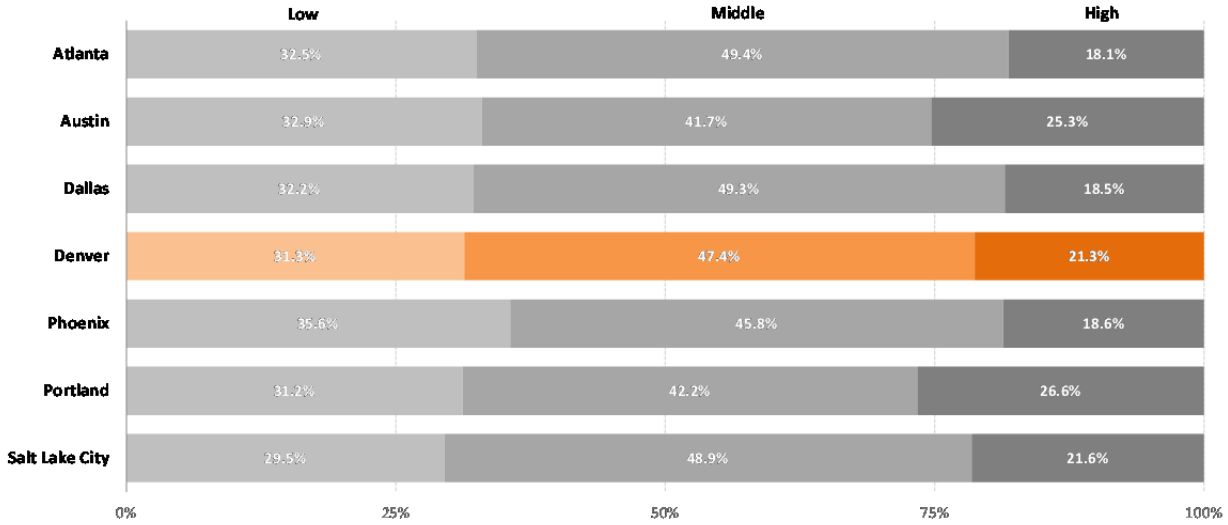
A high proportion of mid to upper level wage industries indicates the importance of skilled labor to the region's employment base. Mid to upper level wage industries increase the wealth of a region and contribute to economic well-being.

Indicator – The analysis was based on average wage for the 20 two-digit North American Industry Classification System (NAICS) sectors obtained from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) data. The sectors were ranked from lowest to highest for each competitor city; the order of the sectors generally differs for each competitor region. Mid-level wage industries comprise the middle eight sectors in each competitor city. Low-level industries comprise the bottom six sectors and high-level industries comprise the top six sectors.

Analysis – Low-level wage sectors represented slightly less than one-third of the employment in all of the competitor metro areas, ranging from 29.5 percent to 32.9 percent of jobs in 2012 (**Figure A1**). The sole exception was Phoenix (35.6 percent), which had the highest proportion of low-wage workers. Salt Lake City, Portland, and Denver had the lowest percentages of low-wage workers among the competitor cities. Five of the seven metro areas had increases in their percentage of low-wage workers from 2007 to 2012, including Denver with Phoenix and Salt Lake City as the only competitors to post declines.

In 2012, Atlanta and Dallas had the highest proportions of mid-level wage earners among the competitor metro areas. In contrast, Austin and Portland had the lowest. Austin was also the only metro area with an increase in its proportion of mid-level workers from 2007 to 2012. Over the same time, Portland posted a 6-percentage point decrease in its proportion of mid-level workers, from 48.2 percent to 42.2 percent.

Figure A1
Proportion of Jobs in Low, Mid, and Upper Level Industries, 2012



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Development Research Partners

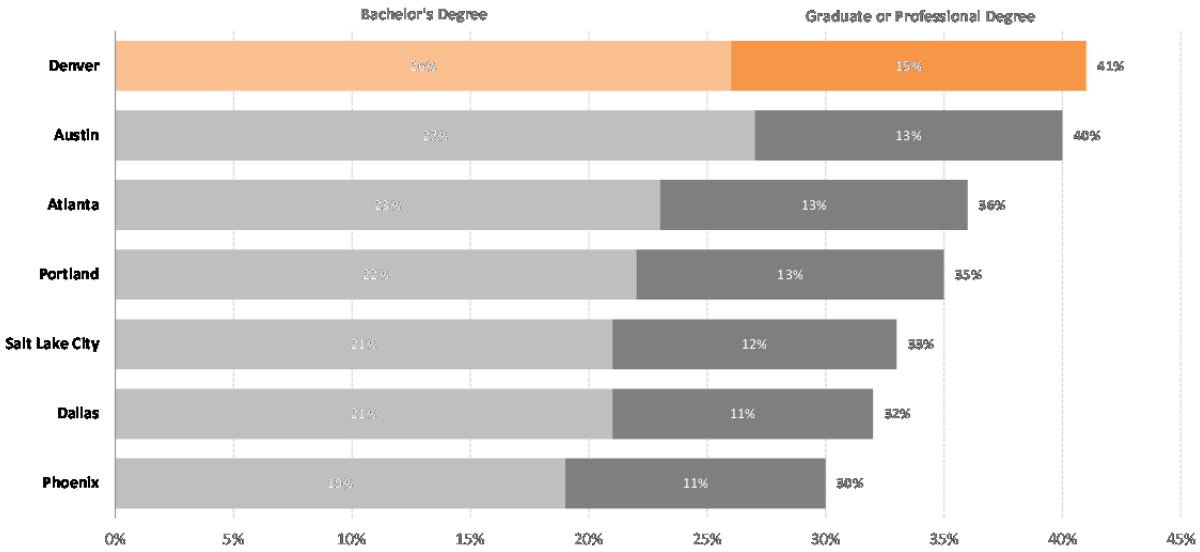
2. Educational Attainment

Access to a skilled and talented workforce is critical to the success of a business or firm. Moreover, individuals that have achieved a higher level of education not only earn higher wages, but they generally have lower rates of unemployment and greater economic mobility.

Indicator – This indicator quantifies the percent of the population 25 years and older by levels of educational attainment for two categories: the percent of the adult population with a bachelor's degree as their highest degree and the percent with a graduate or professional degree.

Analysis – A strong indicator of the level of education of a population is the percentage of the population that has received a bachelor's degree or a graduate or professional degree. Among the six cities analyzed throughout this report, Denver has the highest percentage of individuals with a bachelor' degree or higher, as shown in **Figure A2**. In 2012, approximately 26 percent of the population in Denver had a bachelor's degree as their highest degree and 15 percent of the population had a graduate or professional degree, resulting in a total of 41 percent of the population in Denver that had a bachelor's degree or a graduate or professional degree. Austin had the second highest level of educational attainment, with 40 percent of its population receiving a bachelor's degree or graduate or professional degree. Although a higher proportion of the population in Austin received a bachelor's degree (27 percent compared to 26 percent in Denver), a lower proportion of the population received a graduate or professional degree (13 percent compared to 15 percent in Denver). Phoenix had the lowest level of higher educational attainment. Only 30 percent of the population in Phoenix received only a bachelor's degree or a graduate or professional degree in 2012.

Figure A2
Educational Attainment, Population 25 Years and Older, 2012



Source: U.S. Census Bureau; Development Research Partners

Denver also had the highest growth rate in higher level educational attainment between 2007 and 2012, as shown in **Table A1**. Between 2007 and 2012, the percentage of the population that received a bachelor's degree or graduate or professional degree increased by approximately 3.3 percent. These data support observations that Denver is strong in attracting well-educated labor. Salt Lake City had the second highest growth rate at approximately 3.0 percent. Of the six cities analyzed in this report, Atlanta had the slowest growth rate in higher level educational attainment at only 1.2 percent.

