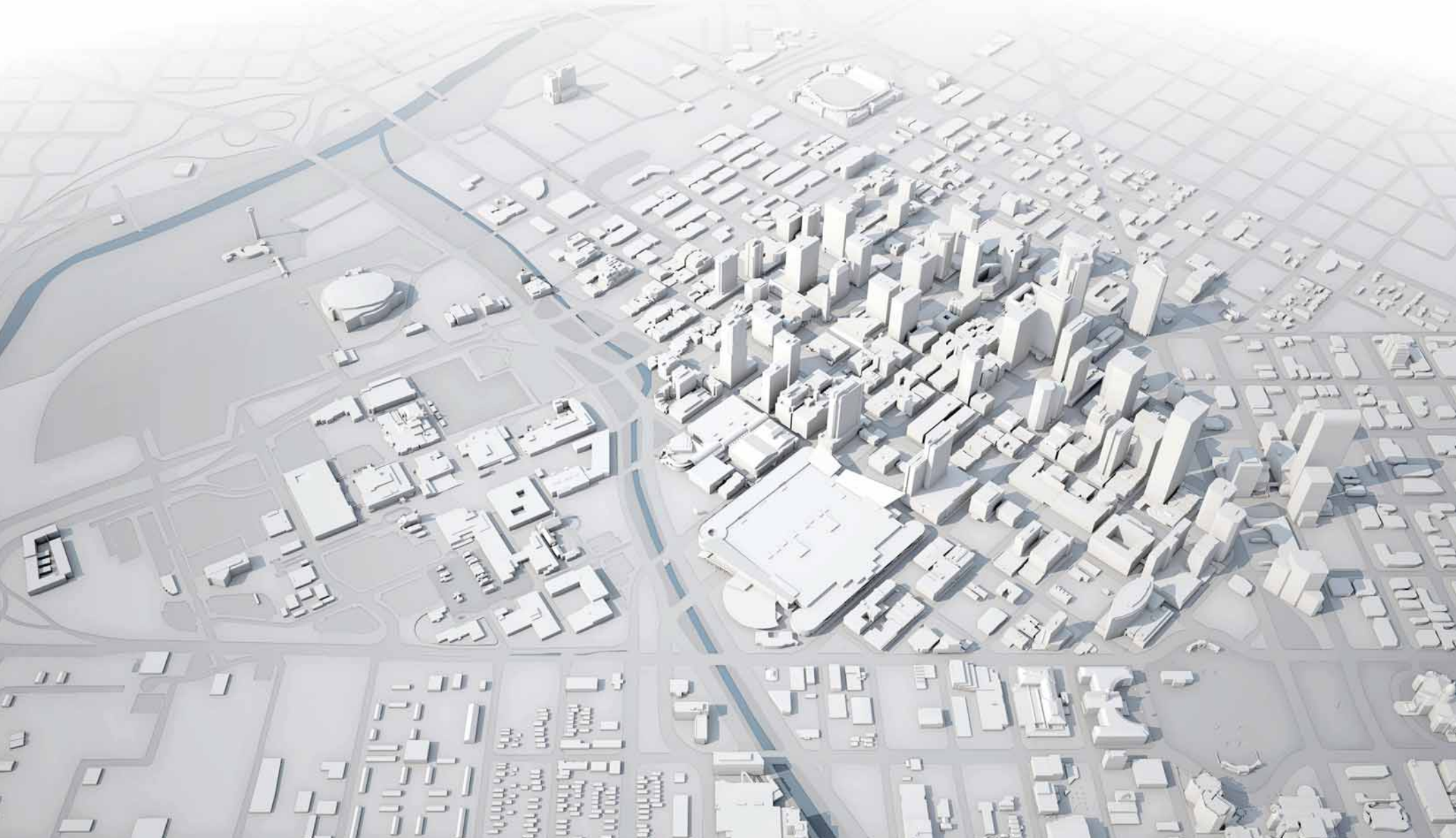

From Vision to Reality

AURARIA HIGHER EDUCATION CENTER | Auraria Campus Strategic Implementation Plan

acknowledgements

This plan was prepared as a collaboration between SmithGroupJJR and Jones Lang LaSalle, with the benefit of contributions from the Auraria Board of Directors, and tireless efforts from the Strategic Implementation Plan Executive and Steering Committees:

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Roderick Narin, Provost and Vice Chancellor for Academic and Student Affairs-University of Colorado Denver
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Consultant Team
SmithGroupJJR
Jones Lang LaSalle

The Strategic Implementation Plan was generously funded through the Auraria Foundation.

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0 | plan summary

Introduction

Following the completion of the 2012 Master Plan Update, the Auraria Higher Education Center (Auraria) directed the development of this Strategic Implementation Plan to organize and prioritize planning efforts, streamline decision making, and provide an integrated framework for managing change on campus. Located in downtown Denver, Colorado, Auraria is the largest campus in the state, comprised of three distinct and separate institutions, the Community College of Denver (CCD), Metropolitan State University of Denver (MSU Denver) and the University of Colorado Denver (CU Denver). This plan augments the 2007 Master Plan and 2012 Master Plan Update, verifying buildable zones, density and capacity guidelines, campus character, adjacencies and phasing within each institution's neighborhood, and focusing on strategies for shared areas on campus. Balancing design with an understanding of national real estate trends and local Denver knowledge, this plan assesses future visions while simultaneously being responsive to immediate "now term" priorities for Auraria and each institution.

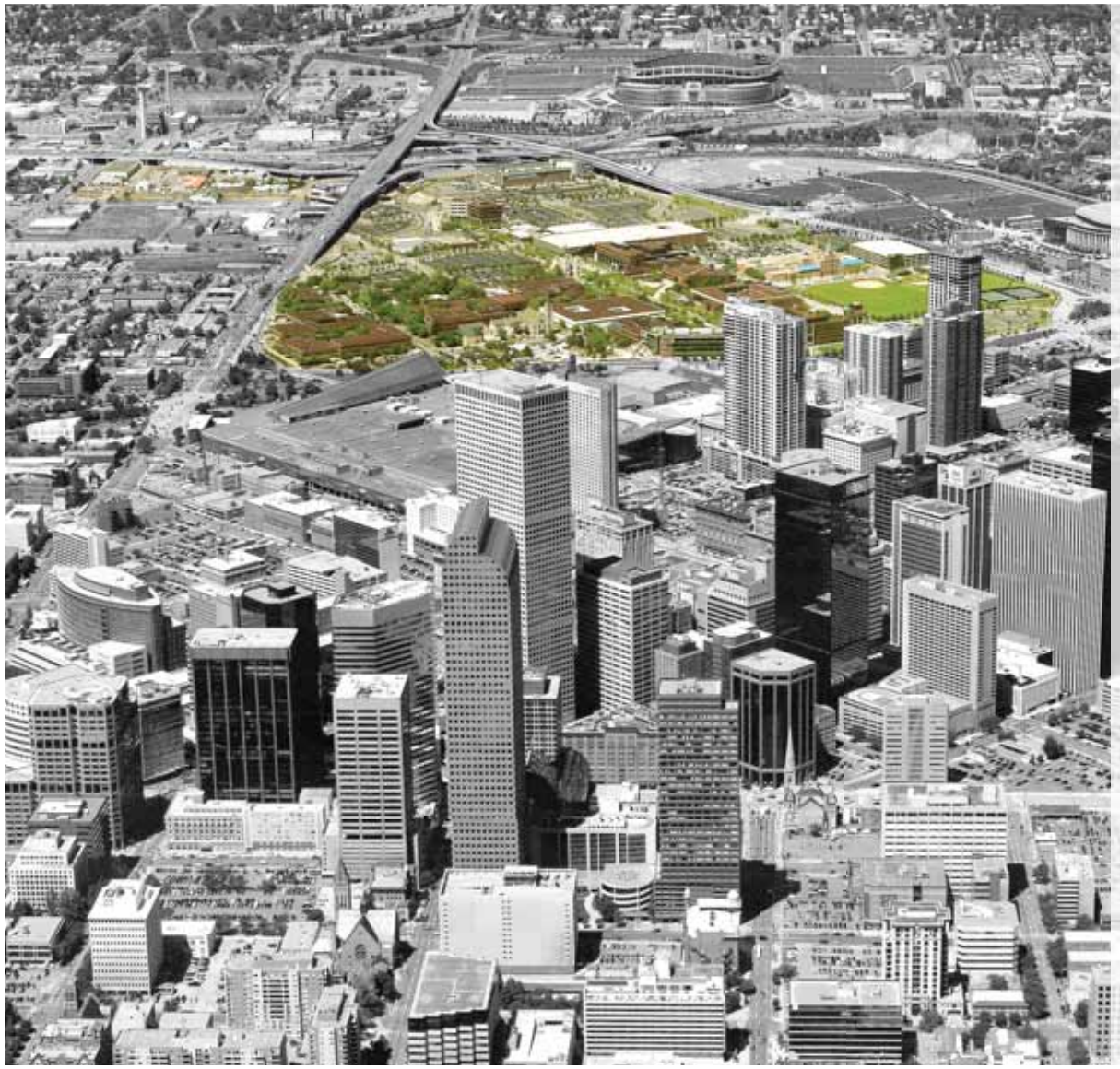
Process

The four-month planning process involved two distinct phases for completion of the Strategic Implementation Plan. Phase One included reviewing, interpreting, and verifying recommendations of the 2012 Master Plan Update. Phase Two integrated an understanding of campus-wide capacity, guidelines for shared resources, near- and mid-term priorities with an in-depth understanding of various Gateway Development Areas, including:

- Tivoli Event Space
- Colfax Edge
- 5th Street
- Auraria Parkway Edge
- Speer Edge + Urban Core

The Strategic Implementation Plan was completed as a collaborative partnership with the Steering Committee and Executive Committee that met during regularly scheduled monthly meetings. An inclusive and iterative planning process ensured that committee members and stakeholders had meaningful involvement in shaping the implementation strategy.

Idea Generation



Downtown Denver and the Auraria Campus

Implementation Themes + Big Ideas

Several essential and reoccurring themes were developed as part of the Strategic Implementation Process. Specific concepts, ideas, and priorities discussed later in this report generally relate back to one of the four major themes outlined below.

Infrastructure Limitations

To achieve the development on campus necessary to support future enrollment demand will require significant investments in the campus's infrastructure. This will require several near term actions:

- Further identifying infrastructure capacity issues, their associated costs and triggers for improvements.
- Developing a process for the three institutions to provide funding for infrastructure investments.
- Evaluating the pros and cons of on campus development versus purchasing real estate adjacent to campus, which is in limited supply and rapidly increasing in cost.

The Urbanization of Auraria

From its inception, Auraria has held a vision as a "commuter campus", whereby the majority of students live off campus and commute from surrounding neighborhoods. As a result, Auraria has developed fewer student life and housing amenities than typically found at an institution of its size. This commuter campus vision notwithstanding, over the past 20 years downtown Denver has grown and matured adjacent to the campus. Today the boundary

across Speer Boulevard has become the City's center for the arts, dining and entertainment, and the boundary along Auraria Parkway is a center of sports entertainment; hallmarked by the Pepsi Center and Sport Authority Stadium at Mile High. Collectively, this growth has given the Auraria neighborhood a more urban feel and is significantly constraining the ability for institutions to grow off-campus. In light of this urban densification, rising rents for off-campus housing and increasing foreign and out-of-state enrollment, Auraria needs to reconsider the "commuter campus" concept to determine the amenities that best support its character and student/faculty population in the future.

Tivoli Field redeveloped as the "Heart of Campus"

The 2012 Master Plan Update identifies geographic neighborhoods for each school and a centralized "shared district", which provides amenities serving all schools. This is an important step in allowing schools to create their own identities and pursue academic priorities within their neighborhood, while still providing land to develop amenities best shared by the overall campus population. Central to enhancing the overall campus experience is the opportunity to redevelop the Tivoli Field into the new heart of Auraria. The thoughtful redevelopment of the Tivoli Field, including its connection to downtown along Larimer Street, present a tremendous opportunity to create a dynamic, diverse and iconic campus experience. Key issues to consider in this development vision include: the scale and activation of the field itself; diverse edge activation through dynamic building uses, streetscapes and various retail and restaurant development; and the redevelopment of PE Events Center to face and integrate with the Tivoli Field.

The need for Alternative Financing

None of the three Auraria schools expect to receive state funding sufficient to develop the facilities needed to support projected growth and academic program requirements. As a result, there is great need to pursue and evaluate opportunities for alternative development funding mechanisms, including public private partnerships (P3's). Although private investment will not make sense on every project, the team has identified a number of planned campus developments that appear to be good candidates for private sector investment. It is highly recommended that further feasibility studies on near term projects commence shortly.

Tivoli Field as a New Campus Focal Point

Auraria may Add a Minimum of 6,800 Students by 2021

Summary Data + Findings (By Chapter)

1| Long-Range Capacity + Flexibility for Growth

- 929,000 adults will be added to Colorado's population by 2021. With 17% of the market share attending Colorado Public Higher Education, Auraria may add a minimum of 6,800 students by 2021
- Different models were tested - suggesting the Auraria Campus could need 405,000-632,000 GSF of new space in the next decade
- Extrapolation of GSF per decade data compounded with the high cost of surrounding urban land suggests Auraria must consider increased density options for future growth on campus, including taller buildings along the Speer Boulevard edge or adjacent to light rail stations
- CU Denver, CCD, and MSU Denver should each undertake detailed space inventories, space utilization, and future space needs studies to verify this data
- Triggers for growth and optimal size on campus include building heights, utilities, parking, transit, housing, and student life resources

2| Shared Thinking

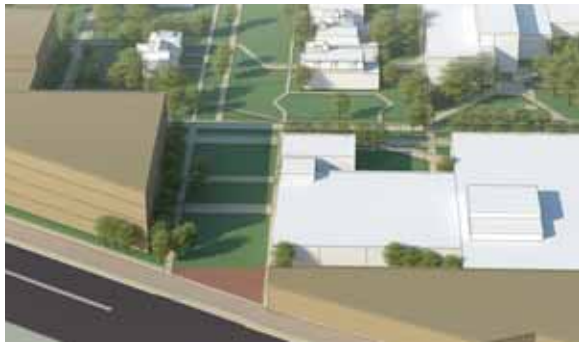
- Institutional neighborhoods should be strengthened through a series of guidelines for shared corridors to create a more imageable and identifiable campus image in downtown Denver.
- Utility constraints and suggestions for growth include sanitary sewer, investigation for feasibility of a centralized plant, understanding of potential for cogeneration, and consideration of an Auraria utility system with an incremental fee or tax to pay for major utility improvements
- Auraria should further study feasibility of a shared facility for Engineering/Technology, Arts, Swing Space, and Incubator Space

3| Priorities + Phasing for Strategic Implementation

- Prioritization, phasing and order of magnitude costing for strategic priorities in 0-5, 6-10, and 11+ year time frames were developed based on detailed input from the Steering and Executive Committees

Institutional Neighborhoods Concept Established in the 2007 and 2012 Master Plans for the Auraria Campus

Activating Tivoli Shared Special Event + Activity Field



A new Front Door for CCD and the Auraria Campus

A Mixed Use Neighborhood on 5th Street

4| Tivoli Shared Special Event + Activity Field

Key principles include:

- Activate Larimer Street + Tivoli Field Edge with retail and transparency
- Encourage Complete Streets and street level activity adjacent to the field
- Activate Tivoli Field with PE/Event Center addition
- Preserve Views to the Tivoli Student Union at discrete moments
- Consider public private partnership (P3's) opportunities for academic, housing and parking

5| Colfax Edge

Key principles include:

- Renovate the Technology Building to create a new front door for CCD and the Auraria Campus
- Provide views in to the 9th Street Mall and Campus green space

6| 5th Street

Key principles include:

- Create an active and vibrant mixed use neighborhood anchored by light rail and MSU Denver Athletics
- Provide flexible space for mixed use residential, incubator and swing space
- Create an imageable front door from the Auraria Sports Authority Field at Mile High Station

7| Auraria Parkway Edge

- Create a memorable front door at Auraria Parkway that emphasizes MSU Denver and encourages safe pedestrian crossing to the north
- Enhance 7th Street as a pedestrian scaled environment that still provides an outlet for vehicles exiting events from the Pepsi Center

8| Speer Edge + Urban Core

- Provide a more meaningful connection from downtown to the Auraria Campus using enhanced landscape and/or additional programmatic uses
- Emphasize landmark buildings to provide terminating vistas and improve the perception of proximity between campus and downtown
- Understand development options at 14th Street and Larimer Street

9| Next Steps + Funding Strategies

- Understand near- and "now-term" priorities for Auraria and individual institutions
- Consider P3's and alternative funding strategies for initial priorities

Understanding Alternate Funding Mechanisms

This is a challenging time for public colleges and universities in the US, as the economic downturn in 2008 has resulted in dramatic reductions in state funding for higher education. Moreover, with the prevailing "anti-tax/anti-government" attitude in the US, even with an economic recovery it is unlikely that prior levels of college and university budgets will be reinstated for years to come.

With little assurance that the state will approve funds for needed capital projects, institutions of higher education must begin to look to alternative means of financing core educational and ancillary development. This has resulted in an accelerating shift in higher education real estate from traditional projects, where the entire project is built utilizing public funds and the institution controls the entire process and bears all the risk, to pubic private partnerships (P3's) that involve a sharing of the decision making, risk and investment between the public and private sector.

Similar to many other colleges and universities, Auraria's three schools are struggling to determine how to fund upcoming programmatic requirements for development and must consider non-traditional funding sources, such as P3's, to develop the core and ancillary facilities necessary to sustain anticipated growth and academic mission.

In most P3's the public entity will own the underlying real estate and the private sector provides the know-how and capital to bring the desired development to fruition. The private partner(s) help determine the project scope, share some of the financial risk, assumes the construction risk, and remains in the project for a long period of time and share in some of the returns if the project is successful. The need for developing a procurement strategy that balances flexibility and clarity, aspirations and reality, to meet the needs of both public clients and potential private partners requires hard work, hard thinking and hard choices. However, if the institution retains experienced experts to guide them through a structured process that is designed to leverage the skills and wisdom of the private sector as they formulate the project from vision to reality, great benefits can be derived. The public entity is able to deliver a project that is creative, well executed; maximizing their return and minimizing their exposure. The private partner is able to participate in a project that provides them with a well secured return of the investment in what is often a high-visibility project servicing the public interest.

Specific to Auraria's near term needs, there are three projects that appear to have merit for P3 consideration and early financial analysis indicates that they meet the financial and functional criteria for success. These include:

- Creating a building on the 5th street corridor provides swing space for the schools, space for grant programs and space to support incubator businesses. The location of this facility would likely be on 5th street
- Providing private sector support to develop student housing at no financial risk to Auraria or its three schools
- Using a P3 structure to further develop the CU Denver property at 14th and Larimer to house media arts and architecture

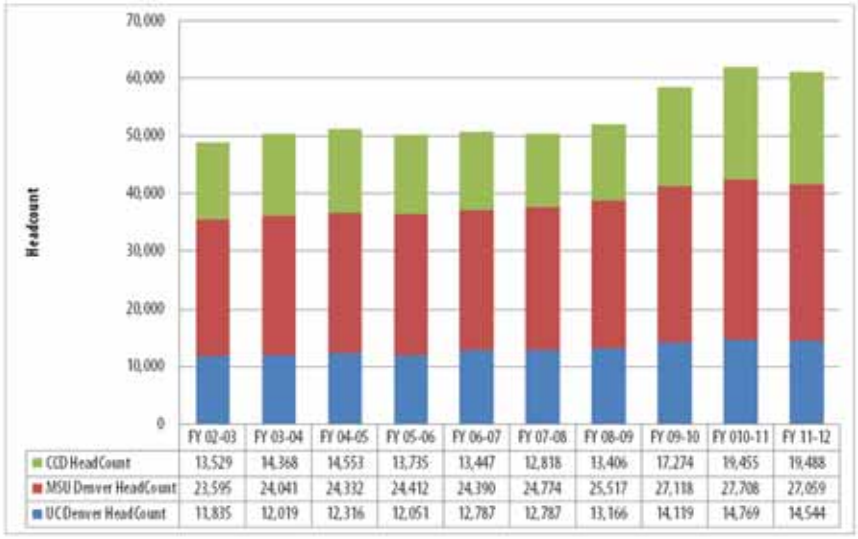
Strategies for implementing these projects using alternative funding mechanisms are detailed in the "Next Steps" section of this report.

Auraria West Station as a Catalyst for Development on 5th Street

1 | long-range capacity + flexibility for growth

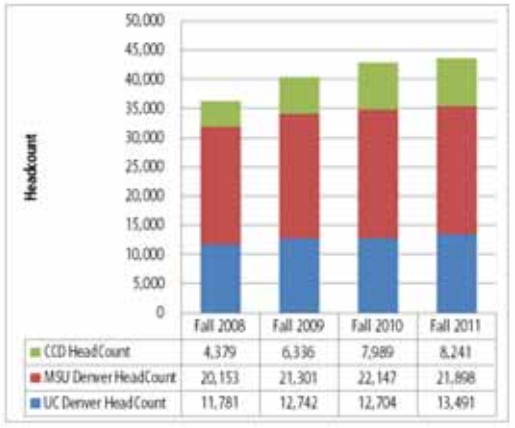
Introduction

The 2007 Master Plan projects a student population of 31,373 full time equivalent (FTE) and a total population of 35,101 on the Auraria Campus by 2026. Utilizing a straight line projection, the 2007 plan identified a 2,551,475 gross square feet (GSF) deficit of space by 2026. The 2012 Master Plan Update did not revise the student enrollment projections or space needs data presented in the 2007 Master Plan, and allows for approximately 4,500,000 GSF of buildable footprints on the 150 acre Auraria Campus. As part of this Strategic Implementation Plan, the Consultant Team was asked to verify the capacity of the campus to ensure that each institution was planning for appropriate long-range growth scenarios. Building on a baseline understanding of this issue, the team studied historic growth trends and applied assessments from the 2012 State of Colorado Department of Higher Education Enrollment Projections Study completed by Noel-Levitz.



	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 010-11	FY 11-12
CCD Head Count	13,529	14,368	14,553	13,735	13,447	12,818	13,406	17,274	19,455	19,488
MSU Denver Head Count	23,595	24,041	24,332	24,412	24,390	24,774	25,517	27,118	27,708	27,059
UC Denver Head Count	11,835	12,019	12,316	12,051	12,787	12,787	13,166	14,119	14,769	14,544

Auraria Historic Enrollment (Annual Head count). Statistics include students attending class on campus as well as satellite and online students.



	Fall 2008	Fall 2009	Fall 2010	Fall 2011
CCD Head Count	4,379	6,336	7,989	8,241
MSU Denver Head Count	20,153	21,301	22,147	21,898
UC Denver Head Count	11,781	12,742	12,704	13,491

Auraria Campus Historic Enrollment (Fall Head count).

Historic Trends + State Demographics

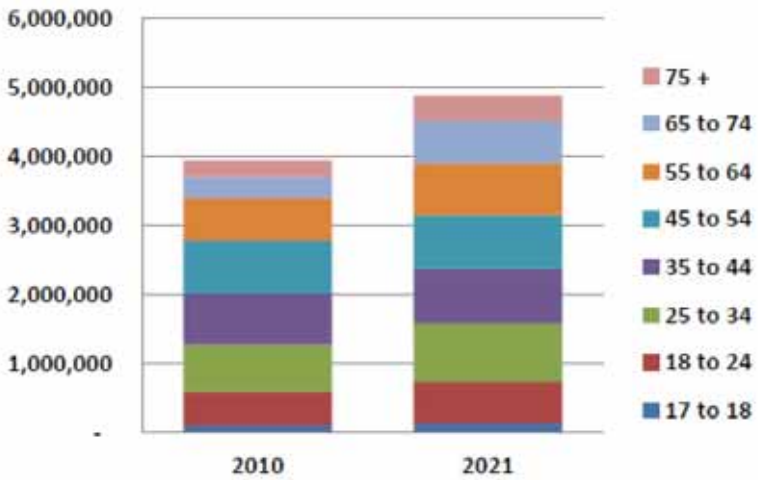
Historic Growth Patterns

The Consultant Team evaluated the change in annual head count* from fiscal year (FY) 2002-2003 through fiscal year 2011-2012. This is pictorially represented in the above chart. The results revealed a 25% change for the entire Auraria Campus during the last decade. This represents a 2.2% time-valued annual average.

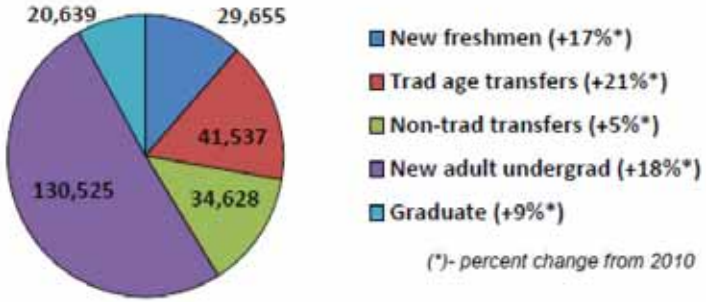
The study of individual institutions during this 10-year time frame reveals CCD with the sharpest enrollment increase of 44% average enrollment change during the decade or 3.7% time-valued annual average. Much of the strongest growth occurred during post-recessionary FY 2008-2010 as shown in the chart to the right for the Auraria Campus only. It is worth noting that post-recessionary enrollment trending for two-year institutions suggests a flattening in years after the spike followed by a steady increase and/or return to a normative enrollment trajectory.

MSU Denver enrollment increase for the decade averaged 15% or approximately 1.4% annually. MSU Denver's enrollment trajectory has been predictably increasing, evenly matching the spikes displayed by CCD during FY 2008-2010. Finally, CU Denver enrollment increase for the decade averaged 23% or approximately 2.1% annually. CU Denver's enrollment increase has been fairly consistent and is unique among Auraria institutions with growing out-of-region and out-of-state enrollment populations. As a footnote to the conversation about enrollment, and using 1974 and 2011 fall head count data sets, the Auraria Campus has added an average of 12,650 students per decade during its 38 year history.

**Includes both online participants and satellite campus populations.*



Colorado Change In Population by Age Group (Age 17+)
Source : Noel-Levitz



Colorado Change In Enrollment by 2021
Source: Noel-Levitz

State Demographic Projections

In 2011, the State of Colorado commissioned Noel-Levitz to conduct a comprehensive 10-year enrollment projection analysis for Colorado's public institutions of postsecondary education. This study concluded several major findings that will impact the Auraria Campus and its institutions. First, it is estimated that more than 929,000 adults (over 17 year of age) will be added to Colorado's population between 2012 and 2021. Second, 40,000 additional students will likely participate in Colorado's public higher education system during this time horizon. Moreover, the increase in potential students is anticipated to be pronounced in the adult undergraduate market aged 25 and over and in the Hispanic/Latino community. These population implications for the Auraria Campus are significant. Today, Auraria enrolls approximately 17% of the 258,000 students in the Colorado Public Higher Education marketplace. Using a straight-line projection of 17% market share in a 10-year time frame, it suggests that Auraria may add a minimum of 6,800 students. This inference suggests a potential minimum fall head count in 2021 of more than 50,400 students. This growth trajectory represents 15% enrollment growth over 10 years or a time-valued annual average of 1.4%.

As noted in the previous Historic Growth Pattern section, the Auraria Campus averaged 2.2% annual growth during the last decade. The Consultant Team believes that Denver, as a major metropolitan center, could garner a larger proportion of the statewide population increase. This implies that Auraria could grow faster than 1.3% annually (as implied by the Noel-Levitz study) and gain more than 6,800 students in a 10-year period.

Capacity Implications for Auraria

The Auraria Campus contains approximately 2,554,670 GSF of academic, academic support, and auxiliary space. Historically, the campus has added approximately 692,000 GSF per decade or an average of 69,000 GSF per year. This is an important benchmark for comparing past growth to future spatial consumption. Both the 2007 Campus Master Plan and the 2012 Campus Master Plan accommodate approximately 4,500,000 additional GSF. Using the historic build-rate of 692,000 GSF/decade, the current plan has a building capacity lifespan of 6.5 decades or approximately 65 years.

Utah System of Higher Education Peer Review

The Auraria Campus has a full time equivalent (FTE) of 30,200(fall 2011 data). And, as noted above, the campus contains 2,554,670 GSF. When compared as a ratio, it yields a simple metric of 85 GSF/FTE. The planning team conducted a cursory peer review using the Utah System of Higher Education Space Standards Study of December 2011. The analysis revealed two important findings. First, the Utah statewide average for all institutions is 142 GSF/FTE. Individual Utah institutions range from 106 GSF/FTE (community colleges) to more than 195 GSF/FTE (research universities). Second, the Auraria campus is extremely efficient with space allocations per student. High facility utilization has forced Auraria to extend the length of the academic day and number of days in the academic week. Moving forward, it is recommended that CCD, MSU Denver, and CU Denver undertake detailed space inventories, space utilization, and future space needs studies. Coupled with institution specific enrollment projections, these tools can accurately predict specific space needs, shared needs, and common amenities.

Spatial Models

Using the existing 85 GSF/FTE ratio, the planning team developed three models to explore a 10-year spatial demand and campus capacity questions. Each scenario illuminates space implications for the 2012-2021 time horizon.

To test a range of spatial planning assumptions, the Consultant Team modeled 1.4%, 2.0% and 2.2% time valued annual growth approaches. A 2.0% annual increase was used to evaluate parking/transportation demand implications. The parking metrics can be found in Chapter 3 entitled Priorities + Phasing for Strategic Implementation.

Model One. This scenario evaluates a time valued annual enrollment increase of 1.4%. Additionally, all scenarios model the Auraria 17% state-wide capture rate implied from the Noel –Levitz study and use the 43,630 (fall 2011 head count) and 30,200 FTE as a point of departure.

- 17% Colorado market capture x 40,000 students = 6,800 potential students
- 6,800 students (4,760 FTE)* x 85 GSF/FTE = 405,000 GSF 10-year spatial demand

*Auraria FTE to head count ratio 0.60 to 1.0

Model Two. This scenario highlights a time valued annual increase of 2.0%.

- 43,630 head count x 2.0%/year = 9,555 potential students
- 9,555 students (6,688 FTE) x 85 GSF/FTE = 568,500 GSF 10-year spatial demand

Model Three. This scenario highlights a time valued annual increase of 2.2%. For reference, Auraria's past performance demand suggests a 672,300 GSF 10-year spatial demand.

- 43,630 head count x 2.2%/year = 10,607 students
- 10,607 students (7,425 FTE) x 85 GSF/ FTE = 632,000 GSF 10-year spatial demand

To fully appreciate the implications for campus carrying capacity and limitations for future growth, the planning team has developed a series of future growth scenarios. Contained on the subsequent pages, these models address alternative ways to value urban land. Each of them highlight FAR, total GSF capacity, height limitations, zoning allowances, and concentrations of density.

Projected 10-Year Enrollment Increase will Affect the Capacity and Character of the Auraria Campus

Urban Land + Challenging Economics

The Auraria Campus is bordered by four distinct districts, which include 1) Downtown; 2) North of Auraria Parkway; 3) South of Campus across Colfax and; 4) West of Auraria. Although each of these districts has unique demographic characteristics, each contains attributes that will increasingly inhibit further Auraria expansion beyond current campus boundaries. As a result, it is important for the Auraria community to evaluate the cost/benefit trade-off between further campus densification as compared to growth beyond the campus boundaries.

Downtown

- Opportunities located across Speer Boulevard in the Downtown CBD are limited. Land constraints, high prices and lack of available properties all drive the need for best use of Auraria's existing land.
- The existing utility capacity in Downtown Denver indicates new construction/redevelopment opportunities may be less expensive than utility upgrades needed on campus.
- Opportunities for partnering with the City of Denver or acquiring city-owned land supports the goal of connecting the Auraria Campus to downtown.
- Downtown presents opportunities for mixed-use projects in which a private developer plays a significant financial role, and that downtown development helps integrate CU Denver into the business fabric of Denver.
- Connectivity and access to the downtown business community would further enhance branding awareness.

North of Auraria Parkway

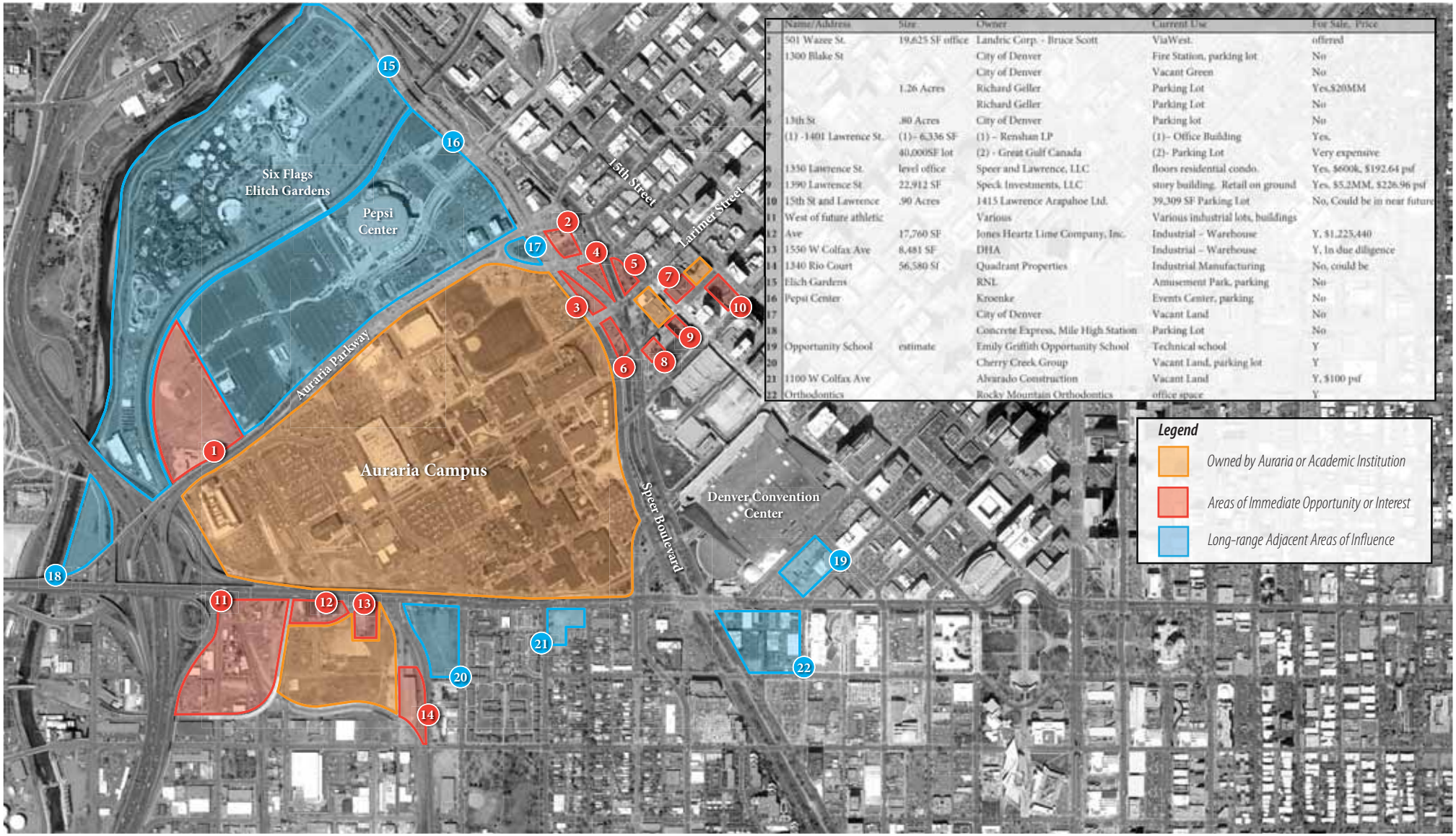
- Future opportunities exist to partner with Kroenke Sports Enterprises for parking and utility needs.
- Future development of Pepsi Center lots and Six Flags Elitch Gardens are likely. Proactive communication between Auraria and these entities for collaboration will lead to shared benefits and enhanced property development.

South of Campus Across Colfax

- Opportunities for land outlined in #11 on the facing Auraria Surrounding Properties Map are limited due to the amount of assemblage required to acquire a significant portion of the land. The lots directly adjacent to future athletic fields could be purchased as they become available to expand athletic field area and services.
- Due to extremely sensitive neighborhood concerns, expansion across Colfax from the Auraria Campus is limited and unlikely.
- Private sector parties are currently or will be developing this area. It is suggested that Auraria work in conjunction with the developments to support making the area conducive to student activities and safety.
- This area is also a prime area of storm mitigation. Auraria is currently part of the upstream team working on this and should continue to play an important role in developing a solution that works for the campus and surrounding area.

West of Auraria

- I-25 serves as a barrier.
- Opportunity for development in the Mile High Stadium area can occur at a lower cost
- Opportunity for connectivity with west line of light rail in 2013.
- Additional campus parking development could be cheaper in this area which could allow campus property to be better utilized; however, doing so would necessitate use of a shuttle which can be costly to operate.