Table A1
Educational Attainment, Population 25 Years and Older, 2007-2012

	2007			2012			Change (2007-2012)		
Metro Region	Bachelor's Degree	Graduate or Professional Degree	Total	Bachelor's Degree	Graduate or Professional Degree	Total	Bachelor's Degree	Graduate or Professional Degree	Total
% of Total									
Atlanta	22.6%	11.5%	34.1%	22.7%	12.6%	35.3%	0.1%	1.1%	1.2%
Austin	24.9%	13.5%	38.4%	27.3%	13.2%	40.5%	2.5%	-0.3%	2.2%
Dallas	20.6%	9.3%	29.9%	21.0%	10.6%	31.6%	0.5%	1.3%	1.7%
Denver	**24.4%**	**14.0%**	**38.4%**	**26.2%**	**15.5%**	**41.7%**	**1.8%**	**1.5%**	**3.3%**
Phoenix	17.4%	9.2%	26.6%	18.6%	10.6%	29.2%	1.2%	1.4%	2.6%
Portland	21.0%	11.7%	32.7%	22.1%	13.1%	35.1%	1.1%	1.3%	2.5%
Salt Lake City	19.1%	10.3%	29.4%	20.6%	11.8%	32.4%	1.5%	1.6%	3.0%

Source: U.S. Census Bureau; Development Research Partners

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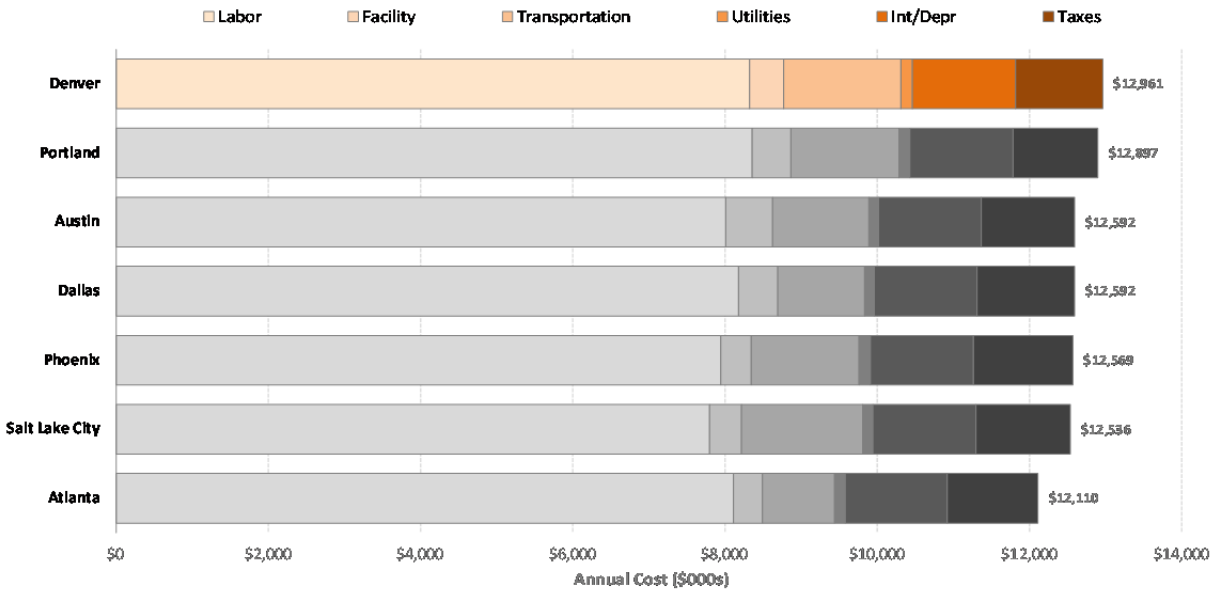
3. Business Cost Index

Business costs are an important factor in company locational decisions. Business costs not only reflect the competitive climate of cities, they influence the type and mix of jobs and industry that thrive in a specific metro area.

Description – The business cost index, published by the accounting firm KPMG, consists of six factors: labor, lease, transportation, utilities, interest/depreciation, and taxes. The KPMG Study compares seven different business-to-business service sector operations and 12 different manufacturing sector operations. The overall cost comparisons for each city are based on a 10-year average result for these two sectors. The index provides a way to compare costs between cities, both domestically and internationally, and is based on the U.S. baseline value of 100, meaning a value over 100 indicates higher costs than the U.S. average.

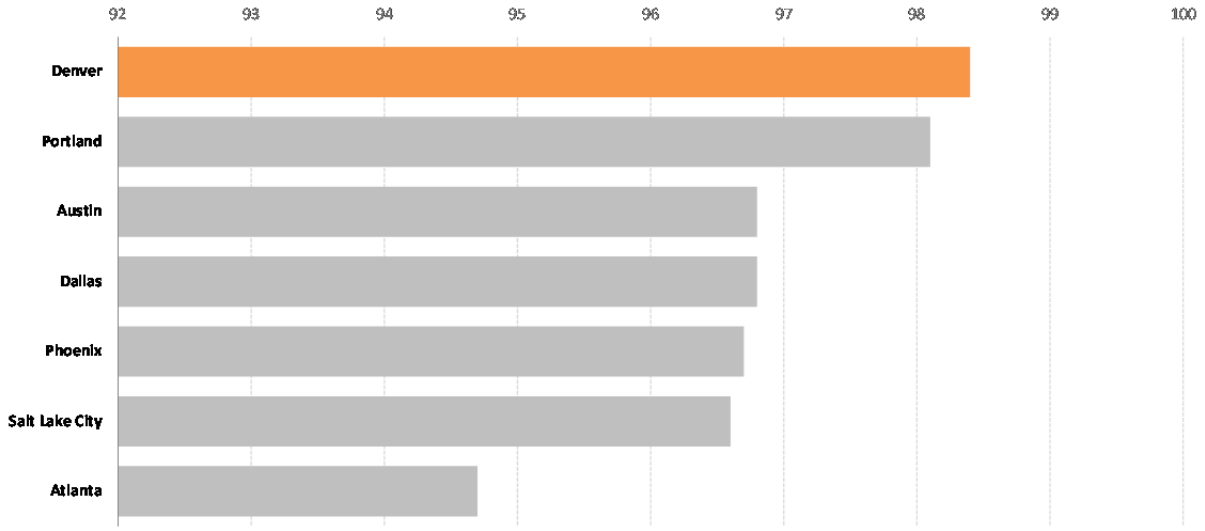
Analysis – In 2014, the Metro Denver region had slightly higher business costs than the competitor cities (**Figure A3**); however, its costs were still below the U.S. average–as were the competitor cities (**Figure A4**). Portland followed Metro Denver in second and Atlanta was the lowest cost city among the competitors. Among the six location-sensitive categories of business costs tracked by the index, labor comprised roughly two-thirds of the total. Metro Denver and Portland had the highest costs of labor among the competitor cities while Phoenix had the lowest. Transportation, including both surface and air freight, is another significant cost for the competitor cities. Among the competitors, Metro Denver and Salt Lake City had the highest transportation costs. With respect to taxes, Metro Denver had the second lowest burden among the competitor cities, while Portland had the lowest.

Figure A3
Location Sensitive Business Costs, 2014



Source: KPMG, Competitive Alternatives; Development Research Partners

Figure A4
Business Cost Index, 2014



Source: KPMG, Competitive Alternatives; Development Research Partners

Population and Quality of Life Assets

4. Population Growth by Age Cohort

Population growth consists of two factors: natural increase (births minus deaths) and net migration (the number of people moving in less the number of people moving out). The U.S. is experiencing a key shift in the age composition of the population that will influence everything from services for the elderly to tax structures and the supply of labor.

Indicator – Based on data from the Census, this indicator represents the percent change in the population from 2007 to 2012 by each of seven age cohorts.

Analysis – In terms of total population, Metro Denver was the second fastest growing area among the competitor cities from 2007 to 2012. Metro Denver's population increased by 8.5 percent between 2007 and 2012, which was more than Dallas (8.2 percent), Salt Lake City (6.0 percent), and Portland (5.3 percent), as shown in **Table A2**. However, none of the competitor cities approached the 15.1 percent change in population in Austin, which has ranked among the top 10 fastest growing metro areas in the nation for several years. The slowest growing metro areas were Atlanta which increased by 3.2 percent and Phoenix (3.6 percent).

The fastest growing age groups in the competitor cities were the 55 to 64 year age group and the 65 years and older age group. Each metro area had double-digit percent change in these age groups from 2007 to 2012, with the largest change in Austin where the 55 to 64 year old population grew by approximately 34 percent and the 65 years and older population grew by 35.5 percent (**Figure A5**). One of the slowest growing age groups in the competitor cities was the 35 to 44 year age group. This demographic group decreased in Atlanta (-6.1 percent change), Phoenix (-2.8 percent), Dallas (-0.5 percent), and Portland (-0.2 percent). The 35 to 44 year age group was also the slowest growing in Metro Denver (1.3 percent). In Austin, the 35 to 44 year age group was one of its slowest growing demographics despite growing 10.9 percent from 2007 to 2012.

Among the competitor cities, Denver had one of the fastest rates of growth in the 0 to 14 year age group and the 25 to 34 year age group. Denver's 0 to 14 year demographic grew by 5.4 percent, second only to Austin (10.9 percent) and Denver's 25 to 34 year age cohort grew by 8.5 percent compared with Austin's 14.3 percent growth.

Table A2
Population by Age Group, 2012

Age Group	Atlanta	Austin	Dallas	Denver	Phoenix	Portland	Salt Lake City
Under 14	1,176,392	388,336	1,524,445	590,693	928,312	440,046	286,943
15 to 24	744,575	269,346	914,586	376,901	601,796	284,512	167,481
25 to 34	768,525	313,792	985,411	440,953	610,747	342,812	193,778
35 to 44	832,391	279,517	976,250	425,534	585,068	332,527	158,175
45 to 54	788,406	237,964	930,432	412,164	558,135	317,430	136,410
55 to 64	594,767	185,969	690,195	347,784	472,769	290,809	114,841
Over 65	537,057	159,379	626,177	317,720	572,707	281,515	104,087
Subtotal	**5,442,113**	**1,834,303**	**6,647,496**	**2,911,749**	**4,329,534**	**2,289,651**	**1,161,715**
2007 to 2012 Percent Change	**3.2%**	**15.1%**	**8.2%**	**8.5%**	**3.6%**	**5.3%**	**6.0%**

Source: U.S. Census Bureau; Colorado State Demography Office; Development Research Partners

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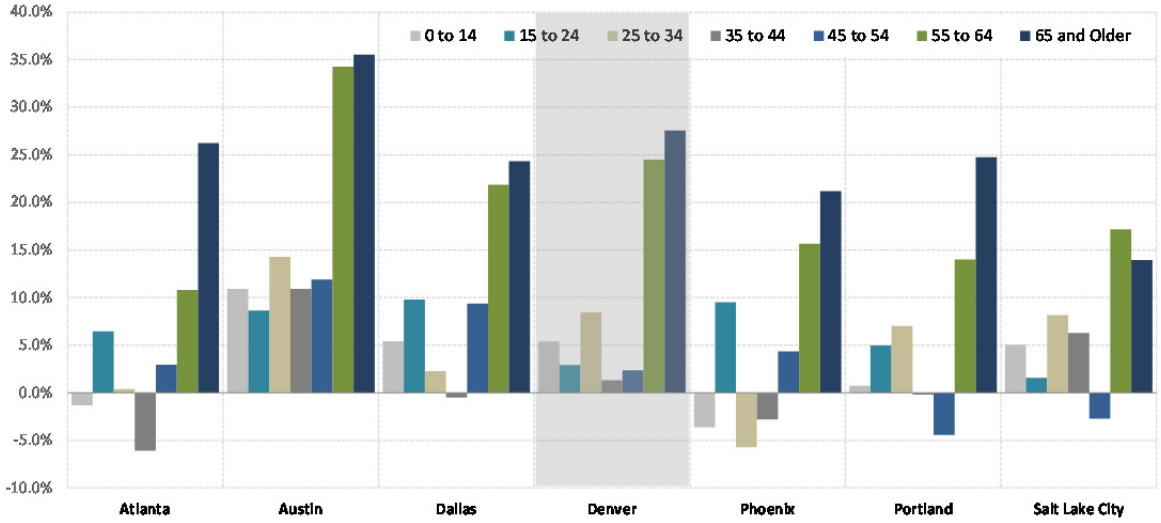
Figure A5
Percent Change by Age Group, 2007-2012



Source: U.S. Census Bureau; DOLA; Development Research Partners

5. Net Migration

Population growth is comprised of the natural increase (births minus deaths) plus net migration (the number of people moving in less the number of people moving out). Net migration reflects a region's attractiveness to labor, especially skilled labor that tends to be highly mobile; it is also a reflection of quality of life and economic opportunity.

Indicator – This indicator is the total net migration (both domestic and international) into each metro area compared with the total increase in population compiled from Census data.

Analysis – Metro Denver had the second highest share of population change attributed to net migration among the competitor cities from July 1, 2012 to July 1, 2013. At 61.8 percent, Denver trailed only Austin (65.1 percent) and was followed by Phoenix (56.9 percent), Portland (51.7 percent) and Dallas (48.2 percent), as shown in **Table A3**. As with overall population growth, the cities with the lowest migration totals were Atlanta (40.8 percent) and Salt Lake City (22.9 percent).

By far, the most migration to Denver is from other U.S. states. Domestic migration in Denver is larger than international migration by 5 to 1 and is proportionally similar to Austin and Phoenix.

Table A3
Components of Population Change, 2012-2013

MSA	Natural Increase	Domestic Migration	International Migration	Net Migration	Residual	Total Pop. Change[1]
Total						
Atlanta	39,737	11,020	16,910	27,930	846	**68,513**
Austin	16,660	25,908	5,322	31,230	51	**47,941**
Dallas	56,731	32,641	19,501	52,142	-761	**108,112**
Denver	18,573	26,536	4,868	31,404	805	**50,782**
Phoenix	29,279	32,014	8,437	40,451	1,400	**71,130**
Portland	11,607	7,901	5,280	13,181	728	**25,516**
Salt Lake City	12,739	1,227	2,562	3,789	12	**16,540**
Share of Change						
Atlanta	58.0%	16.1%	24.7%	40.8%	1.2%	**100.0%**
Austin	34.8%	54.0%	11.1%	65.1%	0.1%	**100.0%**
Dallas	52.5%	30.2%	18.0%	48.2%	-0.7%	**100.0%**
Denver	36.6%	52.3%	9.6%	61.8%	1.6%	**100.0%**
Phoenix	41.2%	45.0%	11.9%	56.9%	2.0%	**100.0%**
Portland	45.5%	31.0%	20.7%	51.7%	2.9%	**100.0%**
Salt Lake City	77.0%	7.4%	15.5%	22.9%	0.1%	**100.0%**

[1] Total population change includes a residual that cannot be attributed to any component of change.

Source: U.S. Census Bureau; Economic & Planning Systems

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6. Median Household Income and Income Distribution

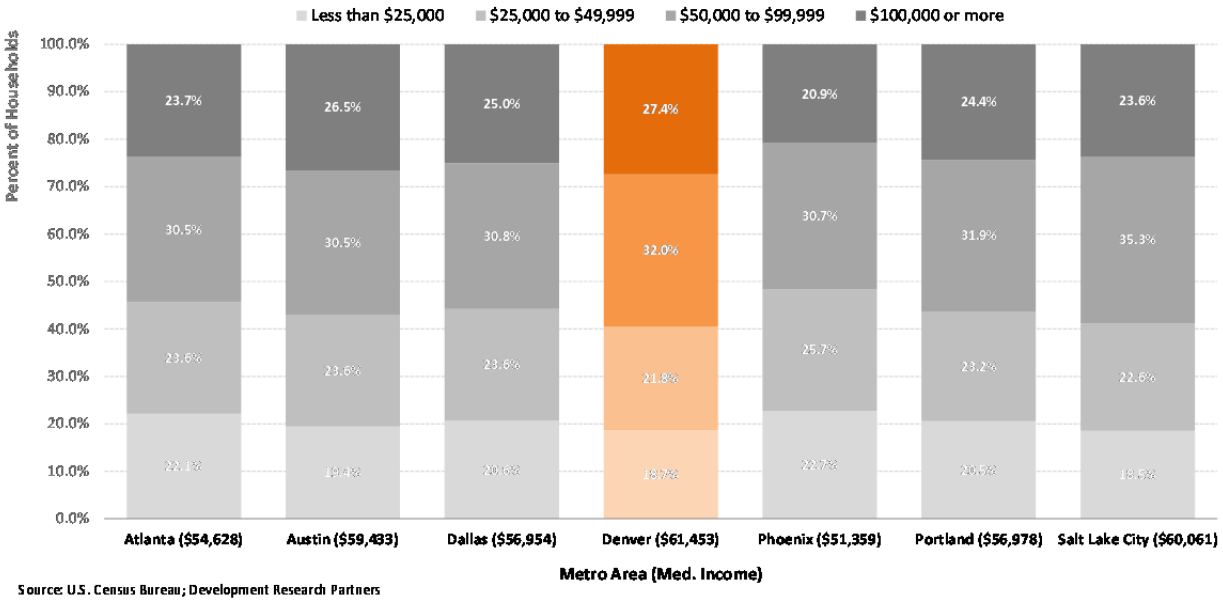
The level of income reflects the well-being of a region's households. Higher incomes indicate the prevalence of high-paying jobs and industries in a region, the talent and education of the area's workforce, and the ability of a region to grow and attract residents. A prevalence of lower-income households may reflect the need for better access to jobs and educational opportunities, and higher demands on public and social services.