#	Name/Address	Size	Owner	Current Use	For Sale, Price
1	501 Wazee St.	19,625 SF office	Landric Corp. - Bruce Scott	ViaWest.	offered
2	1300 Blake St		City of Denver	Fire Station, parking lot	No
3			City of Denver	Vacant Green	No
4		1.26 Acres	Richard Geller	Parking Lot	Yes,$20MM
5			Richard Geller	Parking Lot	No
6	13th St	.80 Acres	City of Denver	Parking lot	No
7	(1) -1401 Lawrence St.	(1)- 6,336 SF	(1) – Rensham LP	(1)- Office Building	Yes,
		40,000SF lot	(2) - Great Gulf Canada	(2)- Parking Lot	Very expensive
8	1350 Lawrence St.	level office	Speer and Lawrence, LLC	floors residential condo.	Yes, $600k, $192.64 psf
9	1390 Lawrence St	22,912 SF	Speck Investments, LLC	story building. Retail on ground	Yes, $5.2MM, $226.96 psf
10	15th St and Lawrence	.90 Acres	1415 Lawrence Arapahoe Ltd.	39,309 SF Parking Lot	No, Could be in near future
11	West of future athletic		Various	Various industrial lots, buildings	
12	Ave	17,760 SF	Jones Heartz Lime Company, Inc.	Industrial – Warehouse	Y, $1,225,440
13	1550 W Colfax Ave	8,481 SF	DHA	Industrial – Warehouse	Y, In due diligence
14	1340 Rio Court	56,580 Sf	Quadrant Properties	Industrial Manufacturing	No, could be
15	Elich Gardens		RNL	Amusement Park, parking	No
16	Pepsi Center		Kroenke	Events Center, parking	No
17			City of Denver	Vacant Land	No
18			Concrete Express, Mile High Station	Parking Lot	No
19	Opportunity School	estimate	Emily Griffith Opportunity School	Technical school	Y
20			Cherry Creek Group	Vacant Land, parking lot	Y
21	1100 W Colfax Ave		Alvarado Construction	Vacant Land	Y, $100 psf
22	Orthodontics		Rocky Mountain Orthodontics	office space	Y

Auraria Surrounding Properties Map; Potential Future Sites for Development and Areas of Influence

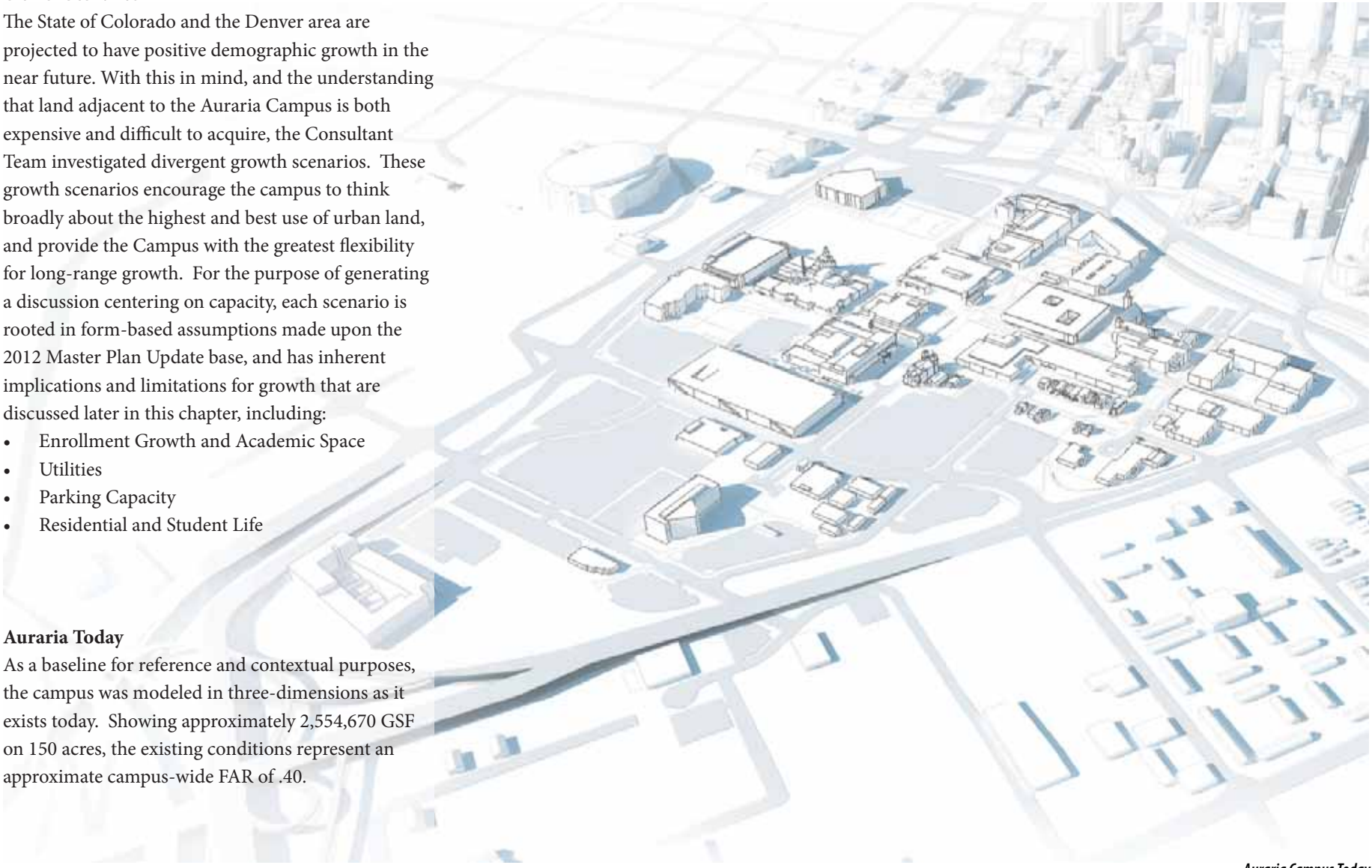
Growth Scenarios

The State of Colorado and the Denver area are projected to have positive demographic growth in the near future. With this in mind, and the understanding that land adjacent to the Auraria Campus is both expensive and difficult to acquire, the Consultant Team investigated divergent growth scenarios. These growth scenarios encourage the campus to think broadly about the highest and best use of urban land, and provide the Campus with the greatest flexibility for long-range growth. For the purpose of generating a discussion centering on capacity, each scenario is rooted in form-based assumptions made upon the 2012 Master Plan Update base, and has inherent implications and limitations for growth that are discussed later in this chapter, including:

- Enrollment Growth and Academic Space
- Utilities
- Parking Capacity
- Residential and Student Life

Auraria Today

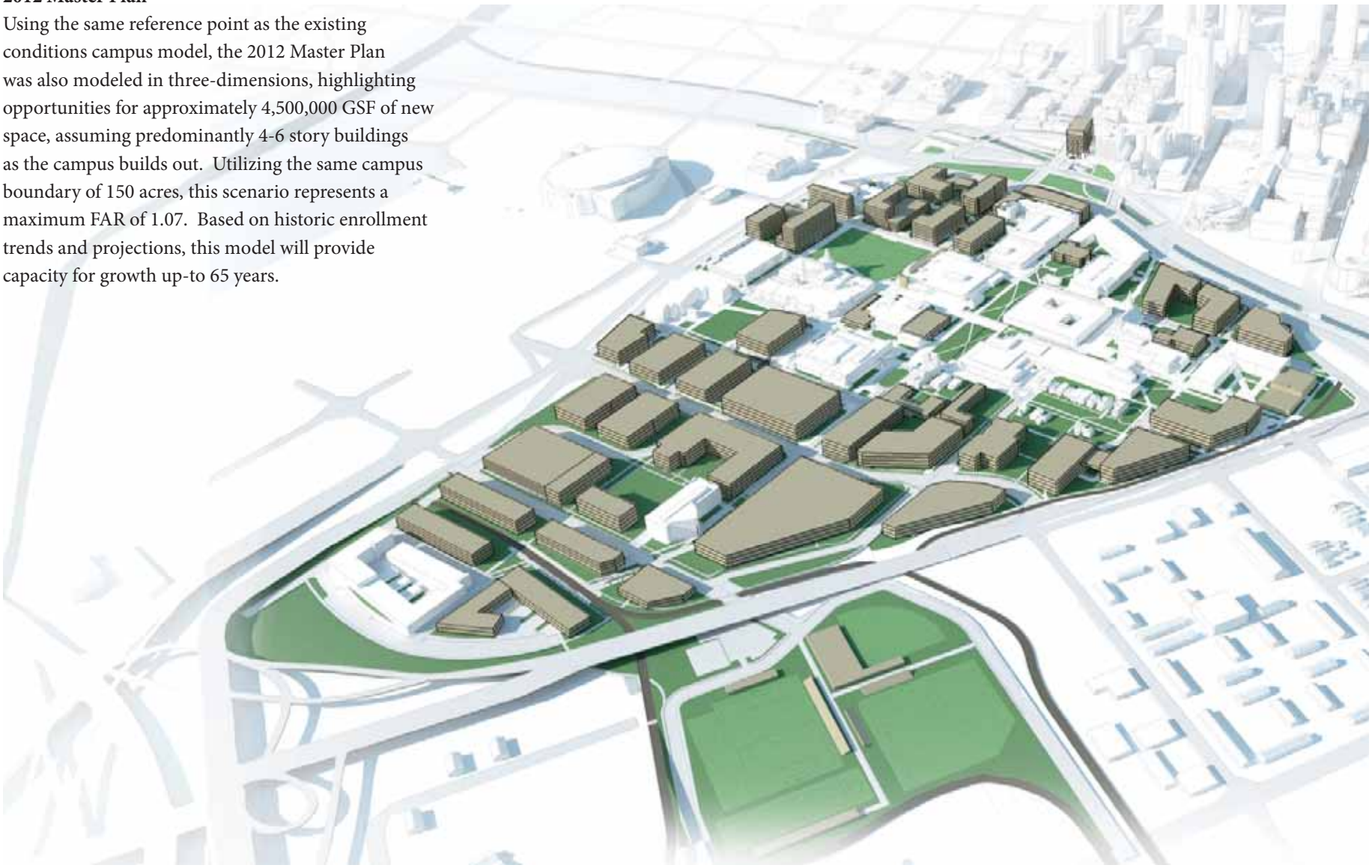
As a baseline for reference and contextual purposes, the campus was modeled in three-dimensions as it exists today. Showing approximately 2,554,670 GSF on 150 acres, the existing conditions represent an approximate campus-wide FAR of .40.



Auraria Campus Today

2012 Master Plan

Using the same reference point as the existing conditions campus model, the 2012 Master Plan was also modeled in three-dimensions, highlighting opportunities for approximately 4,500,000 GSF of new space, assuming predominantly 4-6 story buildings as the campus builds out. Utilizing the same campus boundary of 150 acres, this scenario represents a maximum FAR of 1.07. Based on historic enrollment trends and projections, this model will provide capacity for growth up-to 65 years.



2012 Master Plan Highlighting Opportunities for up-to 4,750,000 new GSF

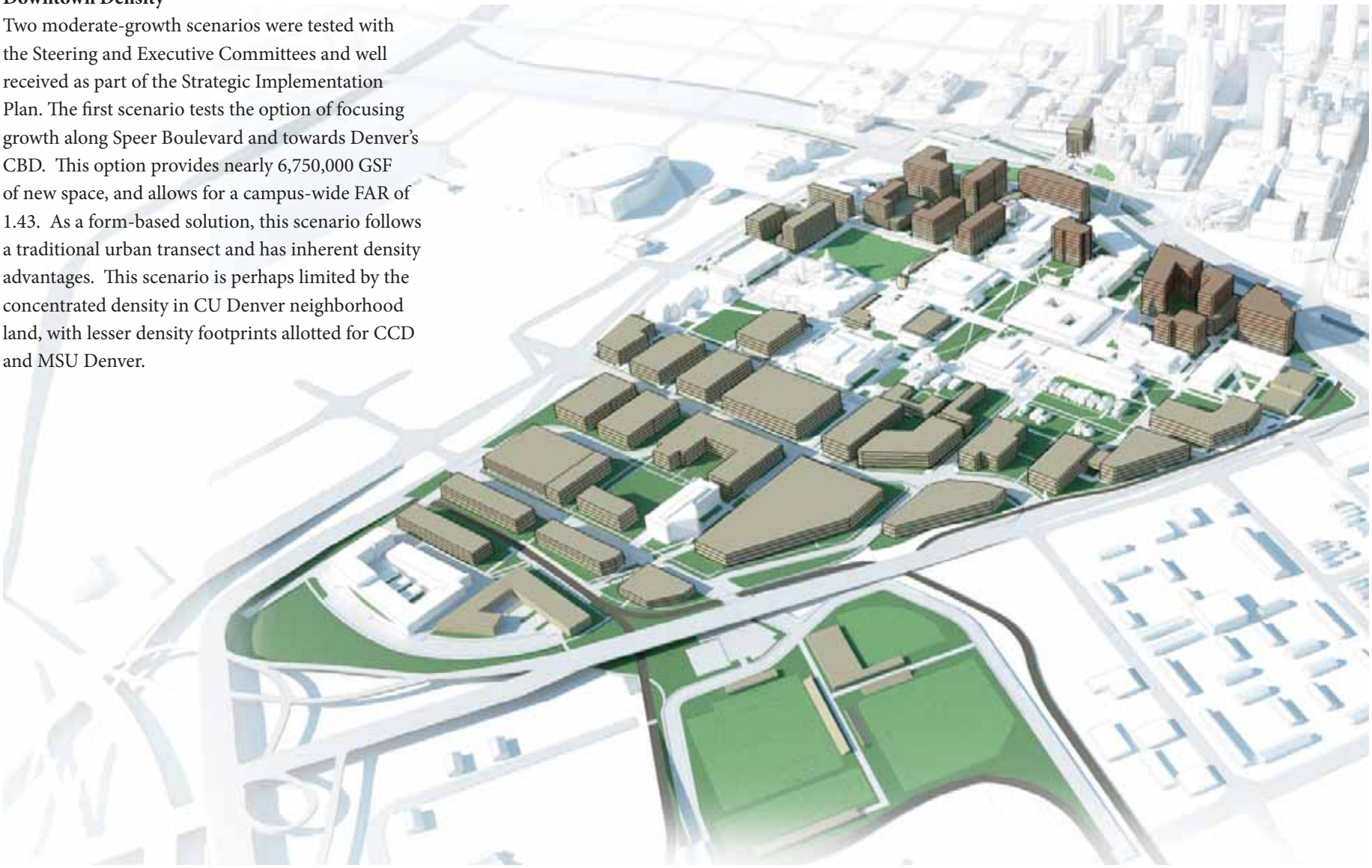
Maximum Allowable Density

To understand maximum carrying capacity of the land, the Consultant Team modeled the Auraria Campus to account for maximum density allowed per City and County of Denver zoning. Assuming 150-foot height limitations, this scenario accounts for 8-10 story buildings, except where restricted by the Old City Hall and State Capital View Planes (should the campus choose to comply). While the Auraria campus is not specifically bounded by these zoning restrictions, this model allows for over 13,000,000 GSF of new space, and a maximum FAR of 2.38 for the Auraria Campus. The general consensus of the Consultant Team, Steering Committee and Executive Committee is that the institutions may never achieve this much space, and the utility/transportation implications will likely be cost prohibitive.

The Maximum Allowable Density Model Examines Campus Capacity if Built to the Limitations of Local Zoning Regulations

Downtown Density

Two moderate-growth scenarios were tested with the Steering and Executive Committees and well received as part of the Strategic Implementation Plan. The first scenario tests the option of focusing growth along Speer Boulevard and towards Denver's CBD. This option provides nearly 6,750,000 GSF of new space, and allows for a campus-wide FAR of 1.43. As a form-based solution, this scenario follows a traditional urban transect and has inherent density advantages. This scenario is perhaps limited by the concentrated density in CU Denver neighborhood land, with lesser density footprints allotted for CCD and MSU Denver.



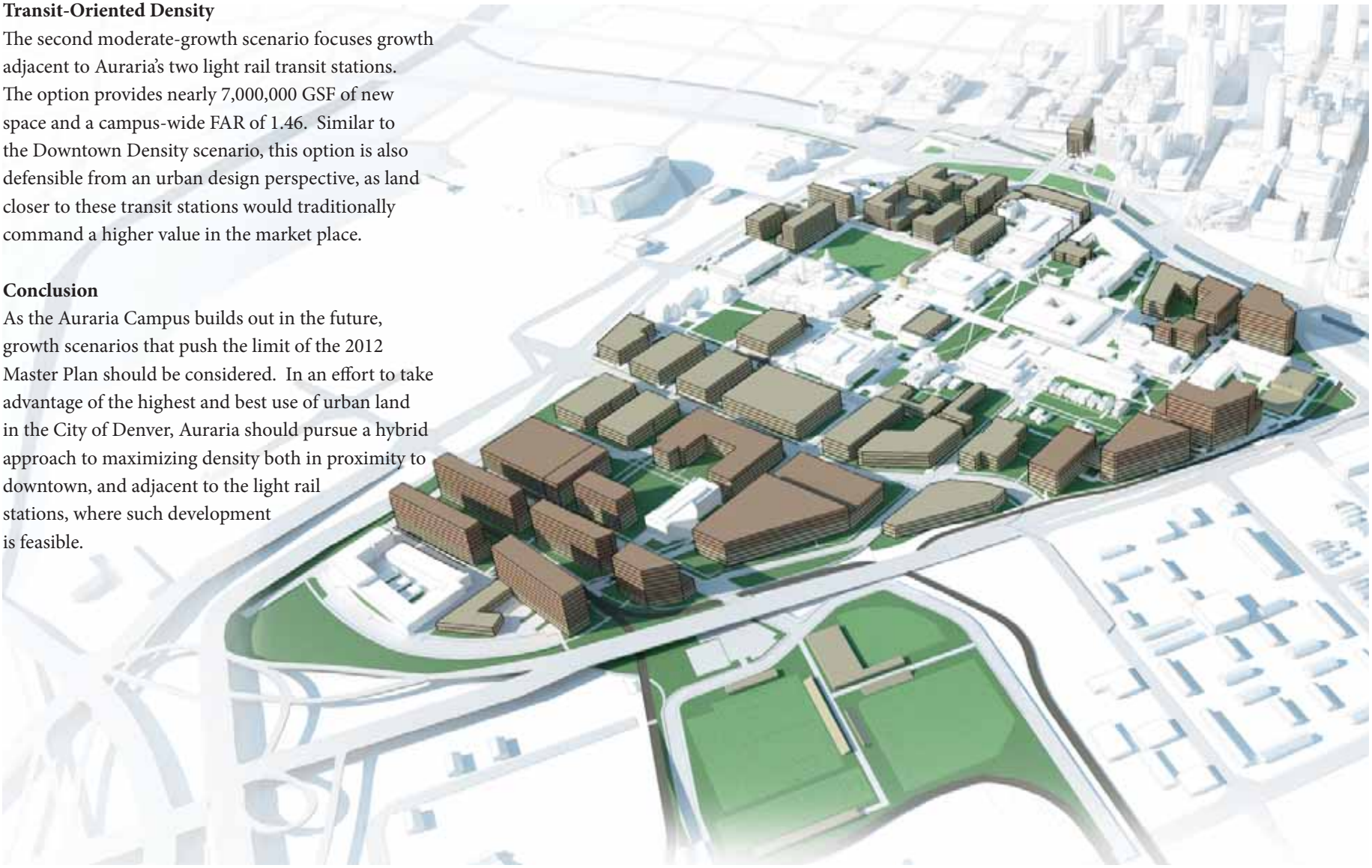
The Downtown Density Model Examines How the Campus Would Develop if High Density was focused Adjacent to Denver's CBD

Transit-Oriented Density

The second moderate-growth scenario focuses growth adjacent to Auraria's two light rail transit stations. The option provides nearly 7,000,000 GSF of new space and a campus-wide FAR of 1.46. Similar to the Downtown Density scenario, this option is also defensible from an urban design perspective, as land closer to these transit stations would traditionally command a higher value in the market place.

Conclusion

As the Auraria Campus builds out in the future, growth scenarios that push the limit of the 2012 Master Plan should be considered. In an effort to take advantage of the highest and best use of urban land in the City of Denver, Auraria should pursue a hybrid approach to maximizing density both in proximity to downtown, and adjacent to the light rail stations, where such development is feasible.



The Transit-Oriented Density Model Examines Density Concentration in Proximity to Existing Light Rail Stations

Triggers for Growth + Optimal Size

Inherent to the form-based discussion of capacity is an understanding of the limitations for growth associated with each scenario. These triggers, highlighted below, should be considered as new density and development is considered on campus.

Academic Buildings

At a planning level, classroom buildings should be considered for a maximum height of 5-6 stories. While there are certainly scenarios in higher education (especially urban higher education) where this model is challenged, a mid-range height allows for optimum vertical circulation. As higher density footprints are considered in key areas, a mix of uses (including retail on the first floor, parking on the lower levels, and even office/residential above) is necessary.

Utilities

As part of the Strategic Implementation Plan, the Consultant Team has identified a potential short-term capacity issue with the sanitary sewers on campus. This will be discussed in more detail in Chapter 2, but should be considered an immediate priority for any growth scenario. As long-range growth scenarios are considered, Auraria should study opportunities for a central plant and/or cogeneration. Because of the rising cost of energy, there is a long-range cost benefit to either of these opportunities when applied to any of the growth scenarios.

Academic Buildings Require Optimal Footprints and Heights that should be Considered in the Planning Process

Parking

While these growth scenarios do not address specific enrollment growth beyond short-term (10-year) planning horizons, each scenario does have very real implications for the number of people the campus can support. One of these implications is parking. Detailed growth projections and lot-by-lot parking balance in the 10-year horizon identify sufficient parking resources for the campus assuming three new parking structures are constructed. However, in longer range planning horizons, there will be a need for Auraria to pursue the following options:

- Significantly reduce parking demand with transit and/or on campus housing opportunities
- Construct another large parking structure on campus beyond what is shown in the 2012 Master Plan Update
- Identify opportunities for remote parking
- Integrate new structured parking within new building projects

These issues are addressed in further depth in Chapter 3.

Long-range Parking Planning must Address Opportunities for Integrated Parking Structures and Reduction of Parking Demand

Housing

Each scenario avoids discussion of building uses. However, the discussion of capacity cannot be fully addressed without an understanding of the institutions' approach to providing on campus housing for its students. Embedded in this discussion is a question of what the market can absorb, which locations are ideal for student housing, and if any operational changes will be made to encourage living on campus.

Student Life

Increased density and student population on campus also raises questions regarding the quantity and quality of dedicated student space on campus. Essential to the success of the campus is appropriate space for dining, recreation, and study space. As part of the Strategic Implementation Plan, the Consultant Team realizes that the Tivoli is at and/or over capacity. Conversion of a portion of this facility to a conference center will exacerbate this issue. As increased student population on campus is considered, a new union-type facility should be pursued as a short-term priority. Renovations to increase student oriented space within the Auraria Library will help, but may not be a complete solution.

The Tivoli Student Union is Currently at Capacity and the Projected Increase in Enrollment may Demand a New Union Facility

2 | shared thinking

Introduction

The Auraria Campus is a unique model in higher education where three distinct institutions share a common piece of land. This presents both opportunities and challenges for sharing academic, recreational, and community resources.

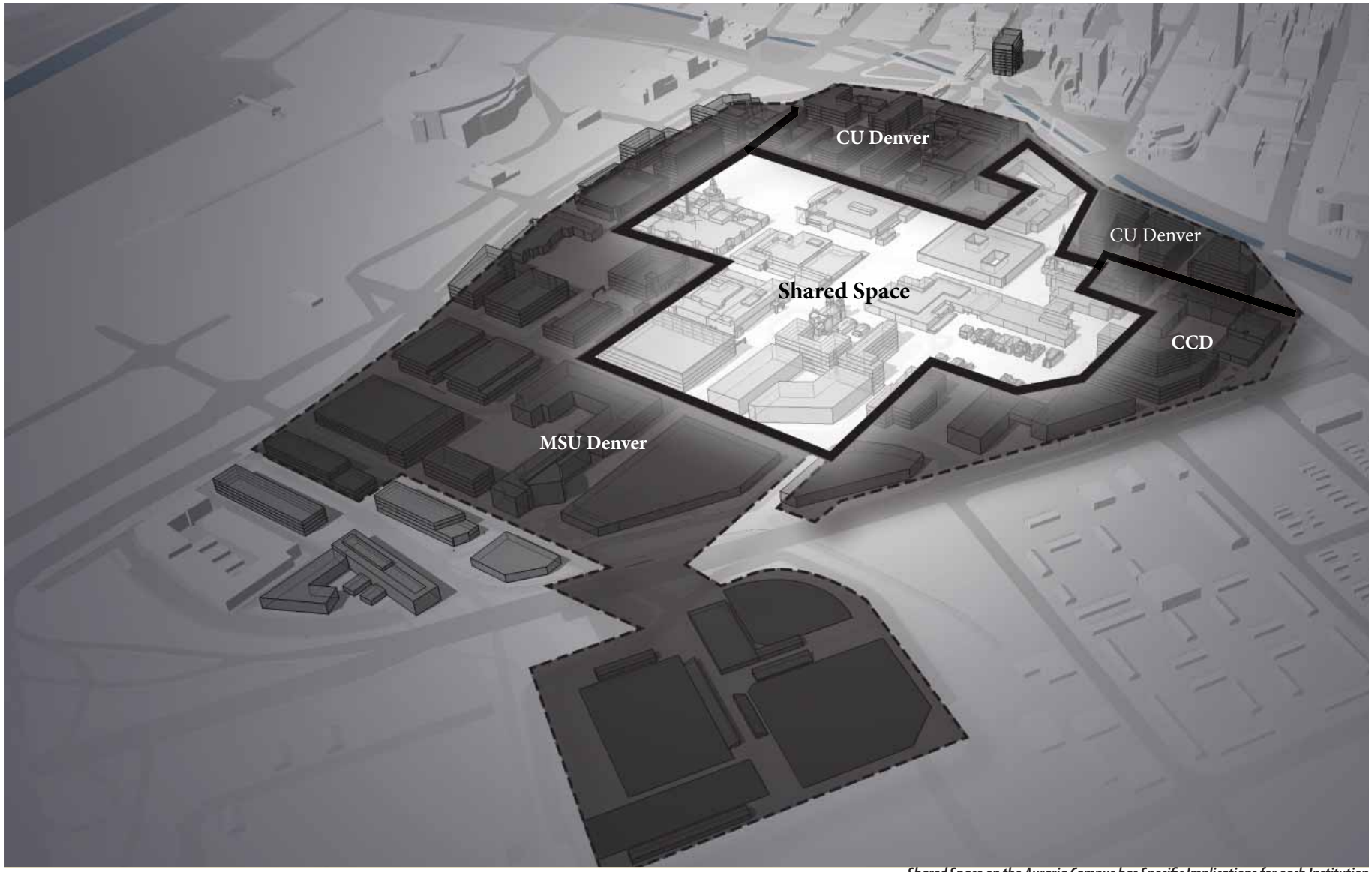
One of the great accomplishments of the 2012 Master Plan Update was the expansion of the neighborhood concept from the 2007 Plan, allowing for institutional identity and identifiable growth zones for CU Denver, CCD, and MSU Denver. The Strategic Implementation Plan respects and strengthens those institutional neighborhoods, developing a series of guidelines for the shared systems and zones on the Auraria Campus in order to blend the need for institutional identity with the goal of a more imageable and identifiable campus image in downtown Denver.

Shared Resources

Building on the 2012 Master Plan Update and prior to conversations regarding specific priorities for the Auraria Campus, this Strategic Implementation Plan begins with a discussion regarding the approach to shared resources on the Auraria Campus. Physical resources that are currently shared on campus (and considered as future shared opportunities) include:

- Parking
- Recreation
- Union (and Food)
- Library
- Utilities
- Facilities
- Open Space (Pedestrian and Bike) Corridors
- Vehicular and Transit Corridors
- Academic Uses

This chapter specifically focuses on implications for shared corridors, utilities, and academic uses, as primary to physical strategic implementation priorities. Shared parking resources are discussed in more detail in Chapter 3. The remaining shared resources listed are addressed as part of specific priorities in Chapters 4-8, or focus on more operational issues, and are not addressed specifically in this Strategic Implementation Plan.



Shared Space on the Auraria Campus has Specific Implications for each Institution

Guidelines for Shared Corridors

To provide further definition for recommendations made in Chapters 5 and 6 of the 2012 Master Plan Update, the Consultant Team developed typical sections for each of the circulation typologies on the Auraria Campus and several specific applications of these typologies, including:

- Major Internal Thoroughfares
- Major Complete Streets
- Minor Complete Streets
- Larimer Street
- Walnut Street Extension
- 10th Street Mall Extension
- Lawrence Street Mall Extension
- 8th Street Mall Extension

In addition to recommendations regarding form, scale, dimensions, and character, these corridor guidelines also directly relate to the 2009 Auraria Campus Design Guidelines. Embedded in each section is a distinct approach to the characteristics and principles of streetscape design articulated in the design guidelines, including:

- Edges
- Street Walls
- Street Spaces
- Building Heights
- Landscape Form
- Roads
- Transportation

Each sectional graphic also includes application of design elements articulated in the 2012 Master Plan Update, 2011 Signage Plan, and 2009 Design Guidelines. These characteristics, principles and design elements are listed with each typology.

Pedestrian Mall in Madison, WI

Streetscape at Scott's Run Station, Tyson's Corner, VA

Proposed Streetscape in the Cleveland Canal Basin District

Typical Major Internal Thoroughfare

Proposed Section

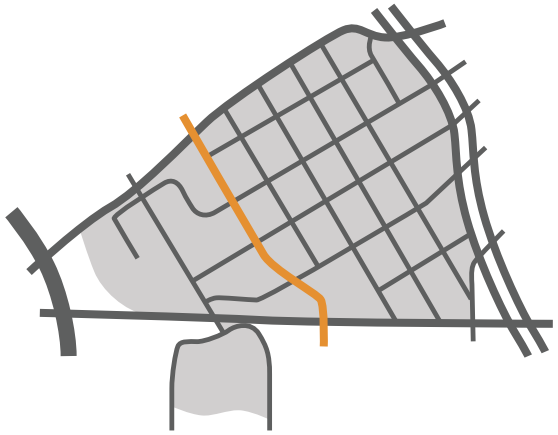
Existing Conditions

Characteristics + Principles

- Edges — Distinct from City
- Street Walls — Gross/Tactful Transparency
- Street Spaces — Meandering Organic
- Building Heights — 3-6 Stories
- Landscape Form — Natural Informal
- Roads — 4-5 Lanes
- Transportation — Vehicle/Bike/Pedestrian

Design Elements

- Off-Street Bike Lane
- Canopy Trees
- Native Natural Planting + Lawn
- Seat Walls
- Vehicular + Pedestrian Scale Lighting
- Campus Standard Furnishings
- On-Street Parking (Occasional)
- Special Paving
- Type A Signage



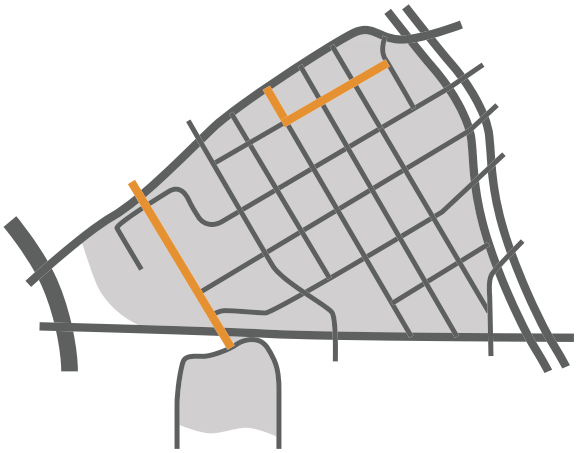
Location Map

Characteristics + Principles

- Edges — Integrated with City
- Street Walls — Human Scale/Transparent
- Street Spaces — Linear Axial
- Building Heights — 6 Stories + Towers
- Landscape Form — Urban Formal
- Roads — 2 Travel Lanes + 2 Parking
- Transportation — Vehicle/Bike/Bus/ Pedestrian

Design Elements

- Shared or Dedicated Bike Lane
- Canopy or Street Trees
- Native Street Planting
- Vehicular + Pedestrian Scale Lighting
- Campus Standard Furnishings (Update)
- On-Street Parking
- Special Paving
- Type C, D Signage



Location Map

Typical Major Complete Street

5′	VARIES	8′	14′	14′	8′	VARIES	6′ - 20′
PEDESTRIAN AREA	LAWN PLANTING	PARKING	SHARED TRAVEL/BIKE LANES	SHARED TRAVEL/BIKE LANES	PARKING	LAWN	PEDESTRIAN AREA

Proposed Section

Existing Conditions

Typical Minor Complete Street

Proposed Section

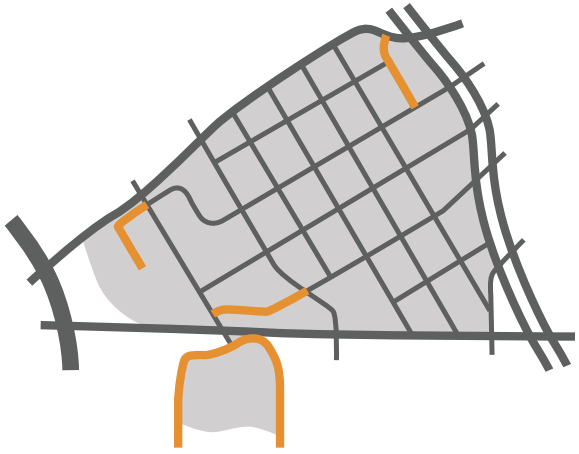
Existing Conditions

Characteristics + Principles

- Edges — Integrated with City
- Street Walls — Human Scale/Transparent
- Street Spaces — Linear Axial
- Building Heights — 6 Stories + Towers
- Landscape Form — Urban Formal
- Roads — 2 Travel Lanes
- Transportation — Vehicle/Bike/Pedestrian

Design Elements

- Bike Lane Varies. See Plan.
- Street Trees
- Native Street Planting + Lawn
- Vehicular + Bollard Lighting
- Campus Standard Furnishings (Update)
- Type C, D Signage



Location Map

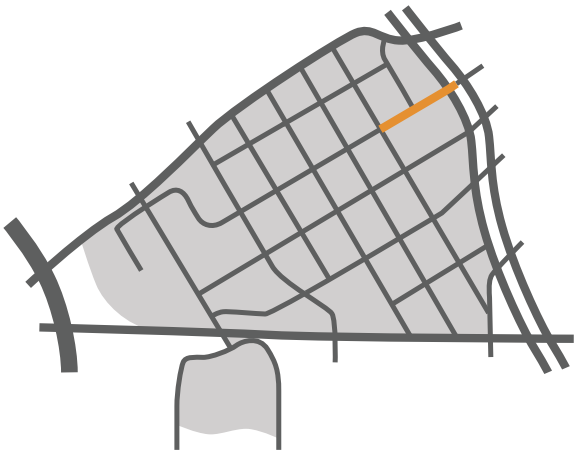
Larimer Street-Initial Phases

Larimer Street on the Auraria Campus is a complex corridor with short-term implications in regards to CU Denver's Academic Building 1 (AB1), and long-term implications regarding placement of a trolley connector between the campus and the 40th and 40th station. As part of the Strategic Implementation Plan this corridor was given specific emphasis and deserves further planning scrutiny as part of any implementation project along the corridor. The Larimer Street approach to campus, through Larimer Square and across Speer Boulevard, is also important to the vitality of this corridor. This approach is studied in further detail in Chapter 8.

20' - 28'	0 - 8'	12'	12'	0 - 8'	20' - 28'
PEDESTRIAN AREA	PARKING BUS TURNOUT	SHARED TRAVEL/BIKE LANES	SHARED TRAVEL/BIKE LANES	PARKING BUS TURNOUT	PEDESTRIAN AREA

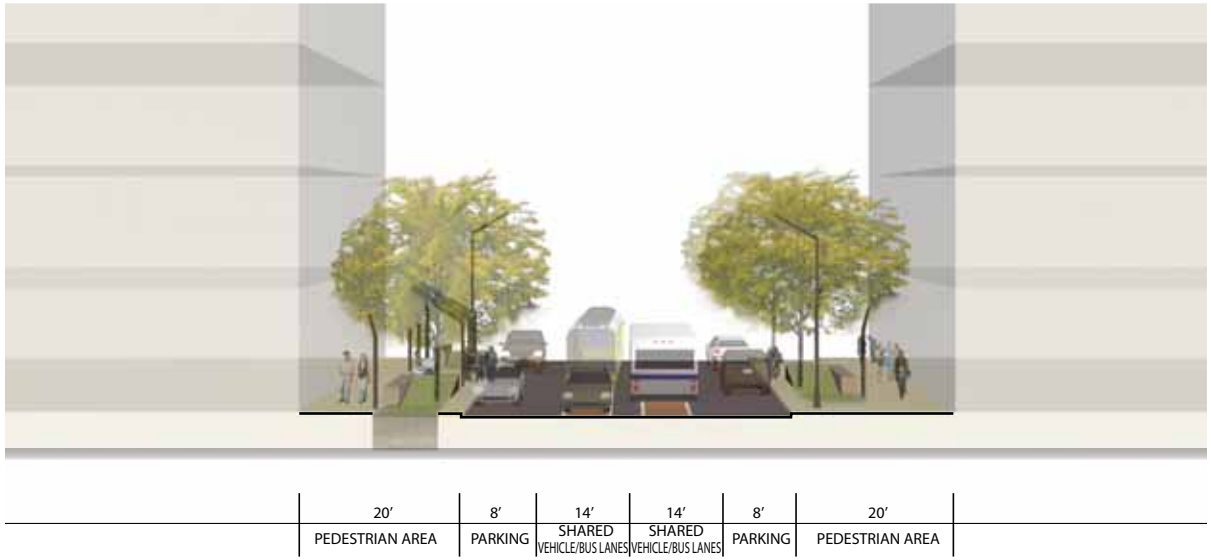
Proposed Section

Existing Conditions



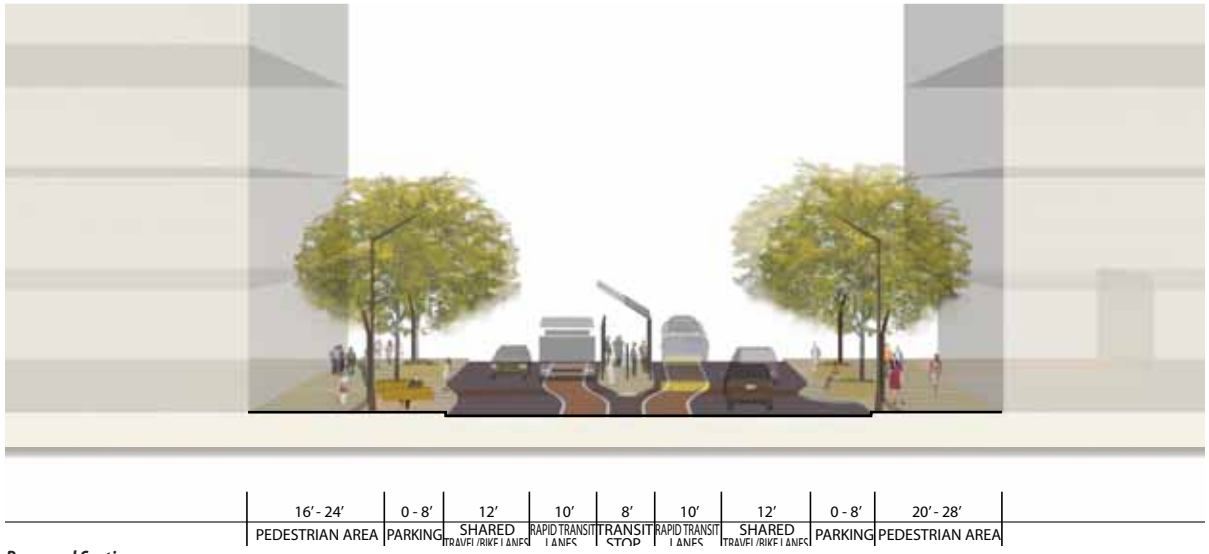
Location Map

Larimer Street-Future Phases with Split Trolley



Proposed Section

Larimer Street-Future Phases with Center Trolley



Proposed Section

Characteristics + Principles

- Edges — Integrated with City
- Street Walls — Human Scale/Transparent
- Street Spaces — Linear Axial
- Building Heights — 6 Stories + Towers
- Landscape Form — Urban Formal
- Roads — 2 Travel Lanes + 2 Parking
- Transportation — Mixed Vehicle/Bus/Trolley
  Bicycle/Pedestrian