Indicator – This measure includes the income of the householder and all other related and unrelated individuals 15 years old and over in the household. Income consists of wages and salaries, public assistance, interest, dividends, and net rental income. **Figure A6** below displays the percentage of households in four income groups: less than $25,000, $25,000 to $49,999, $50,000 to $99,999, and $100,000 and over. The median household income in the U.S. in 2012 was $51,400; therefore the four income groups used in the analysis roughly comprise income quartiles for the U.S.

Analysis – Metro Denver's median household income in 2012 was the highest among the competitor cities and nearly 20 percent higher than the U.S. median. Consequently, the Metro Denver region also had the highest percent of households earning over $50,000. In addition, more than 27 percent of households in Metro Denver earned more than $100,000 compared with about 21 percent in Phoenix, the lowest among the competitor cities. Phoenix was also the only competitor city with a median household income less than the U.S. median.

From 2007 to 2012, the median household income grew the fastest in Salt Lake City, increasing by 4.8 percent over the five-year period. Austin (4.7 percent) posted the second fastest growth and Metro Denver (4.4 percent) ranked third. The median household income in two of the competitor cities actually declined from 2007 to 2012. The decline was largest in Phoenix (-5.3 percent), followed closely by Atlanta (-4.5 percent). The median household income in the U.S. increased by 1.2 percent over the same time period.

Figure A6
Median Household Income and Income Distribution, 2012



Source: U.S. Census Bureau; Development Research Partners

7. Median Single-Family Home Price and Home Affordability Index

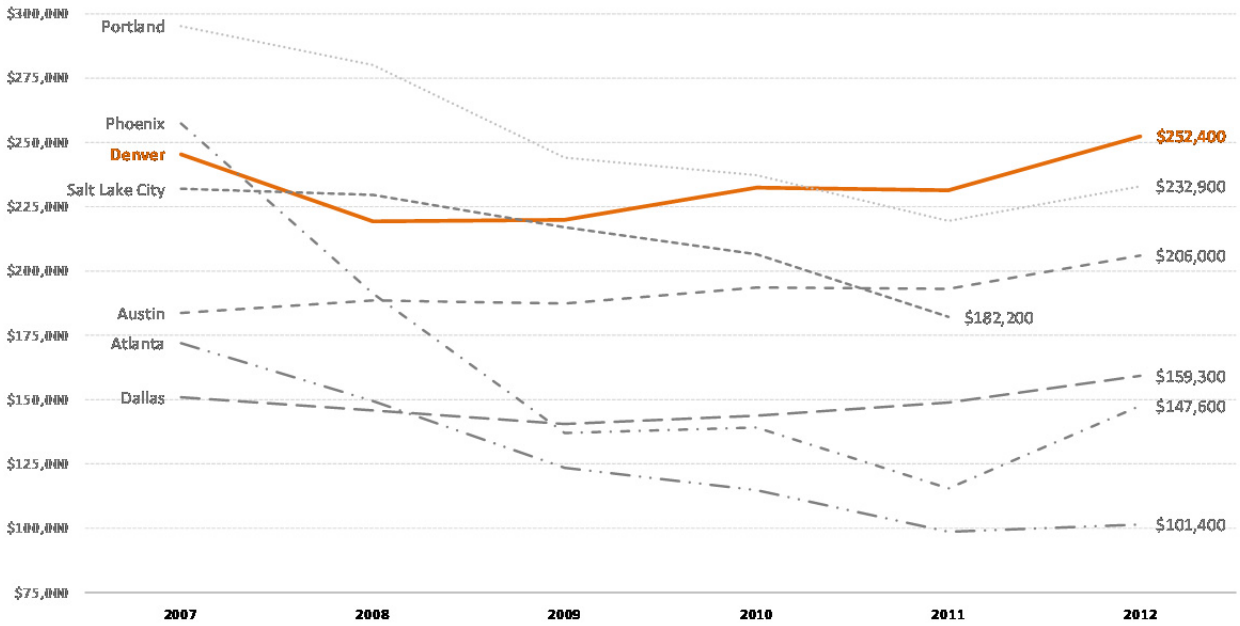
Home value is an indication of wealth and desirability of the community. Furthermore, homeowners want to see an increase in their home value as it typically represents their largest asset purchase. Access to affordable housing at locations close to available employment options is also a factor in attracting and retaining residents.

Indicator – The National Association of Realtors (NAR) tracks the median sales price of existing single-family homes each quarter for over 160 metro areas. In addition, the NAR calculates a home affordability index, defined as the ability of a household earning the median income to purchase a median priced home. An index value of 100 indicates a household earning the median income has just enough money to afford a mortgage for a median priced home assuming a 20 percent down payment and a qualifying income to mortgage payment ratio of 25 percent. A higher index value means that homes are more affordable.

Analysis – Median home prices declined in four of the seven competitor cities from 2007 to 2012, and increased in Denver, Austin, and Dallas. In Denver, the median price increased each year since 2008 and surpassed Portland in 2011 as the highest among the competitor cities (**Figure A7**). In Austin, the median price grew consistently throughout the recession and subsequent recovery, dipping slightly in 2009. In Dallas, the median price troughed in 2009 and by 2012 increased to $159,300. While the median price in each of the metro areas increased from 2011 to 2012, several of the areas have had steep price declines since 2007. The steepest decline was in Phoenix (-42.7 percent), followed by Atlanta (-41 percent) and Portland (-21.1 percent). Across the U.S., prices declined 18.7 percent from $217,900 in 2007 to $177,200 in 2012.

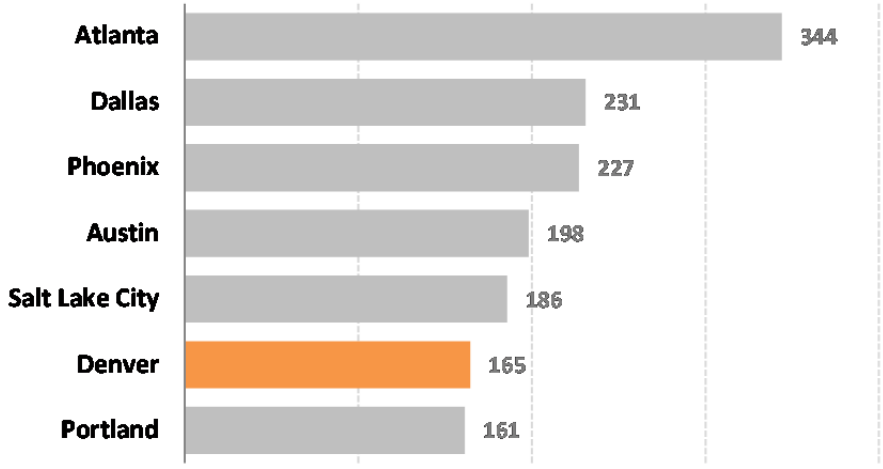
Despite a large decline in price, Portland was the least affordable competitor city in 2012. However, Portland's home affordability index (161.5) was only slightly lower than in Metro Denver (164.6) as shown in **Figure A8**. Salt Lake City has the third least affordable market with an index value of 185.7. The most affordable markets among the competitor cities were also the ones with the largest drops in price. The most affordable markets in 2012 were Atlanta (344) and Phoenix (227.2).

Figure A7
Median Single-Family Home Price, 2007-2012



Source: National Association of Realtors; Development Research Partners

Figure A8
Home Affordability Index, 2012



Source: National Association of Realtors; Development Research Partners

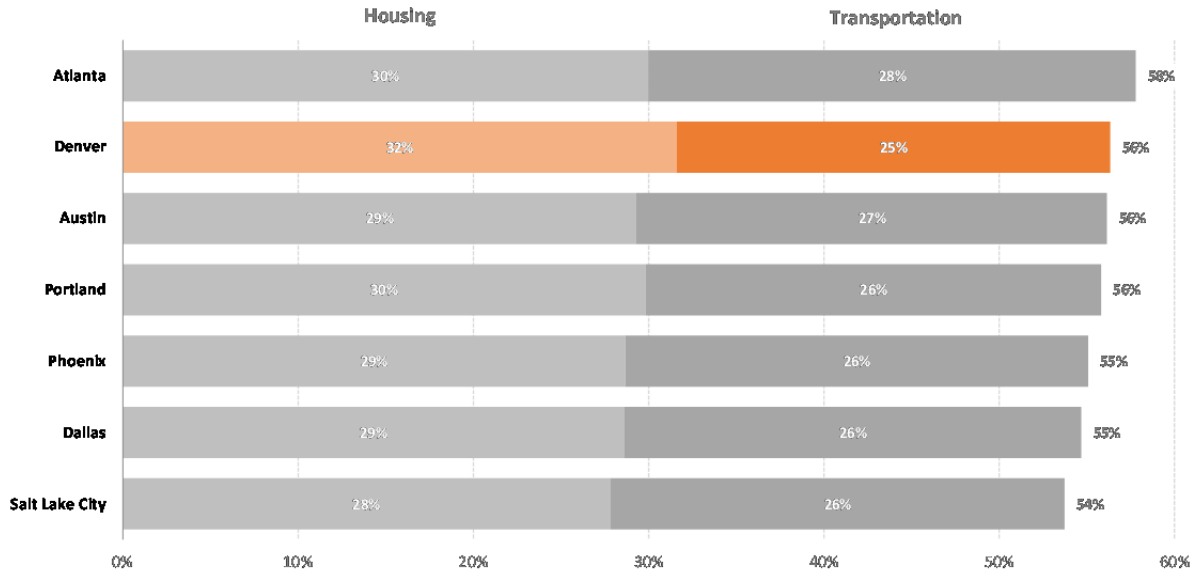
8. Housing and Transportation (H+T) Affordability Index

By HUD standards, housing that costs no more than 30 percent of income is considered affordable. This index provides a more comprehensive view by considering the impact of transportation costs, typically the second biggest household budget item, with housing costs. According to the Center for Neighborhood Technology, 76 percent of America's neighborhoods are considered affordable when only housing is considered. If transportation is included, that number drops to 28 percent. The impact of transportation and housing costs are important to consider in regions where commuting to non-central employment centers is common. This index measures both location efficiency and overall affordability.

Indicator – Based on data from the *H+T Affordability Index*, compiled by the Center for Neighborhood Technology, this indicator is the total percentage of household income spent on housing and transportation. The *H+T Affordability Index* considers a combined cost of housing and transportation that exceeds 45 percent of income as unaffordable.

Analysis – Salt Lake City (53.7 percent) had the lowest percentage of income spent on housing and transportation of the competitor locations (**Figure A9**). However, all were grouped closely together, ranging from 53.7 percent on the low end to 57.8 percent on the high end in Atlanta. Denver falls at the higher end of the competitor cities at 56.3 percent. While Denver has slightly higher housing costs (31.6 percent) of household income, transportation costs are the lowest of the competitor cities (24.7 percent). All of the competitor cities would be considered unaffordable by the H+T affordability standard of 45 percent of income spent on housing and transportation.

Figure A9
Housing and Transportation Costs as a Percent of Income, 2012



Source: Center for Neighborhood Technology, Housing and Transportation Affordability Index; Economic & Planning Systems

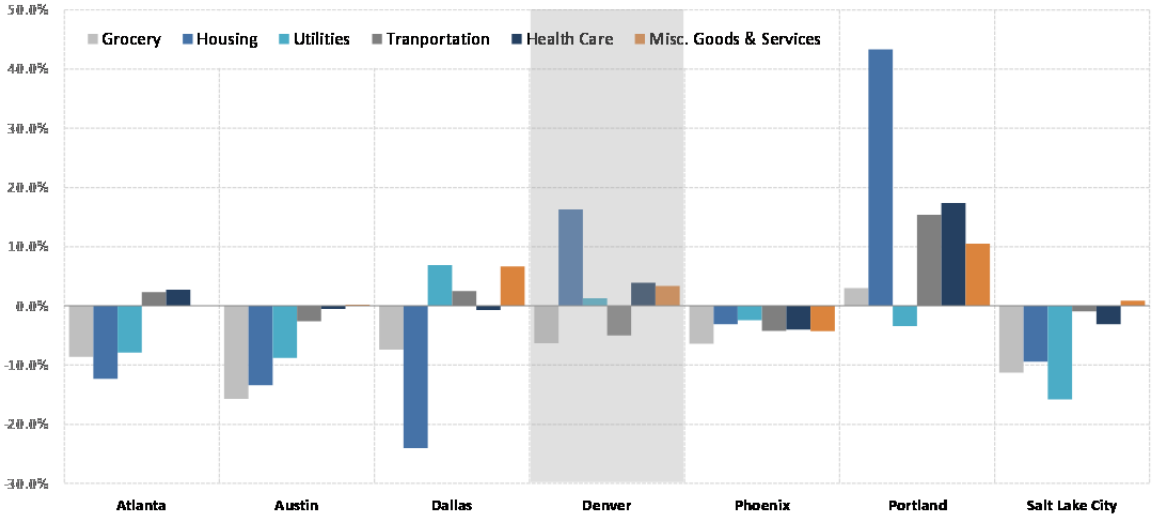
9. Cost of Living Index

The cost of living affects the well-being and quality of life of a region's residents. Residents of higher income, lower cost regions are better off than lower income, higher cost regions. Various factors that comprise the cost of living such as housing, food, and transportation affect the decisions of residents and in-migrants to an area.

Indicator – The *Cost of Living Index* consists of five categories: groceries, housing, utilities, transportation, health care, and miscellaneous goods and services. The index is calculated based on a bundle of goods and services a business professional will likely demand and consume. Each sub-index is weighted and combined to create a composite index. An area's index value represents how it compares with the U.S. metropolitan average of 100.

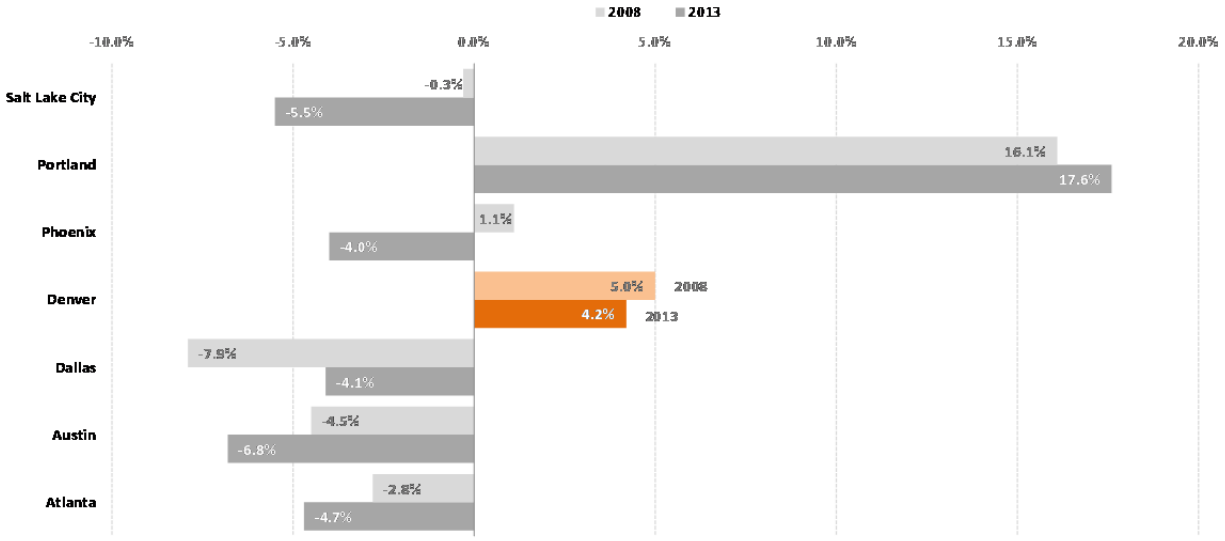
Analysis – While Denver's cost of living is higher than most of the competitor cities, the cost is much lower than in Portland and is favorable when compared with other large metro areas across the U.S. The cost of living in Metro Denver was just 4.2 percent higher than the U.S. average in 2013 (**Figures A10 and A11**). The cost of living in Portland was nearly 18 percent higher than the U.S. average and about 13 percent higher than in Metro Denver. The higher cost of living in Metro Denver and Portland is largely a result of higher housing prices. In 2013, the housing index in Metro Denver was more than 16 percent higher than the U.S. average and Portland's was more than 43 percent higher. The lowest cost competitor city in 2013 was Austin, with a cost of living about 6.8 percent below the U.S. average.

Figure A10
Components of Cost of Living Compared to U.S. Average, 2013



Source: Council for Community and Economic Research, Cost of Living Index; Development Research Partners

Figure A11
Cost of Living Compared to U.S. Average, 2008 and 2013



Source: Council for Community and Economic Research, Cost of Living Index; Development Research Partners

10. Air Quality

Air quality affects the health and safety of an area's residents and the environment. For many, quality of life means the ability to enjoy outdoor activities. Areas with cleaner air may be perceived as a more attractive location.