Design Elements

- Shared Bike Lane
- Street Trees
- Limited Native Street Planting
- Vehicular + Pedestrian Lighting
- Campus Standard Furnishings (Update)
- On-Street Parking (with Bump Outs)
- Special Paving
- Type C, D, E Signage

Larimer Street-Future Phases

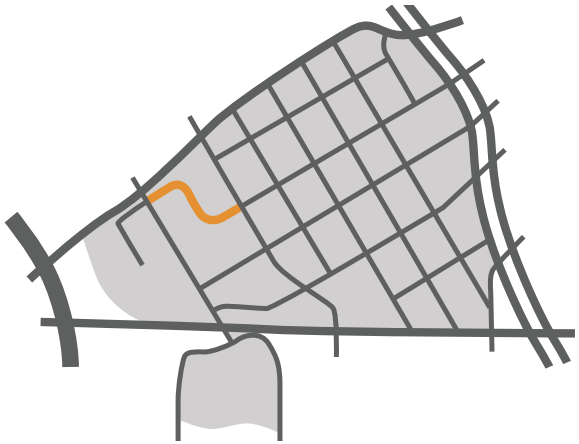
Planning for a long-range trolley along Larimer Street requires specific implications regarding design of the corridor. A shared vehicular and trolley lane can be built within the existing 80' wide Larimer Street right-of-way. Inclusion of a dedicated center trolley lane and on-street parking would require a wider right-of-way for Larimer Street.

Characteristics + Principles

- Edges — Distinct from City
- Street Walls — Gross Scale/Tactful Transparency
- Street Spaces — Linear Axial
- Building Heights — 3-6 Stories
- Landscape Form — Urban Informal
- Roads — 2 Travel Lanes + Median
- Transportation — Vehicle/Bike/Pedestrian

Design Elements

- Dedicated Bike Lane
- Canopy Trees
- Native Street Planting + Lawn
- Vehicular + Pedestrian Lighting
- Campus Standard Furnishings (Update)



Location Map

Walnut Street (Larimer Street Extension) to 5th Street

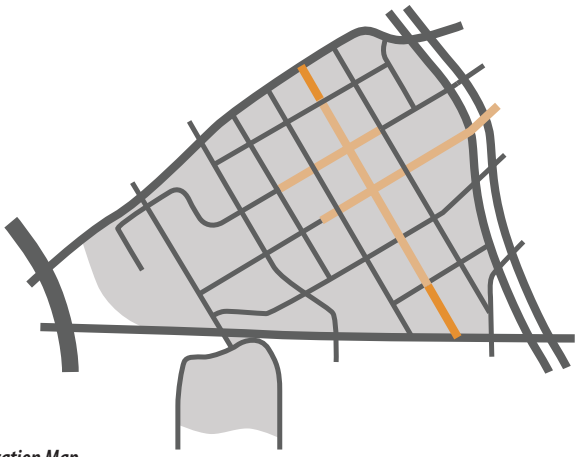
VARIES	6′	VARIES	5′	12′	10′	12′	5′	VARIES	6′	VARIES
LAWN	PEDESTRIAN AREA	LAWN PLANTING	BIKE	TRAVEL LANE	TURN LANES MEDIAN	TRAVEL LANE	BIKE	LAWN PLANTING	PEDESTRIAN AREA	LAWN

Proposed Section

Existing Conditions

10th Street Mall Extension

Proposed Section



Location Map

Existing Conditions

In general, the scale of existing pedestrian malls along 10th Street, Lawrence Street, and Larimer Street are indicative of quality campus space (shown in light orange in the key map). Character improvements within each of these malls (including removal of former asphalt road along 10th Street) should be made as the campus matures. Guidelines for the extension of a shared pedestrian corridor along 10th Street suggest continuation of the existing scale utilizing the following characteristics, principle and design elements to improve the character of this entire corridor:

Characteristics + Principles

- Edges — Distinct from City
- Street Walls — Human Scale/Transparent
- Street Spaces — Meandering Organic
- Building Heights — 3-6 Stories
- Landscape Form — Natural Informal
- Roads — None
- Transportation — Pedestrian

Design Elements

- Canopy Trees
- Native Planting
- Pedestrian Lighting
- Special Paving
- Seat Walls
- Campus Standard Furnishings (Update)
- Type C, D, E Signage

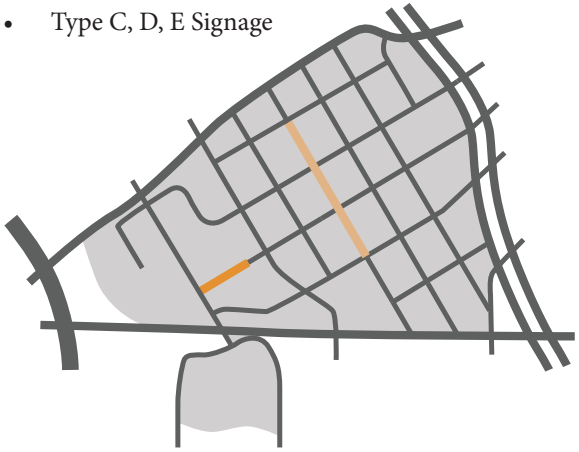
Lawrence Street Mall Extension
Extension of the Lawrence Street Mall should continue the quality scale exemplified along the 9th Street Mall utilizing the following characteristics, principle and design elements:

Characteristics + Principles

- Edges — Distinct from City
- Street Walls — Human Scale/Transparent
- Street Spaces — Meandering Organic
- Building Heights — 3-6 Stories
- Landscape Form — Natural Informal
- Roads — None
- Transportation — Pedestrian

Design Elements

- Canopy Trees/Native Planting
- Pedestrian Lighting
- Special Paving/Seat Walls
- Campus Standard Furnishings (Update)
- Type C, D, E Signage

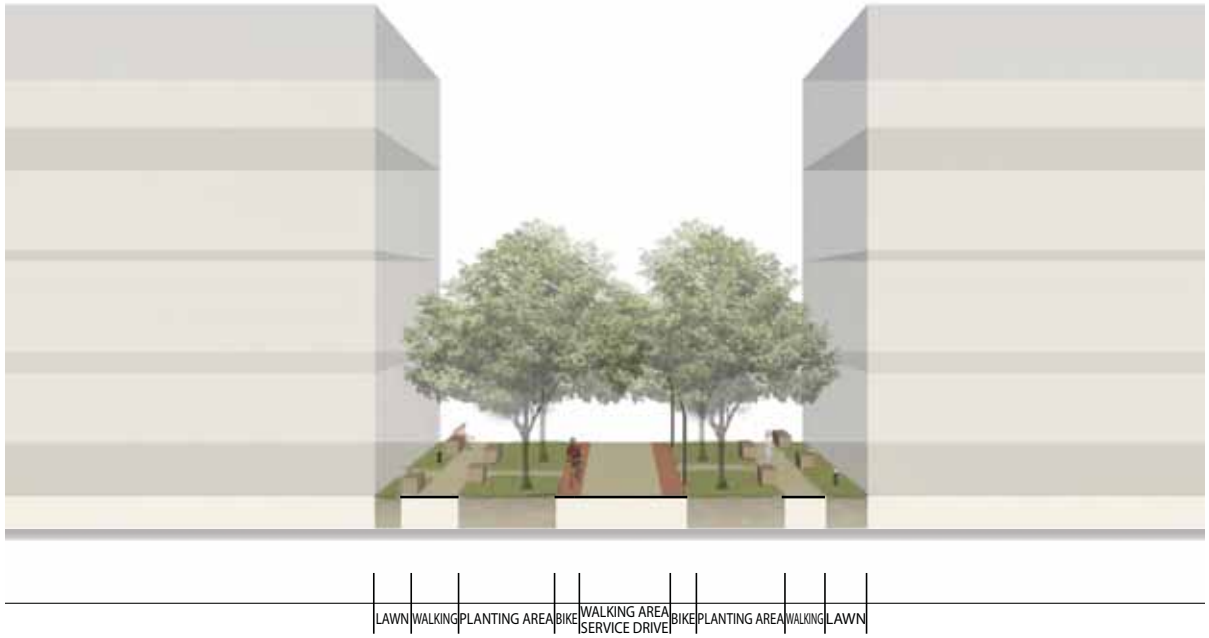


Location Map

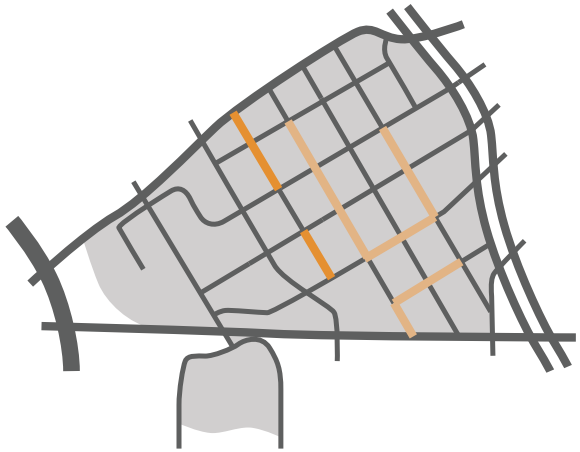
Proposed Section

Existing Conditions

8th Street Mall Extension



Proposed Section



Location Map

Existing Condition

Guidelines for the extension of a shared pedestrian corridor along 8th Street should continue the quality scale of existing pedestrian malls along 9th Street, 11th Street, and Curtis Street utilizing the following characteristics, principle and design elements:

Characteristics + Principles

- Edges — Distinct from City
- Street Walls — Human Scale/Transparent
- Street Spaces — Linear Axial
- Building Heights — 3-6 Stories
- Landscape Form — Urban Formal
- Roads — None
- Transportation — Bike/Pedestrian

Design Elements

- Canopy Trees
- Minimal Native Planting + Lawn
- Pedestrian Lighting
- Special Paving
- Campus Standard Furnishings (Update)
- Type C, D,E Signage

Utility Systems

The 2011 Infrastructure Master Plan (IMP) documents provide an extensive study and system-by-system guide and approach to proper infrastructure improvements as future development is planned for and specific buildings are added to campus. An executive summary of each utility system is presented in the 2012 Master Plan Update. These studies were evaluated as part of this Strategic Implementation Plan in order to:

- Understand capacity constraints and limitations for future growth within each system
- Align infrastructure priorities with other campus priorities for strategic implementation (in Chapter 3)

The summary of each system below relates specifically to capacity issues for long-range growth. Several topics and ideas outlined here and in the 2011 IMP and 2012 Master Plan Update deserve special attention and require further study:

- Review sanitary sewer as a constraint to growth and immediate priority
- Understand which systems and priorities can be handled with incremental improvements and which require major capital investments
- Investigate feasibility of a centralized plant
- Study potential for cogeneration
- Consider implementation of an Auraria utility system with an incremental fee or tax to pay for major utility improvements and maintenance

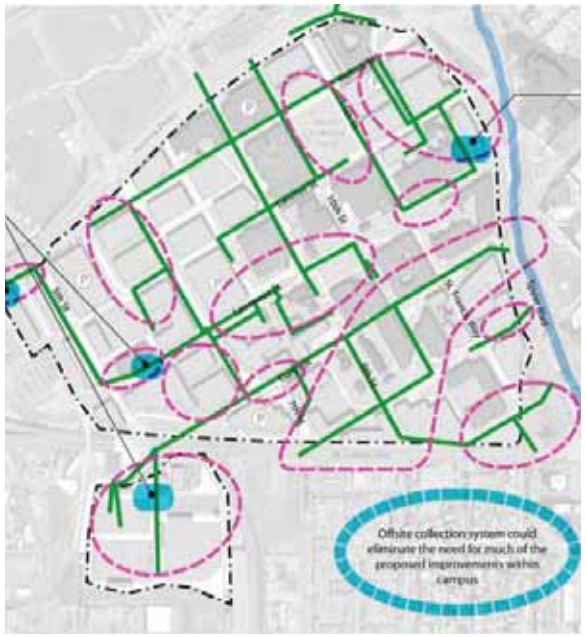
Sanitary Sewer System

- Existing system is surpassing its lifespan
- Multiple sewer projects are needed to increase capacity on campus and make way for proposed facilities
- New construction may exceed capacity of off-site sewer mains in the short term
- Upstream development may further constrain system capacities
- Proposed ball fields conflict with existing sanitary mains

Potable Water

- Existing mains will need to be up sized as development occurs
- Need to relocate existing mains that conflict with new construction
- New mains needed to service new construction
- Some mains are more than 100 years old
- New hydrants are needed to service campus build out

Stormwater + Floodplain



- New construction on existing pervious land will require detention and water quality facilities
- 66% of existing stormwater pipes do not meet current standards
- Investigate sustainable stormwater initiatives in an effort to reduce impervious surfaces, improve water quality, and reduce water quantity flows to pre-development conditions wherever possible

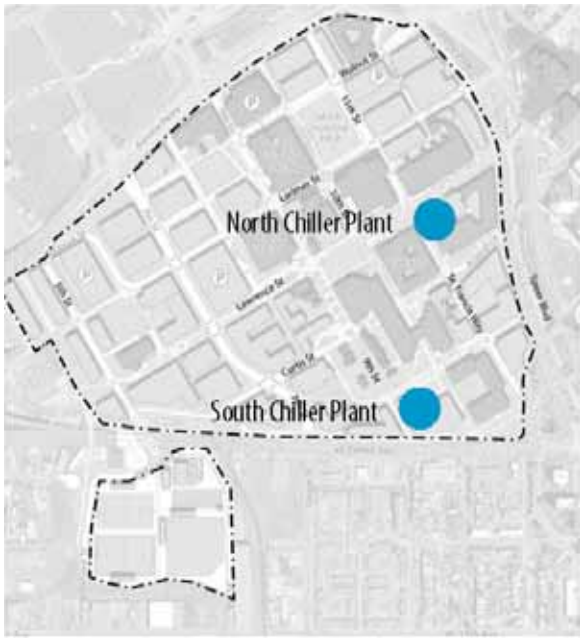
Gas

- The campus has sufficient service to accommodate future growth

Steam

- Abandonment of the steam system should be pursued
- Gas-fired heating systems can replace steam systems

Chilled Water



- Existing North and South chiller plants do not have spare capacity to support major new construction
- Buried pipes for existing system are aging and will need to be replaced
- Future cooling needs should be served with local direct/indirect evaporative cooling equipment as part of each building project

Telecommunications

- Much of existing system dates to the 1970s
- New duct banks parallel the campus electrical system in the northwest area of campus, additional ductwork is required to complete the system
- Build new telecommunications and electrical systems in tangent to minimize cost
- Redundant distributed hub is recommended as a replacement for the current ring based system

Electric

- System will be upgraded in September 2012 and is projected to handle build-out
- The feeds from Xcel come from several sources on an antiquated and patchwork system of feeds that will be both costly and difficult to implement
- A cogeneration plant should be considered for future needs and campus growth
- Additional ductwork is required for enhanced system distribution
- Xcel will require that existing campus buildings must be transferred to the campus' electric network over time, including the Tivoli Union, King Center, Administration Building and the Printing and Distribution Center.

Shared Academic Facilities

As part of the Strategic Implementation Plan, the Consultant Team was asked to study and assess the feasibility of a shared engineering/technology building located in the shared neighborhood at the center of the Auraria Campus. This idea was challenged early in the planning process by diverging and near-term opportunities expressed by several of the institutions:

- State funding may be challenging for a large shared engineering and technology building.
- MSU Denver is considering an aviation technology building as one if its first priorities. Due to the specialized function and partnership opportunities for this program, it may be easier to fund this building separately rather than as part of a shared facility.
- CU Denver is considering incremental additions to the Science Building and North Classroom Building to serve its engineering and technology needs.
- CCD is willing to collocate welding, machining, and other technology needs in a shared facility, but these programs require minor square footage needs.
- It is more likely that the individual institutions could find financial resources for specific needs.

While consensus was not reached regarding the short-term feasibility of a shared Engineering/Technology Building, the idea for a shared academic facility in the shared neighborhood remains strong and viable. Several opportunities for shared academic facilities should be further explored, including:

Engineering and Technology

The idea of a shared engineering and technology facility deserves further detailed programmatic study beyond the scope of this Strategic Implementation Plan. Successful implementation of this type of facility could provide desirable synergies for shared disciplines and would most likely require inclusion of MSU Denver's Aviation Technology Program, CU Denver's Engineering Program, and CCD's Technology Programs.

Arts

Because of the specific requirements of an arts building and the difficulty to raise money for such a facility, a centralized shared arts facility should be considered in an effort to:

- Consolidate CU Denver's College of Arts and Media (CAM) in a central location.
- Provide a shared building for MSU Denver and CCD Arts programs.
- Combine intensive arts programs with technology programs.
- Allow the King Center to redevelop as a music and performing arts building.
- Allow for the relocation of the dirty arts components out of the Technology Building.