Indicator – The U.S. Environmental Protection Agency's *Air Quality Index* categorizes unhealthy air quality into three groups based on particulates, the presence of volatile organic compounds, ozone, and other pollutants. Unhealthy categories include unhealthy for sensitive groups, unhealthy, and very unhealthy. This indicator displays the number of days of air quality unhealthy for sensitive groups or worse from 2008 to 2013.

Analysis – Most of the competitor metro areas have less than 40 days each year of unhealthy air quality, the exception being Phoenix which has averaged about 100 days since 2008 (**Table A4**). Metro Denver ranks in the middle with consistently worse air quality than Austin and Portland, but generally better air quality than Dallas, Salt Lake City, and Atlanta. Since 2008, Denver has averaged about 21 days of unhealthy air quality each year.

Table A4
Number of Unhealthy Air Days, 2008-2013

Description	2008	2009	2010	2011	2012	2013
Atlanta	34	18	29	46	19	3
Austin	2	5	3	7	4	1
Dallas	34	34	18	40	36	33
Denver	**33**	**8**	**17**	**21**	**26**	**23**
Phoenix	191	67	44	121	94	87
Portland	9	15	2	17	2	16
Salt Lake City	26	30	21	22	11	45

Source: U.S. Environmental Protection Agency, Air Quality Index; Development Research Partners

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Transportation Access

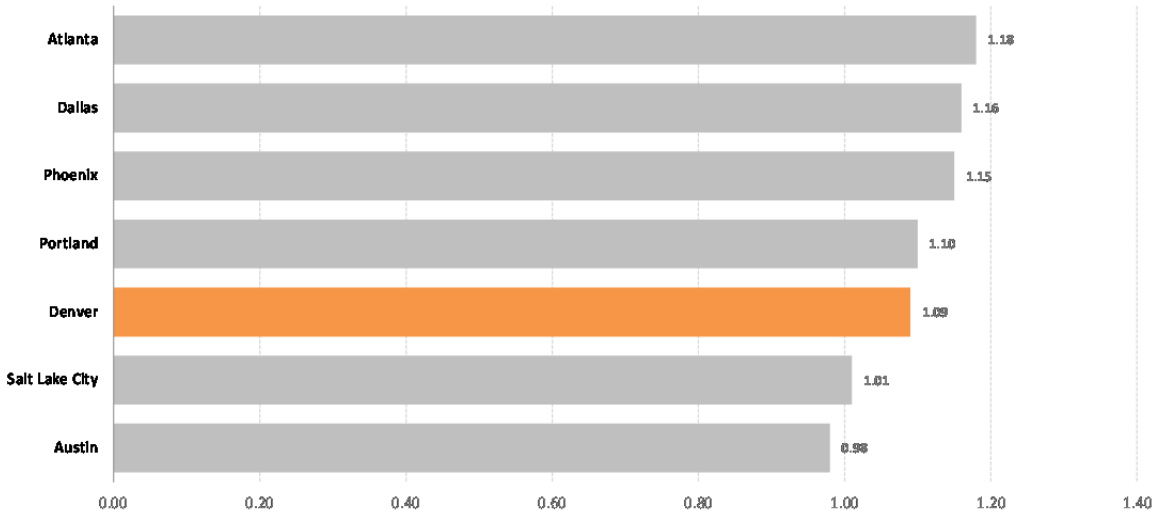
11. Roadway Congestion Index

Persistent, high-levels of congestion on a region's roadways indicate inadequate infrastructure, lost time and productivity, increased pollution, and other costs.

Indicator – The Texas Transportation Institute at Texas A&M University publishes the *Urban Mobility Report* each year that includes several transportation infrastructure and commuting indexes, including the roadway congestion index which measures density of traffic across an urban area by estimating vehicle-miles of travel and lane-miles of roadway. The estimates are combined to create a ratio that represents the amount of travel in a transportation system. An index value greater than 1.0 represents an undesirable level of area wide congestion.

Analysis – Only one of the competitor cities, Austin, has a roadway system demonstrating a acceptable level of congestion based on the most current data. Salt Lake City slightly exceeds that level. The congestion in Metro Denver and Portland is comparable while the worst congestion of the competitor cities is in Atlanta, Dallas, and Phoenix, as shown in **Figure A12.**

Figure A12
Roadway Congestion Index, 2011



Source: Texas Transportation Institute, Urban Mobility Report; Development Research Partners

12. Means of Transportation to Work

A multimodal transportation system meets the needs of a larger portion of the population, helps regions accommodate growth and demands on the transportation system, and contributes to a healthier and safer transportation system. In order to develop effective mobility options, it is important to know the ways people commute and then to measure how implementation of transportation initiatives affect commuting patterns. Metro Vision has a goal of reducing single occupancy vehicle use to 65 percent.

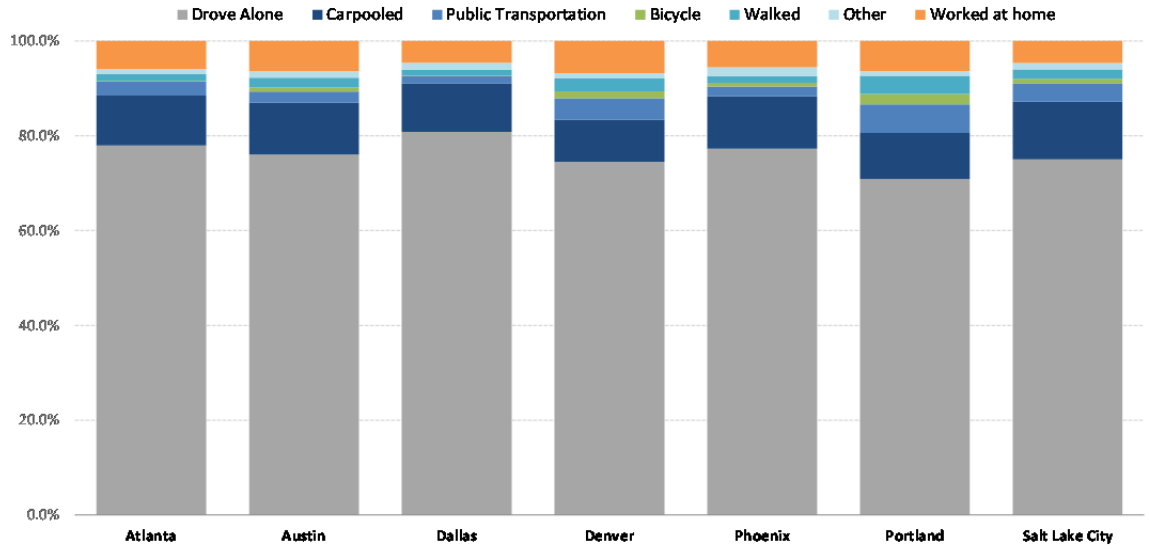
Indicator – This indicator reflects the percentage of workers in a region that generally use the indicated form of travel to get from their home to their place of work.

Analysis – Driving alone in an automobile remains the most frequently used mode of transportation to work; it comprises the largest portion of commutes in 2012 and the percent of the total increased or remained the same in most of the competitor cities since 2007. The portion of workers who drove alone decreased in Portland (73.3 percent in 2007 to 70.8 percent in 2012) and slightly in Salt Lake City (75.3 percent to 75 percent). The percentage increased in Austin, Dallas, and Phoenix and remained stable in Atlanta and Metro Denver. Metro Denver (74.5 percent) has the second lowest percentage of workers that drove alone in 2012 (**Figure A13**).

Carpooling and public transportation also decreased in most of the competitor cities since 2007. However, carpooling was the second most utilized form of transportation. Carpooling declined in all but one of the competitor cities, Atlanta, from 2007 to 2012. In addition, public transportation use decreased in all of the metro areas except Portland and Salt Lake City.

Since 2007, biking, walking, and working at home increased in nearly all of the metro areas. In 2012, the percentage biking to work was less than one percent in every competitor city except for Metro Denver (1.5 percent) and Portland (2.3 percent). Walking comprised 2 percent or less of workers except for Metro Denver (2.7 percent) and Portland (3.8 percent). Working at home increased in every competitor city except Salt Lake City and represented the largest percentage increase in commuters for all modes of transportation in four of the seven competitors.

Figure A13
Commute by Means of Transportation, 2012



Source: U.S. Census Bureau; Development Research Partners

13. Average Commute Time and Distribution of Workers by Commute Time

Longer commutes contribute to lost time and productivity, increased pollution, and less personal and family well-being. The length of the commute also reflects the ability of workers to live close to where they work.

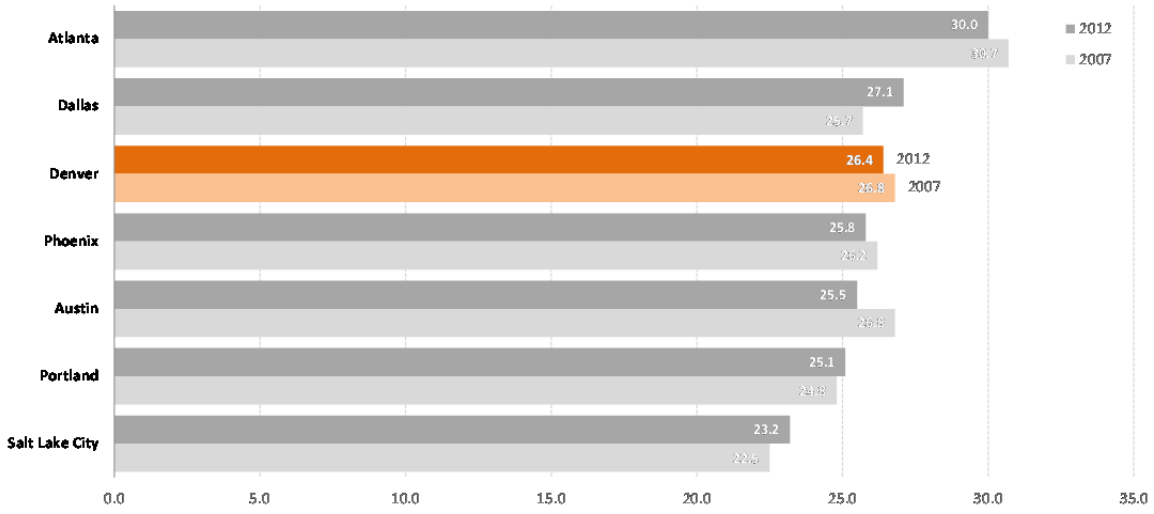
Indicator – The average commute time (2007 and 2012) compares the typical amount of time that it takes for a worker to travel one-way from home to their place of work. In addition, the percentage of workers by commute time is presented for 2012.

Analysis – The average commute time has remained stable in each of the competitor cities since 2007. Atlanta had the longest average commute at 30 minutes (**Figure A14**). Metro Denver had the third longest commute time of 26.4 minutes and the shortest commute was in Salt Lake City (23.2 minutes).

Nearly 70 percent of workers in Salt Lake City had a commute shorter than 30 minutes in 2012 (**Figure A15**). In contrast, only about 52 percent had a commute shorter than 30 minutes in Atlanta. In Denver, about 60 percent of workers had a commute that was less than 30 minutes.

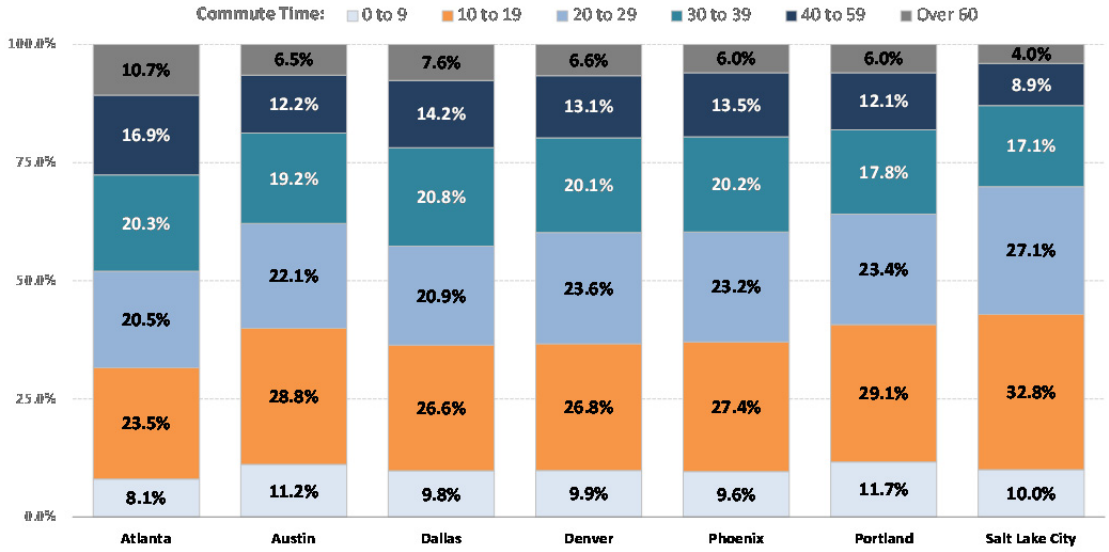
Portland (11.7 percent) and Austin (11.2 percent) had the highest percentages of workers with commutes less than 10 minutes. In Denver, 9.9 percent of the workers fell into this category. In Atlanta, more than 10 percent of workers had commutes longer than 60 minutes. By comparison, only 6.6 percent of the workers in Denver had commutes longer than an hour.

Figure A14
Average Commute Time (Minutes), 2007 and 2012



Source: U.S. Census Bureau; Development Research Partners

Figure A15
Distribution of Workers by Commute Time (Minutes), 2012



Source: U.S. Census Bureau; Development Research Partners

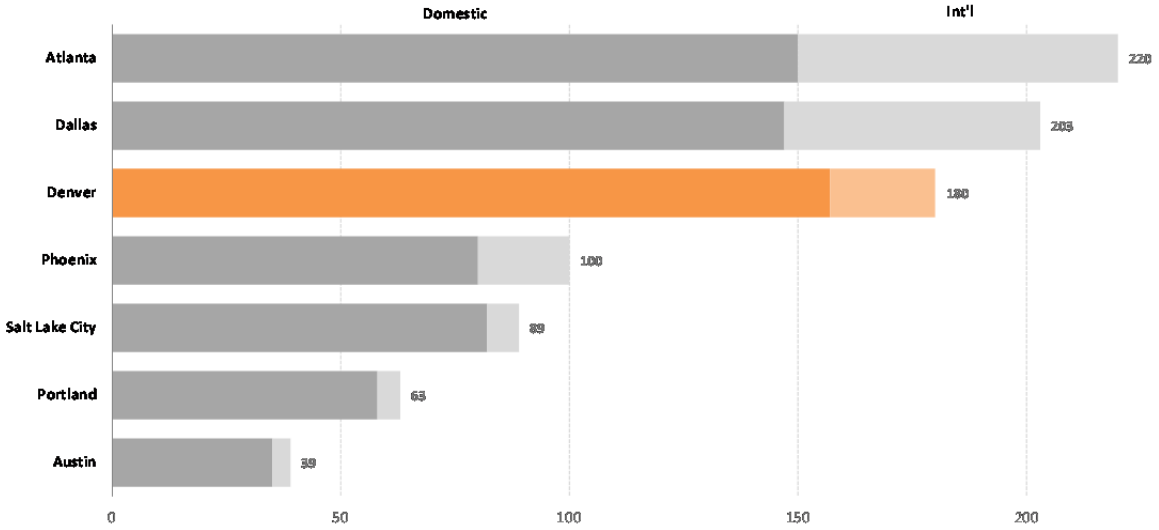
14. Nonstop Domestic and International Flights

Airports play a critical role in fostering business growth and attracting tourists. Airports are a significant economic engine for a region and have large economic impacts. Additionally, the increasingly global nature of business means a key element in the success of a region is its ability to move goods and people quickly and economically across the globe.

Indicator – The number of destinations with nonstop service from the main international airport in each metro area in 2014 are shown in **Figure A16**. Airports included Hartsfield-Jackson Atlanta International, Austin Bergstrom International, Dallas/Fort Worth International, Denver International, Phoenix Sky Harbor International, Portland International, and Salt Lake City International.