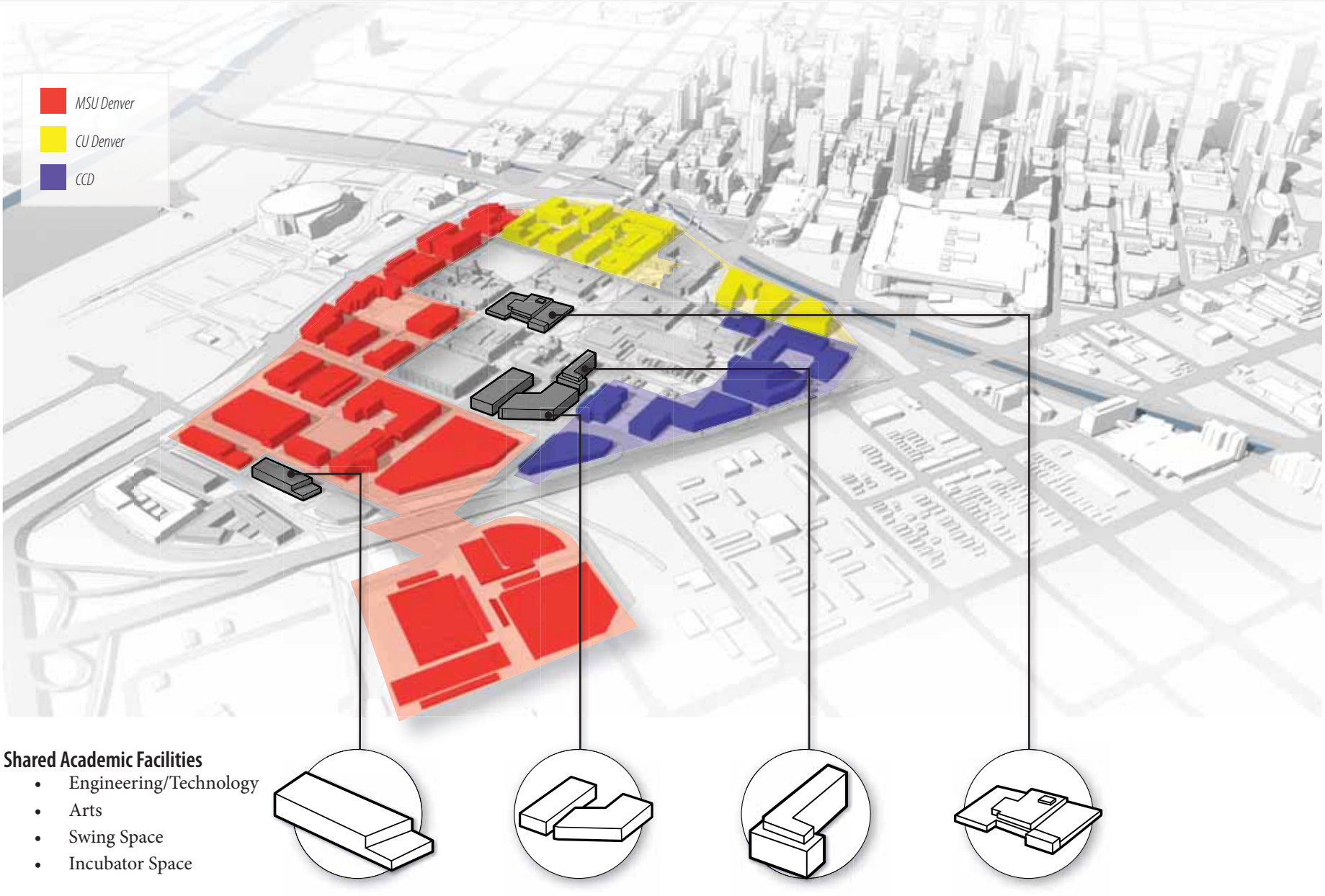
Swing Space

Swing Space should be further investigated as an option for a shared academic building in an effort to remove modular classrooms and collocate space in a centralized building in the shared neighborhood. Further investigation regarding funding strategies for this type of facility is provided in Chapter 6.

Incubator Space

Shared incubator space on campus would provide an opportunity for technology transfer, interdisciplinary learning, and collaboration amongst educational and private sector interests on campus. Locations in shared neighborhoods in closest proximity to the light rail would provide the most feasible opportunity for this type of use. Potential partners could vary significantly, including opportunities for the growing oil and gas industry. If programmed appropriately, an incubator building may also include swing space, with opportunities to develop collaborative classroom layouts with technology appropriate for 21st century learning models.

Possible locations for these type of facilities were tested with the Steering and Executive Committees shown in the diagram on the right. These locations should be further studied as part of more detailed planning and programming studies.



Shared Academic Facilities

- Engineering/Technology
- Arts
- Swing Space
- Incubator Space

3 | priorities + phasing for strategic implementation

Introduction

Prioritization and phasing for strategic priorities in 0-5, 6-10, and 11+ year time frames is based on detailed input from the Steering and Executive Committees. This chapter identifies opportunistic steps required to ensure a methodical and incremental approach to future development without prescribing a method that falls apart if priorities are completed out of order.

Rooted in the 2012 Master Plan Update, priorities described on the following pages incorporate initiatives for each institution and the shared neighborhood, ensuring internal connectivity by phase amongst CU Denver, CCD, MSU Denver and Auraria, and external connectivity with the City of Denver, Connect Auraria Coalition, and others. In providing order of magnitude costs for development and maintenance, this phasing strategy incorporates:

- Triggers and quantities for each priority
- Utility recommendations made in the 2011 Infrastructure Master Plan Report
- Parking (costs for implementation and balance by location, year, and phase)
- Institutional responsibility by priority

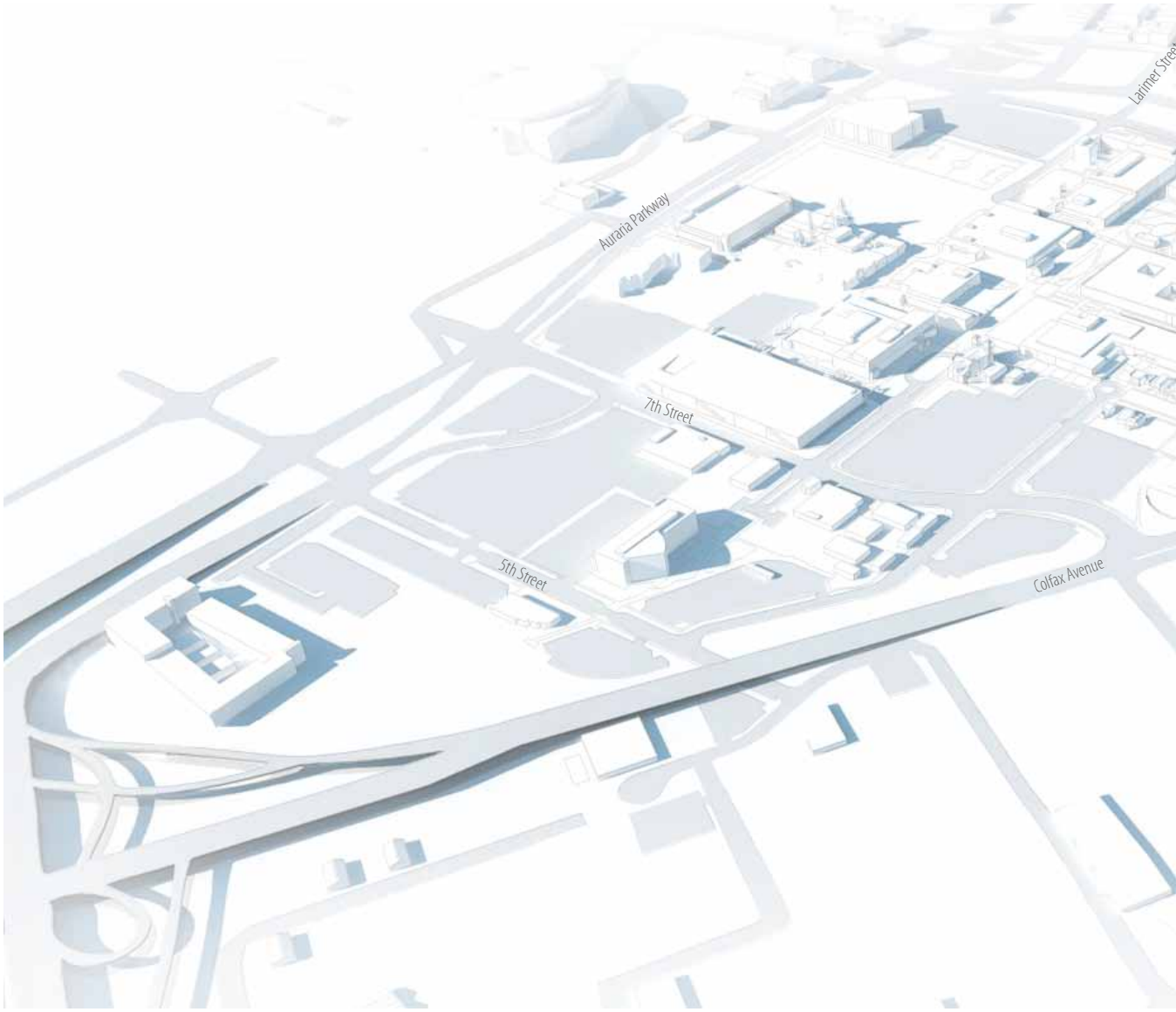
Existing Conditions

The 2012 baseline for the Strategic Implementation Plan represents 2,554,670 GSF on 150 acres. This represents several recent additions to the Campus, including:

- Auraria Science Building Addition (2009)
- MSU Denver Student Success Center (2012)
- MSU Denver Hotel and Hospitality Learning Center (2012)

Ongoing projects also included in the baseline, but also shown for reference as part of the phasing strategy include:

- CU Denver Academic Building 1 (AB1). Anticipated 2013.
- CCD Student Learning and Engagement Building (SLEB). Anticipated 2014



Auraria Campus Today


Speer Boulevard

Phase One (0-5 Years)

Phase One priorities have been evaluated in detail with the Steering and Executive Committees, and have been given more design scrutiny than future phase priorities.

The priorities listed are keyed to coincide with the graphic on the facing page. These numbers are also referenced for further description of priorities in Chapters 4-8. Priorities are also keyed to the 2012 Master Plan where applicable. Consideration has been given to triggers associated with major priorities. As long as these triggers are respected, the actual order of these priorities can vary.

All conceptual opinion of costs represented in this report have been prepared at an order of magnitude and pre-design level, including contingencies. Where applicable, more detailed costs from institutions have been incorporated. Planning and design considerations are articulated for each priority in Chapters 4-8, with emphasis on further study required for each priority.

Note: All order of magnitude costs are in 2012 dollars and have not been escalated.

Key:

U-CU Denver	GSF-Square Feet
C-CCD	LS-Lump Sum
M-MSU Denver	LF-Linear Feet
S-Shared	SP-Parking Spaces

***Numbers on plan relate to "Key" column*

0-5 Year Implementation Strategy

Key	Master Plan Key	Primary Institution	Project	Total Cost	Links + Triggers (per Key)	Maintenance Costs	Quantity	Units	GSF
1	7	U	Academic Building 1	$65,820,944	2, 3, 5	$650,000		SF	130,000
2		U	**Sanitary**-Larimer Street Metro Connection	$180,978	1			LS	
3		U	**Water**-Alignment 3	$669,750	1			LS	
5		U,S	Demo Portion of Redwood Lot/Lot R	$225,000	1		175	SP	75,000
6	4	U,S	Parking Deck on 11th St	$11,500,000	77, 78, 80, 83		575	SP	200,000
7	4	U,S	Academic/Residential on Parking Deck	$36,000,000	77, 78, 80, 83	$600,000	350	beds	120,000
8		S	Walnut St. Streetscape	$160,000	6, 77, 78, 80, 83		400	LF	
9		U,S	**Water**-Alignment 3 Additional	$169,519	8			LS	
10		S	Tivoli Conf Center Renovations	$7,080,500		$141,610		SF	28,322
11		U,S	Traffic Study for Larimer/Speer/11th/Auraria Pkwy	$50,000				apprx	
12		U,S	Larimer Street Improvements (Speer-11th)	$440,000			1,100	LF	
13		U,S	11th Street Improvements +Traffic Signals	$588,000	16		845	LF	
14		U,S	12th Street Improvements	$240,000	16		600	LF	
15		S	Tivoli Front Patio (Escalated per 2005 estimate)	$1,665,000	16				
16		S	Shared Tivoli Events Field (Not Incl. Tivoli Patio)	$3,000,000	77, 78, 80, 83			LS	
17		S	**Storm**-Ball Field Drainage	$685,330	16			LS	
18	9	S	Addition/Renovation to PE Event Center	$4,700,000	16	$110,000		SF	7,000+15,000
27		U	Renovate CU Denver Building 1250 14th St.	$20,989,814		$558,885		SF	111,777
28		U	Demo building wing at Larimer + 14th	$150,000				SF	25,000
29		U	Bldg. at Larimer/14th	$52,500,000		$750,000		SF	150,000
31		U	Acquire Parking lot in middle of Speer		2				
32		U,S	Landscape/Ped on Larimer (Speer-14th)	$210,000			700	LF	
35	31	M	7th + Auraria Aviation/Aerospace	$67,500,000	36, 37	$750,000		SF	150,000
36		M	**Sanitary**-7th St. Realignment	$743,852	36			LS	
37		M	**Water**-9th St. Alignment	$156,049	37			LS	
38		C,S	Tech Bldg. Renovation	$7,500,000		$125,000		SF	25,000
39		S	7th St. Road Diet	$1,500,000	40, 41		2,000	LF	
40		S	**Water**-Alignment	$326,837	39			LS	
42	42	S	Curtis Parking Garage	$11,200,000	43, 44		560	SP	200,000
44	22	C	SLEB 7th + Curtis	$28,700,000	45, 46	$410,000		SF	82,000
45		C	**Water**-SLEB Realignment	$85,673	44			LS	
46		C	**Storm**-Curtis St. Conflict	$129,903	44			LS	
59	18	C	South Classroom Renovation + Addition	$12,000,000		$750,000		LS	150,000
60		C	Bookstore/Café in South Classroom						INCL.
61		C	South Classroom Outdoor Improvements	$525,000				SF	35,000
74		M	Student Success Backfill						
76		M	Build Tennis Courts S. Colfax	$600,000	77, 78, 79			LS	
77		M	**Sanitary**-Colfax Property Realignment	$221,480	76			LS	
78		M	**Water**-Ball Field Realignment	$169,737	76			LS	
79		M	**Storm**-South Campus	$814,769	76			LS	
80		M	Temporary Athletics Facilities					SF	10,000
81		M	Move Baseball S. Colfax	$2,000,000	16			LS	
82		M	Move Softball to Baseball Site	$750,000	6, 16			LS	
83		M	Soccer S. of Colfax	$2,500,000	6, 16			LS	
85		M	Athletics Facilities Bldg.	$2,500,000		$125,000		SF	25,000
90		S	Renovate Existing Bldg for Incubator	$2,500,000		$50,000		SF	10,000
112		S	Library Renovation	$35,000,000		$785,000		SF	157,000

Phase Two (6-10 Years)

Phase Two priorities have also been evaluated with the Steering and Executive Committees and are rooted in realistic considerations and time frames.

The priorities listed are keyed to coincide with the graphic on the facing page. These numbers are also referenced for further description of priorities in Chapters 4-8. Priorities are also keyed to the 2012 Master Plan where applicable. Consideration has been given to triggers associated with major priorities. As long as these triggers are respected, the actual order of these priorities can vary.

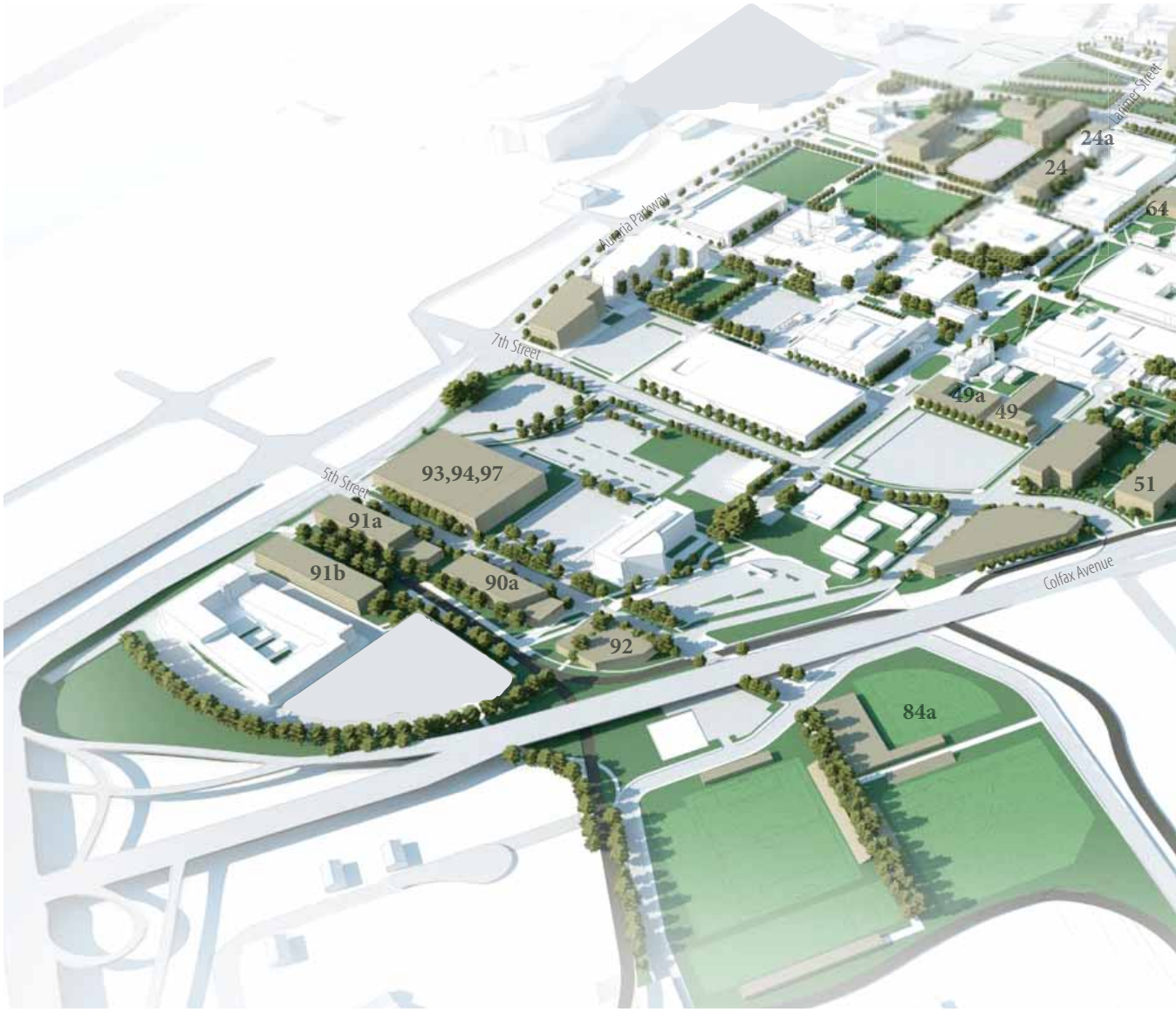
All conceptual opinion of costs represented in this report have been prepared at an order of magnitude and pre-design level, including contingencies.

Note: All order of magnitude costs are in 2012 dollars and have not been escalated.