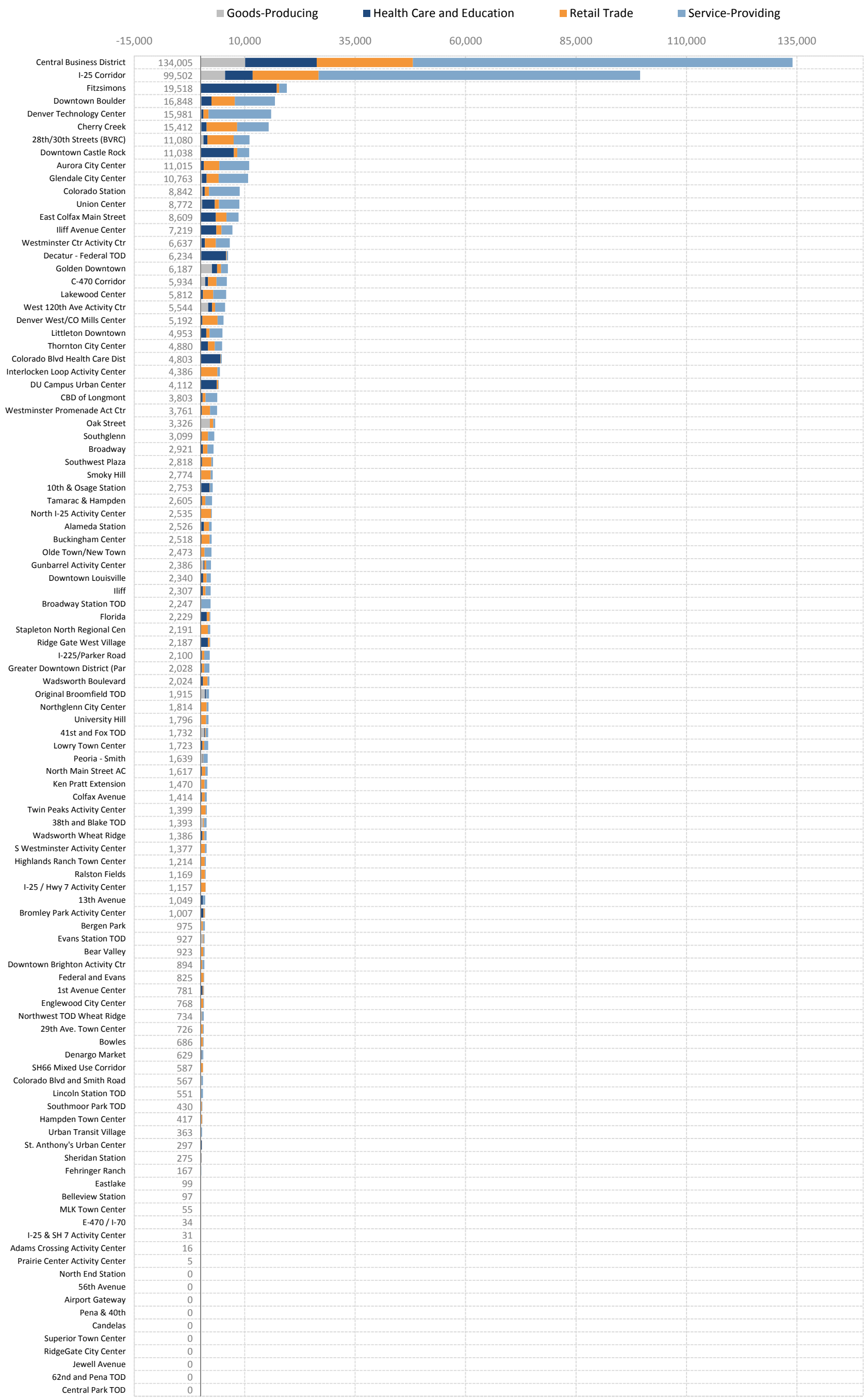
Analysis – Atlanta (220), Dallas (203), and Denver (180) had the most nonstop flights of the competitor cities in 2014. Each of these airports has major hub operations and is among the busiest airports in the world in terms of passenger traffic. According to the *World Annual Traffic Report*, Atlanta ranks first in the world, Dallas ranks eighth, and Denver ranks 13th. In terms of total aircraft movements including both passengers and cargo, Atlanta ranks first, Dallas ranks fourth, and Denver ranks fifth.

Figure A16
Nonstop Domestic and International Destinations, 2014



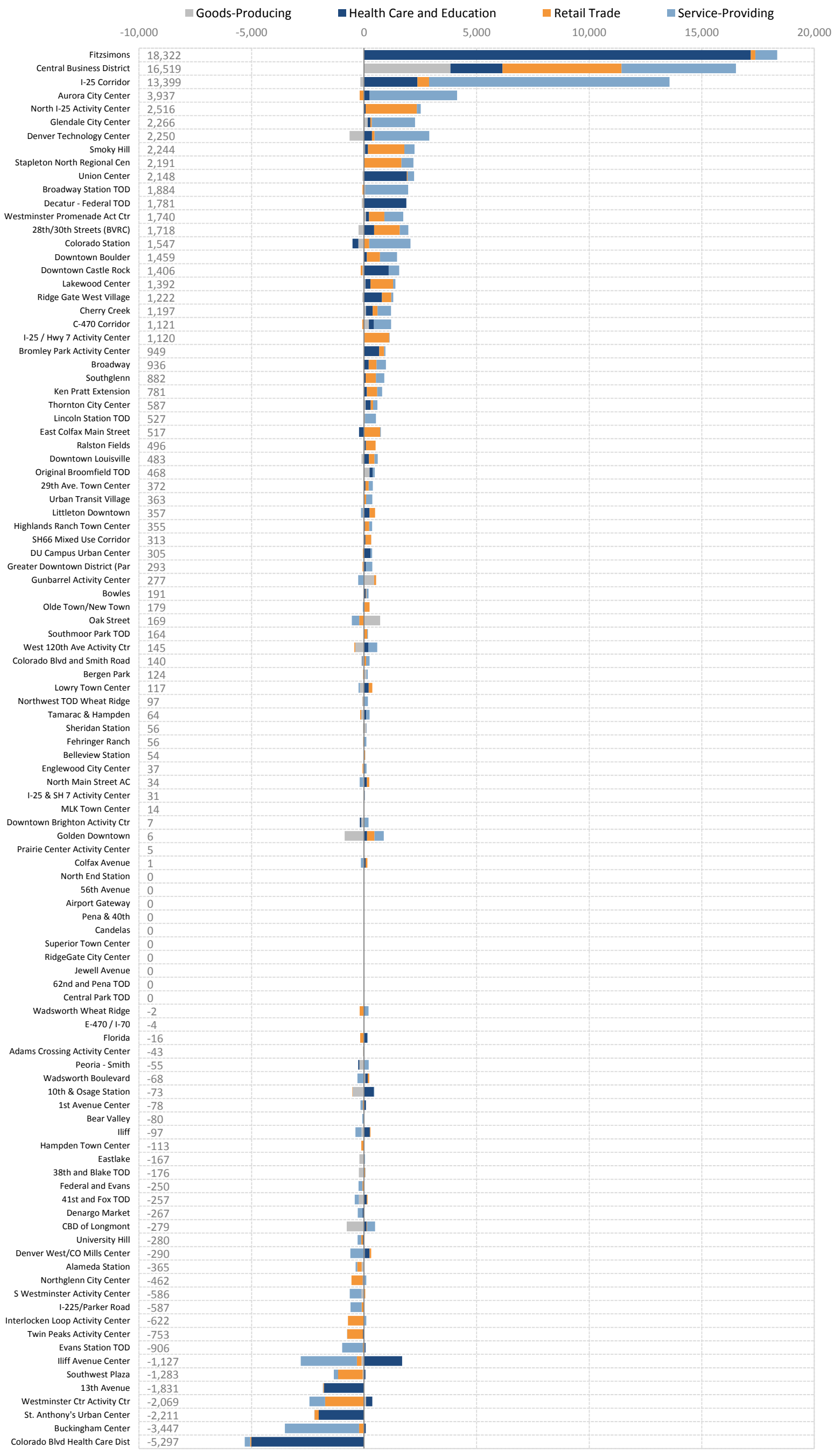
Source: Individual Airports; Development Research Partners

Figure A17
Employment by Industry, DRCOG Urban Centers, 2013



Source: Economic & Planning Systems

Figure A18
Change in Employment in Urban Centers, 2005-2013



Source: Economic & Planning Systems

List of Stakeholders Interviewed

Adams County
Aurora EDC
Boulder Economic Council
City & County Denver
City of Arvada
City of Erie
City of Federal Heights
City of Longmont
City of Louisville
City of Wheat Ridge
Clear Creek County EDC
Colorado Office of Economic Development and International Trade
Denver South Economic Development Partnership
Douglas County
Gilpin County
I-70 Regional Economic Advancement Partnership
Jefferson Economic Council
Longmont Area EDC
Metro Denver EDC
Mile High Connects
Northglenn
Piton Foundation
Red Rocks Community College
Rose Community Foundation
Town of Parker
Work Life Partnership