Key:

U-CU Denver	GSF-Square Feet
C-CCD	LS-Lump Sum
M-MSU Denver	LF-Linear Feet
S-Shared	SP-Parking Spaces

***Numbers on plan relate to "Key" column*



6-10 Year Implementation Strategy

Key	Master Plan Key	Primary Institution	Project	Total Cost	Links + Triggers (per Key)	Maintenance Costs	Quantity	Units	GSF
24	10	U	North Classroom Building Addition	$31,689,357		$525,000		SF	105,000
24a	11	U	North Classroom Building Addition (2)	$10,000,000		$200,000		SF	40,000
30		U	Acquire/ Renovate 1390 Lawrence St						
49	23	S	Shared Academic Bldg	$6,475,000		$300,000		SF	60,000
49a	24	S	New Early Learning Center	$10,000,000		$200,000		SF	40,000
50		S	Demo Early Learning Center	$111,000	50			SF	18,500
51	20,21	C	CCD Academic Building Colfax/7th	$62,500,000		$1,250,000		SF	250,000
52		C	Sitework/Gateway at Colfax/9th	$375,000	52			SF	25,000
58		M	West Classroom Renovation	$21,250,000		$425,000		SF	85,000
64	13	U	CU Denver Science Building Addition	$18,357,080		$270,000		SF	54,000
68		U,M,S	King Center Renovation	$6,250,000		$125,000		SF	25,000
69		U,M,S	**Sanitary**-9th St. Realignment	$222,670	68			LS	
73		U,M	Arts Building Renovation	$15,000,000		$300,000		SF	60,000
84		M	Acquire 2 properties for Softball						
84a		M	Move Softball S. of Colfax	$1,500,000				LS	
88		M	**Sanitary**-5th St. Realignment	$337,242	90a,91a,91b,91c,92			LS	
90a	37	S	Mixed Use Building	$17,500,000		$350,000		SF	70,000
91a	35	M	MSU Denver Building	$42,000,000		$600,000		SF	120,000
91b	36	S	Mixed Use Building	$35,000,000		$500,000		SF	100,000
92	41	S	Dining/Student Life 5th + Curtis	$5,000,000		$100,000		SF	20,000
93	34	S	Facilities Offices/Police 5th + Walnut	$5,000,000		$100,000		SF	20,000
94		S	Relocate Facilities/Laydown 5th + Walnut	$1,000,000	47a, 47b, 49, 49a			LS	60,000
97	34	S	5th St. Parking Garage	$23,900,000			1,195	SP	

Future Phases (11+ Years)

Future phase priorities have been evaluated with the Steering and Executive Committees but are less rooted in phaseable and actionable reality. The priorities listed are required to fulfil the vision of the 2012 Master Plan Update, but are subject to significantly more study and consideration.

The priorities listed are keyed to coincide with the graphic on the facing page. These numbers are also referenced for further description of priorities in Chapters 4-8. Priorities are also keyed to the 2012 Master Plan where applicable. Consideration has been given to triggers associated with major priorities. As long as these triggers are respected, the actual order of these priorities can vary.

All conceptual opinion of costs represented in this report have been prepared at an order of magnitude and pre-design level, including contingencies.

Note: All order of magnitude costs are in 2012 dollars and have not been escalated.

Key:

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M-MSU Denver	LF-Linear Feet
S-Shared	SP-Parking Spaces

***Numbers on plan relate to "Key" column*

11+ Year Implementation Strategy

Key	Master Plan Key	Primary Institution	Project	Total Cost	Links + Triggers (per Key)	Maintenance Costs	Quantity	Units	GSF
19	6	U	Academic Bldg. at Larimer + 11th	$72,500,000		$750,000		SF	150,000
20		U	**Water**-Alignment 2	$298,638	19			LS	
21	5	U	Academic Bldg. at Speer/12th	$49,000,000	5	$700,000		SF	140,000
22	3	M	Bldg. at Walnut + 10th/11th	$31,500,000	8	$450,000		SF	90,000
23	2	M	MSU Denver Academic Building	$70,000,000	8	$1,000,000		SF	200,000
25	12	U	North Classroom Bldg. Expansion to Speer	$35,000,000	26	$500,000		SF	100,000
26		U	**Storm**-Relocate Detention S2	$742,034	25			LS	
33		U	Building Connection along Larimer	$7,875,000				SF	35,000
34		U	Acquire Additional Downtown Sites						
41		S	**Storm**-Building at 7th and Walnut	$508,844	107, 107a			LS	
47a	25	S	Shared Academic Bldg. Curtis + 7th	$63,000,000	48	$900,000		SF	180,000
47b	26	S	Shared Academic Bldg. Lawrence + Curtis	$49,000,000	48	$700,000		SF	140,000
48		S	**Storm**-Lawrence Street Conflict	$413,215	56			LS	
53		C	Demo Technology Bldg.	$360,000				SF	60,000
54		S	**Sanitary**-Building 17	$120,109	53			LS	
55		S	**Storm**-Curtis St. Outfall (St. Francis Way)	$360,621	53			LS	
56	19	C	New Academic Building-Colfax + 10th	$63,000,000	53	$900,000		SF	180,000
62		C	Demo St. Francis Ctr.	$66,000				SF	11,000
63	17	C	CCD Academic Building	$11,250,000		$225,000		SF	45,000
65	14	U	CU Denver Bldg. to Centralize CAM	$52,500,000		$750,000		SF	150,000
66		U	**Storm**-Curtis St. Outfall	$2,440,114	65			LS	
67		U	**Storm**-Stout St. Outfall	$1,402,112	65			LS	
70	8	U,M,S	Plaza Building Renovation + Addition	$18,500,000		$370,000		SF	74,000
71		S	**Water**-9th St. Alignment (2) 18" Upgrades	$257,259	70			LS	
75	28	M	Academic Building	$40,000,000		$800,000		SF	160,000
91d		S	Mixed Use Building (by others)	$35,000,000		$500,000		SF	100,000
95		S	Shared Laydown Space Across Auraria						
96		S	Shared Co-Gen Plant Across Auraria						
98		S	Demo Existing Facilities	$102,000	101			SF	17,000
99		S	**Storm**-Relocate Detention ADM at 7th/Curtis Ph. 1	$158,217	101			LS	
100		M,C	Remove Modular Classrooms	$136,818	101			SF	22,803
101	40	M	Indoor Athletics Facility 5th + Curtis	$26,250,000		$875,000		SF	175,000
102		M	**Water**-Lawrence St. Alignment	$310,288				LS	
103		M	**Storm**-Relocate Detention ADM 7th/Curtis Ph. 2	$761,589				LS	
104	38	M	Mixed Use Building 5th St.	$23,100,000		$330,000		SF	66,000
105		S	New Quad/Open Space	$1,125,000				SF	75,000
106	29	M	New Academic Building 7th St.	$59,500,000		$850,000		SF	170,000
106a	30	M	New Academic Building 7th St.	$76,500,000		$850,000		SF	170,000
107	32	M	New Academic Building 7th St.	$59,500,000		$850,000		SF	170,000
107a	33	M	New Academic Building7th St.	$76,500,000		$850,000		SF	170,000
108		S	Demo parking garage on 7th	$3,600,000				SF	600,000
109	27	S	Parking Garage Replacement at 7th/Lawrence	$20,000,000			1,000	SP	
110		S	New Walnut Street between 5th and 7th	$400,000			1,000	LF	
111		S	Extend Larimer between 7th and 9th	$300,000			750	LF	
113		S	Upsize Water with Development	$1,222,473				LS	
114		S	Replace Mains as Development	$1,747,949				LS	
116		S	Rehab Sanitary Mains built prior to 1900	$67,362				LS	
117	15	C	CU Denver Academic Building	$45,500,000		$650,000		SF	130,000
118	16	C	CU Denver Academic Building	$52,500,000		$750,000		SF	150,000
119	1	M	MSU Denver Academic Building	$56,250,000		$625,000		SF	125,000
120	39	M	MSU Denver Academic Building	$75,000,000		$1,500,000		SF	300,000

Parking Resources by Phase

Detailed consideration has been given to ensure sufficient parking resources exist per phase of the Strategic Implementation Plan. The chart on the right tracks lot-by-lot capacity by year over 0-5, 6-10 and 11+ time frames based on data from the 2012 Master Plan Update. As part of the Strategic Implementation Plan, this detailed parking data has been aligned with total campus population (head count + faculty + staff) projected at a growth of 2% per year. The resulting population to parking space ratio tracked by year is an indicator of parking balance on campus. Assuming construction of three new parking structures over the 0-10 year time frame, this ratio will increase only slightly, maintaining a total parking count that remains relatively steady in the planning horizon. In order to maintain this same ratio of population to parking spaces in the 11+ time frame, a new garage consisting of 1,250 spaces would be required. As listed in Chapter 1, additional strategies to accommodate for this gap in parking supply and demand could include:

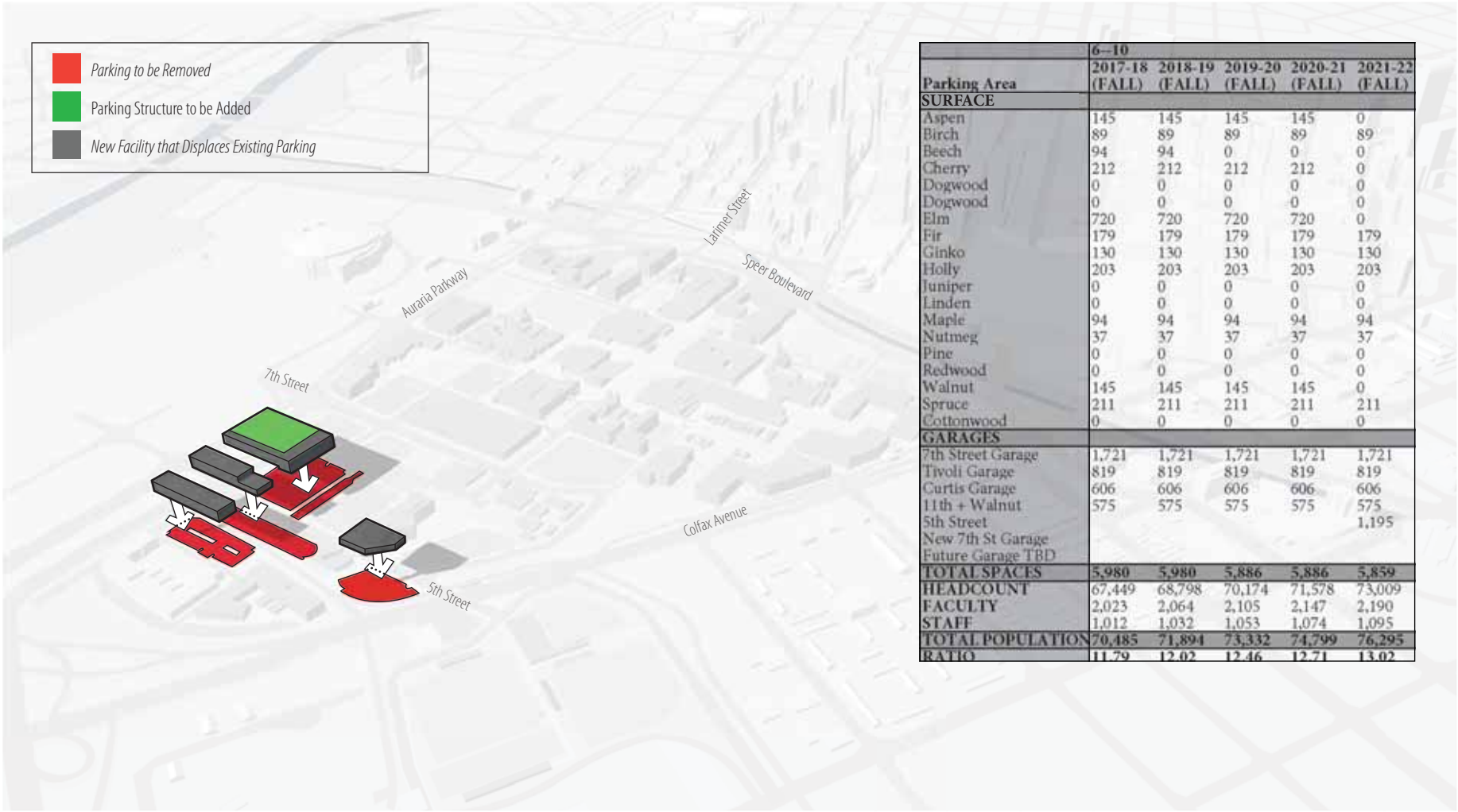
- Significant reduction of parking demand with transit and/or on campus housing opportunities
- Pursue opportunities for remote and/or shared parking including, but not limited to Pepsi Center, Convention Center, Mile High Stadium (with shuttle), or remote "park and ride" locations along light rail stops
- Integrate new structured parking on lower levels of new building projects

	Current 0--5						6--10					11+
Parking Area	2011-12 (SPRING	2012-13 (FALL)	2013-14 (FALL)	2014-15 (FALL)	2015-16 (FALL)	2016-17 (FALL)	2017-18 (FALL)	2018-19 (FALL)	2019-20 (FALL)	2020-21 (FALL)	2021-22 (FALL)	2022-23 (FALL)
SURFACE												
Aspen	145	145	145	145	145	145	145	145	145	145	0	0
Birch	89	89	89	89	89	89	89	89	89	89	89	89
Beech	94	94	94	94	94	94	94	94	0	0	0	0
Cherry	212	212	212	212	212	212	212	212	212	212	0	0
Dogwood	228	228	228	228	0	0	0	0	0	0	0	0
Dogwood	123	123	123	123	0	0	0	0	0	0	0	0
Elm	720	720	720	720	720	720	720	720	720	720	0	0
Fir	179	179	179	179	179	179	179	179	179	179	179	0
Ginko	130	130	130	130	130	130	130	130	130	130	130	0
Holly	588	588	588	588	588	203	203	203	203	203	203	0
Juniper	158	158	0	0	0	0	0	0	0	0	0	0
Linden	0	0	0	0	0	0	0	0	0	0	0	0
Maple	94	94	94	94	94	94	94	94	94	94	94	0
Nutmeg	37	37	37	37	37	37	37	37	37	37	37	0
Pine	50	50	50	50	50	50	0	0	0	0	0	0
Redwood	329	329	0	150	150	150	0	0	0	0	0	0
Walnut	145	145	145	145	145	145	145	145	145	145	0	0
Spruce	183	211	211	211	211	211	211	211	211	211	211	0
Cottonwood	0	0	0	0	0	0	0	0	0	0	0	0
GARAGES												
7th Street Garage	1,721	1,721	1,721	1,721	1,721	1,721	1,721	1,721	1,721	1,721	1,721	0
Tivoli Garage	819	819	819	819	819	819	819	819	819	819	819	819
Curtis Garage				606	606	606	606	606	606	606	606	606
11th + Walnut					575	575	575	575	575	575	575	575
5th Street											1,195	1,195
New 7th St Garage												1,500
Future Garage TBD												1,250
TOTAL SPACES	6,044	6,072	5,585	6,341	6,565	6,180	5,980	5,980	5,886	5,886	5,859	6,034
HEADCOUNT	61,091	62,313	63,559	64,830	66,127	67,449	67,449	68,798	70,174	71,578	73,009	74,470
FACULTY	1,751	1,869	1,907	1,945	1,984	2,023	2,023	2,064	2,105	2,147	2,190	2,234
STAFF	865	935	953	972	992	1,012	1,012	1,032	1,053	1,074	1,095	1,117
TOTAL POPULATION	63,707	65,117	66,419	67,748	69,103	70,485	70,485	71,894	73,332	74,799	76,295	77,821
RATIO	10.54	10.72	11.89	10.68	10.53	11.41	11.79	12.02	12.46	12.71	13.02	12.90

Parking Count by Lot by Year 2012-2023

Parking Area	Current 2011-12 (SPRING)	0--5 2012-13 (FALL)	2013-14 (FALL)	2014-15 (FALL)	2015-16 (FALL)	2016-17 (FALL)
SURFACE						
Aspen	145	145	145	145	145	145
Birch	89	89	89	89	89	89
Beech	94	94	94	94	94	94
Cherry	212	212	212	212	212	212
Dogwood	228	228	228	228	0	0
Dogwood	123	123	123	123	0	0
Elm	720	720	720	720	720	720
Fir	179	179	179	179	179	179
Ginko	130	130	130	130	130	130
Holly	588	588	588	588	588	203
Juniper	158	158	0	0	0	0
Linden	0	0	0	0	0	0
Maple	94	94	94	94	94	94
Nutmeg	37	37	37	37	37	37
Pine	50	50	50	50	50	50
Redwood	329	329	0	150	150	150
Walnut	145	145	145	145	145	145
Spruce	183	211	211	211	211	211
Cottonwood	0	0	0	0	0	0
GARAGES						
7th Street Garage	1,721	1,721	1,721	1,721	1,721	1,721
Tivoli Garage	819	819	819	819	819	819
Curtis Garage				606	606	606
11th + Walnut					575	575
5th Street						
New 7th St Garage						
Future Garage TBD						
TOTAL SPACES	**6,044**	**6,072**	**5,585**	**6,341**	**6,565**	**6,180**
HEADCOUNT	61,091	62,313	63,559	64,830	66,127	67,449
FACULTY	1,751	1,869	1,907	1,945	1,984	2,023
STAFF	865	935	953	972	992	1,012
TOTAL POPULATION	**63,707**	**65,117**	**66,419**	**67,748**	**69,103**	**70,485**
RATIO	**10.54**	**10.72**	**11.89**	**10.68**	**10.53**	**11.41**

Changes to Parking in 0-5 Years



Parking Area	6--10 2017-18 (FALL)	2018-19 (FALL)	2019-20 (FALL)	2020-21 (FALL)	2021-22 (FALL)
SURFACE					
Aspen	145	145	145	145	0
Birch	89	89	89	89	89
Beech	94	94	0	0	0
Cherry	212	212	212	212	0
Dogwood	0	0	0	0	0
Dogwood	0	0	0	0	0
Elm	720	720	720	720	0
Fir	179	179	179	179	179
Ginko	130	130	130	130	130
Holly	203	203	203	203	203
Juniper	0	0	0	0	0
Linden	0	0	0	0	0
Maple	94	94	94	94	94
Nutmeg	37	37	37	37	37
Pine	0	0	0	0	0
Redwood	0	0	0	0	0
Walnut	145	145	145	145	0
Spruce	211	211	211	211	211
Cottonwood	0	0	0	0	0
GARAGES					
7th Street Garage	1,721	1,721	1,721	1,721	1,721
Tivoli Garage	819	819	819	819	819
Curtis Garage	606	606	606	606	606
11th + Walnut	575	575	575	575	575
5th Street					1,195
New 7th St Garage					
Future Garage TBD					
TOTAL SPACES	5,980	5,980	5,886	5,886	5,859
HEADCOUNT	67,449	68,798	70,174	71,578	73,009
FACULTY	2,023	2,064	2,105	2,147	2,190
STAFF	1,012	1,032	1,053	1,074	1,095
TOTAL POPULATION	70,485	71,894	73,332	74,799	76,295
RATIO	11.79	12.02	12.46	12.71	13.02

Changes to Parking in 6-10 Years

Parking Area	11+ 2022-23 (FALL)
SURFACE	
Aspen	0
Birch	89
Beech	0
Cherry	0
Dogwood	0
Dogwood	0
Elm	0
Fir	0
Ginko	0
Holly	0
Juniper	0
Linden	0
Maple	0
Nutmeg	0
Pine	0
Redwood	0
Walnut	0
Spruce	0
Cottonwood	0
GARAGES	
7th Street Garage	0
Tivoli Garage	819
Curtis Garage	606
11th + Walnut	575
5th Street	1,195
New 7th St Garage	1,500
Future Garage TBD	1,250
TOTAL SPACES	6,034
HEADCOUNT	74,470
FACULTY	2,234
STAFF	1,117
TOTAL POPULATION	77,821
RATIO	12.90

Changes to Parking in* 11+ *Years

4 | tivoli event space

Introduction

As part of the Strategic Implementation Plan, the Consultant Team identified near-term development strategies and sequencing of phasing priorities for several of the key gateway development opportunities on the Auraria Campus. These gateway development areas often cross institutional and shared neighborhood boundaries, and focus on:

- External connectivity with downtown Denver and surrounding neighborhoods
- Internal connection opportunities on campus
- Prioritization of key initiatives

The 2012 Master Plan Update identifies a multi-purpose field located directly adjacent to the Tivoli Student Union. The Strategic Implementation Plan clarifies this idea, providing a capstone space for special events and activities to support the campus and integration with the community. Essential to the success of this vision is scale and activation of the field itself, in addition to surrounding dynamic building uses/streetscapes, and connection to downtown along Larimer Street.

Existing Conditions

Bounded by Speer Boulevard, Auraria Parkway, the Tivoli Student Union, and the Lawrence Street Pedestrian Mall, the area surrounding the future Tivoli Field does not currently fulfil its role as a major gateway and heart of campus. This area straddles CU Denver, MSU Denver, and shared neighborhoods. Currently occupied predominately by MSU Denver Athletic Fields and the Redwood Surface Parking Lot, several opportunities will positively affect the space in the near term:

- MSU Denver is pursing relocation of athletic fields south of Colfax Avenue. Baseball relocation is an immediate priority.
- MSU Denver's Hospitality Learning Center (HLC), including a 150 key hotel and conference facility is scheduled to open in August of 2012.

Additional constraints for this area include:

- The Redwood Lot is not being used to capacity due to HLC construction. CU Denver's Academic Building 1 threatens a portion of this lot.
- Time line for moving MSU Denver soccer and softball field.
- Several modular classrooms currently line the front of the Tivoli Student Union.
- The entrance to campus on Larimer Street represents the most imageable front door for the campus from downtown.
- 59,000 cars a day traverse Speer Boulevard, making it one of the most dangerous crossing points on campus.

Existing Conditions of Tivoli Field area. View from Speer Boulevard.

Note: *All conceptual opinion of costs are for planning purposes and have been prepared at an order of magnitude and pre-design level. Utility costs were taken from the 2011 IMP Report. Further clarification of these assumptions can be found in Chapter 3. Costs are represented 2012 dollars and have not been escalated.*

Initial Priorities for Tivoli Field area. View from Speer Boulevard.

Initial Priorities

CU Denver's Academic Building 1 is an immediate phase opportunity that has currently completed programing and conceptual design. Location of this academic classroom and student services building will help bridge the gap between downtown Denver and the Auraria Campus. Siting of this building will require demolition of +/-200 parking spaces in the Redwood Lot. Additional priorities, triggers and order of magnitude costs for these initial priorities include:

1| Academic Building 1	$65,820,944
2| Sanitary-Larimer Street Connect	$180,978
3| Water-Alignment 3	$669,750
5| Demo Portion of Redwood Lot	$225,000

Additional considerations for development include:

- +/- 150 surface parking spaces will remain in the Redwood Lot in the short term.
- On-street parking and removal of the landscape island on Larimer Street.
- Transparent edges and streetscape enhancements to facilitate pedestrian crossing of Speer Boulevard.
- One- and two-story massing for Academic Building 1 along Speer Boulevard puts pressure on surrounding buildings to have an increased density and may not be the highest and best use of urban land.
- Further study is required to determine if Academic Building 1 triggers the relocation of stormwater pipes leading to the detention pond adjacent to North Classroom Building.

Future Priorities

Location of structured parking on 11th and Walnut Streets should be considered as a near-term priority. Consideration should be given to ensure that this deck is at least 180-feet wide to maximize parking while still allowing for a pedestrian mall that connects Academic Building 1 to the Tivoli Student Union. Assuming four levels above ground and one level below ground, parking in this location could generate 575 spaces. Due to its visible and central location, active ground floor uses should be considered, and structural reinforcement for density on top of the structure should also be studied. Additional priorities, triggers and order of magnitude costs for these initial priorities include:

6| Parking Deck on 11th	$11,500,000
11| Traffic Study	$50,000
12| Larimer Street (Speer-11th)	$440,000
13| 11th Street +Traffic Signals	$588,000
14| 12th Street Improvements	$240,000

Additional considerations for development include:

- Construct parking structure as a near term priority
- Perform traffic study prior to parking location
- Develop mixed-use on parking structure

Constraints for development include:

- MSU Denver soccer and baseball relocation
- MSU Denver softball temporary and permanent relocation

Future Priorities for Tivoli Field area. View from Speer Boulevard.

Full Build Out for Tivoli Field area. View from Speer Boulevard.

Long-Range Build Out

Long-range considerations for the Tivoli Field include shared priorities for CU Denver and MSU Denver. Short-term consideration should be given to programmatic uses (residential or academic) on top of the parking structure at intersection of Walnut and 11th Streets. Constraints for development include utility lines in the Walnut Street corridor that limit future building opportunities at Speer Boulevard and 12th Street. Additional priorities, triggers and order of magnitude costs for these initial priorities include:

7| Program on Parking Structure	$36,000,000
8| Walnut St. Streetscape	$160,000
9| Water-Alignment 3 Additional	$169,519
15| Tivoli Front Patio	$1,665,000
16| Shared Tivoli Events Field	$3,000,000
17| Storm-Ball Field Drainage	$685,330
18| PE Event Center Renovation	$4,700,000
19| Academic Bldg. Larimer/11th	$72,500,000
20| Water-Alignment 2	$298,638

Future Opportunities Include:

21| Academic Bldg. at Speer/12th	$49,000,000
22| Bldg. at Walnut + 10th/11th	$31,500,000
23| MSU Denver Academic Bldg.	$70,000,000
24| North Classroom Building Add.	$31,689,357
24a| North Classroom Bldg. Add. 2	10,000,000
25| North Classroom Bldg. Exp.	$35,000,000
26| Storm-Relocate Detention S2	$742,034
119| MSU Denver Academic Bldg.	$56,250,000

Key Principles +Objectives

Design Tivoli Field for Maximum Activity and Flexibility

Tivoli Field as a Gathering Space and Recreation Hub

Tivoli Field sized for Regulation Soccer and Half Field Recreational and Intramural Matches

Special Events field as Outdoor Graduation and Concert Venue for up to 13,000 seats

Activate Larimer Street + Tivoli Field Edge with Retail and Transparency

Tivoli Field with Active Edges

Design Events Field for Maximum Activity and Flexibility

The Tivoli Special Event and Activity Field can become a hub for activity on campus and within the community. Utilizing the Tivoli Student Union as an iconic backdrop, several design moves should be considered as part of development for the field:

- Utilize artificial field turf to maximize flexibility
- Size field for full regulation soccer pitch to allow for concurrent half field recreation and intramural matches
- Consider final field elevation +/- 2 feet below street level to allow for seat walls and planter beds that encourage views in to the field
- Study opportunity for below grade stormwater detention under the field surface

Activate Larimer Street + Tivoli Field Edges

As a major connection point between downtown Denver and the Auraria Campus, the Larimer Streetscape must be activated with pedestrian level transparency and activity. A similar approach should be considered for the Larimer Street extension in front of the PE/Event Center, 11th Street and Walnut Street.

Encourage Complete Streets and Street Level Activity Adjacent to the Field

Tivoli Field at 11th Street

Tivoli Field at Walnut Street

Adjacent streets and buildings are essential generators of activities for Tivoli Field. Larimer Street will serve as the main axis for pedestrians, while the planned 11th Street and Walnut Street will create new frontages. 10th Street in front of Tivoli Student Union will become an important gathering plaza and access point to the field.

In addition to the existing Tivoli Student Union, a new facade of the PE/Events Center and ground floor mixed-uses along the proposed 11th Street will help to activate currently underutilized edges. Special paving, planting beds and lighting fixtures will allow city and campus character to merge at this central gathering area.

Tivoli Field at Larimer Street

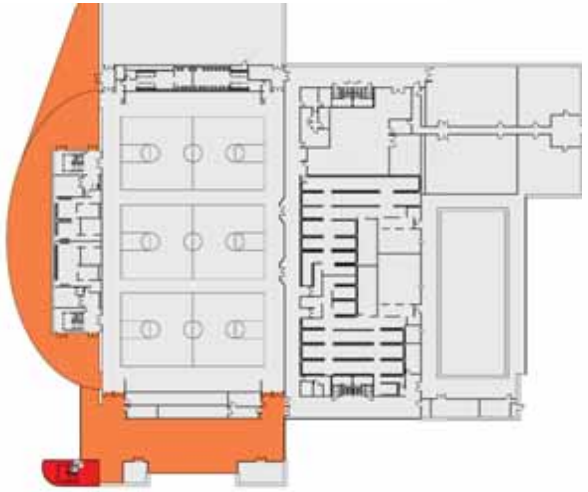
Tivoli Field at the Tivoli Student Union

Activate Tivoli Field with PE/Event Center Addition

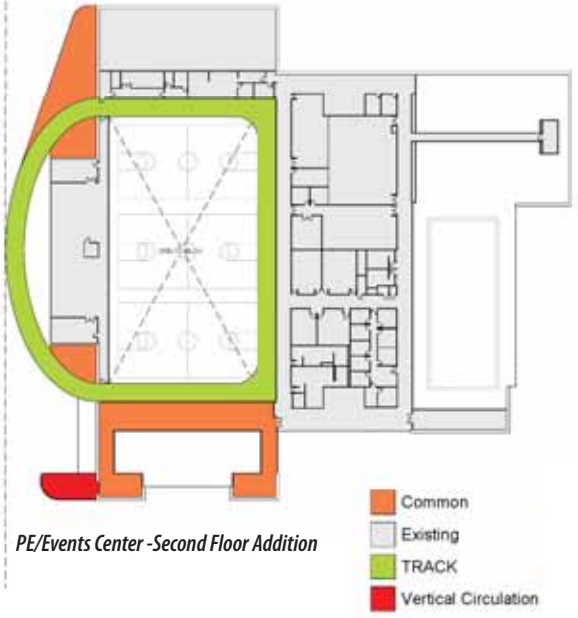
The PE/Events Center currently turns its back to both the athletics field and to Larimer Street. Renovation to the north end of the building will improve the programmatic function of the P/E Events Center and better address its adjacency to the Tivoli Field and Tivoli Student Union.

The use of glazing and a more transparent north facade will project an active image, punctuated by elements such as an elevated jogging track and an indoor climbing wall. Natural daylit views to the north will further strengthen the building/ street connection at Larimer Street. Additionally, as Larimer Street becomes a more prominent entrance to campus, the building addition and new overhead canopy help to mark the transition from vehicular to pedestrian circulation.

Future renovation to the PE/Event Center should consider expansion towards the Lawrence Street Mall, removal of the pool, and the creation of additional gym/studio space.



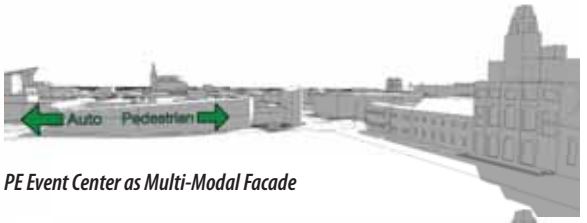
PE Event Center-First Floor Addition



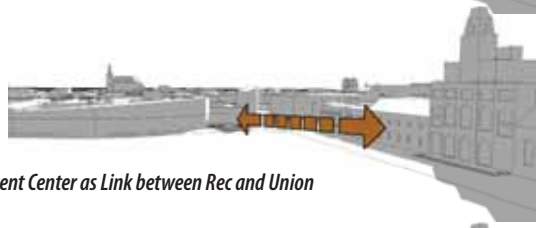
PE/Events Center -Second Floor Addition

Active Recreation on the First and Second Floors

Climbing Wall, Track, Cardio Equipment and Weights Encourage Activity along the Larimer Facade



PE Event Center as Multi-Modal Facade



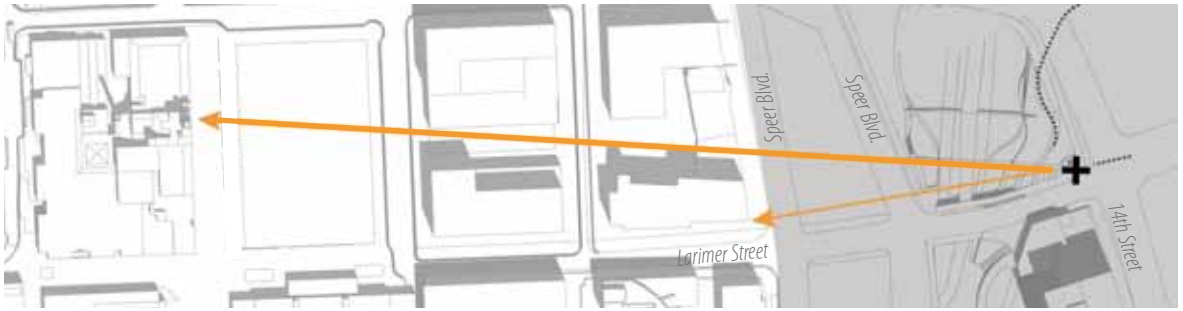
PE Event Center as Link between Rec and Union

PE Event Center as Iconic Edge

An Iconic Facade allows for Transparency and Enhanced Engagement with the Tivoli Field

Preserve Views to the Tivoli Student Union at Discrete Moments

Larimer Street is one of the most traversed pedestrian corridors in downtown Denver. The intersection of 14th and Larimer, is the current western end of street level commercial activities. An enhanced view to the Tivoli Student Union and adjacent Auraria Campus at this discrete moment will guide visitors across Speer Boulevard to Tivoli Field and the Auraria Campus.



Visual Connections at Speer and Larimer

View from Old City Hall Marker (14th and Larimer) towards Tivoli Student Union

Consider Public/Private Partnerships

There will be numerous opportunities for private sector investment in the development of the Tivoli Field area. These potentially include private sector investments in retail, housing, entertainment and parking. An analysis performed by Jones Lang LaSalle indicates that the market conditions are favorable for private sector student housing on campus. As any new development is proposed for the edges of the Tivoli District, including the gateway along Larimer off of Speer, it will be important to determine the appropriate ancillary uses to provide amenities that facilitate edge activation. Once a vision for these uses is established, it should be supported by current economic analysis on market potential for the proposed use.

The Tivoli Field Area will Provide Numerous Opportunities for Private Sector Investment

Tivoli Field: Existing Conditions

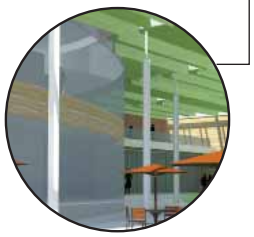
Existing Conditions at the Southeast Corner of the Tivoli Field

① Lack of open access to the fields
② Poor visual and programmatic interaction between fields and surrounding facilities
③ Visual barriers to the Tivoli Union

Tivoli Field: Future Opportunities

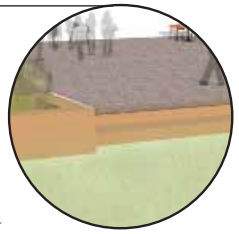
Tivoli Field as a New Campus Focal Point

Create a new front door with visual connection to the field for the PE/ Events Center



Utilize raised planting beds to create seating and stormwater management opportunities

Encourage multiple access points for enhanced interaction between the field and the adjacent uses



Provide outdoor seating for commercial areas and outdoor seating to generate a vibrant urban atmosphere

5 | colfax edge

Introduction

The Colfax at Auraria Light Rail Station, nearly 50,000 vehicles per day on Colfax Avenue, RTD bus routes and stops, and the mixed-use La Alma Lincoln Park neighborhood contribute to a vibrant urban character along Colfax Avenue at the Auraria Campus. As the predominant frontage for the CCD neighborhood, the Consultant Team focused strategic implementation efforts in this area on:

- External connectivity with downtown Denver and surrounding neighborhoods
- Internal connection opportunities on campus
- Prioritization of key initiatives

In the 2012 Master Plan, Colfax Avenue is envisioned as pedestrian and transit gateway to the Auraria Campus, with a singular future vehicular entrance occurring at 7th Street. As the second highest traversed light rail station in the City of Denver, the Colfax at Auraria Light Rail Station contributes significantly to the pedestrian activity that currently exists along the 10th and 9th Street Malls on campus. Due to the traffic volumes on Colfax Avenue, retail uses south of Colfax are extremely challenging to access as a pedestrian.

Existing Conditions

The Auraria Campus frontage on Colfax Avenue between Speer Boulevard and 7th Street currently lacks character and institutional identity. Several opportunities will positively affect the space in the near term:

- The 87,000 GSF Student Learning and Engagement Building (SLEB) is currently under construction on the Linden Parking Lot and is expected to be completed in the Spring of 2013. This facility will support CCD students as the home to a one-stop shop that supports admissions, registration, financial aid, testing, advising, and classrooms.

Additional considerations for this area include:

- The Linden Lot has been removed for construction of SLEB.
- A brick wall currently encloses the Technology Building service yard and Early Learning Center. Removal of these walls is a high priority in order to create a more welcoming front door on Colfax Avenue.
- The 10th Street Mall is the pedestrian heartbeat of campus. Implementation priorities must respect the importance of this corridor on campus and as a point of connection to the city
- Improvements are needed along the mall in order to better the pedestrian experience.
- The historic 9th Street Mall is one of the most imageable and memorable spaces on campus. This character should extend to Colfax Avenue.

Existing Conditions at the Colfax edge. View from the south.

Note: *All conceptual opinion of costs are for planning purposes and have been prepared at an order of magnitude and pre-design level. Utility costs were taken from the 2011 IMP Report. Further clarification of these assumptions can be found in Chapter 3. Costs are represented 2012 dollars and have not been escalated.*

Initial Priorities at the Colfax edge. View from the south.

Initial Priorities

Scheduled to open in 2013, SLEB will be a welcome addition to the CCD neighborhood. Planning is currently underway for a renovation to the South Classroom Building, including a cafe and outdoor courtyard improvements that create a more welcoming entrance from the 10th Street Mall.

As part of the Strategic Implementation Plan, CCD representatives identified an immediate need to find space for welding and machining programs on the Auraria Campus. This use should be considered for an addition to the Technology Building, creating a new front door for CCD on Colfax Avenue and adjacent to the light rail station. This addition will require the relocation of the campus waste, recycling and storage that currently occurs at the Technology Building loading area. A transparent facade on Colfax Avenue would provide an opportunity to put education on display and create space for a cafe or convenience retail store that would not compete with the renovations planned for the South Classroom Building. Additional priorities, triggers and order of magnitude costs for these initial priorities include:

38| Tech Bldg. Renovation	$7,500,000
44| SLEB 7th + Curtis	$28,700,000
45| Water-SLEB Realignment	$85,673
46| Storm-Curtis St. Conflict	$129,903
59| South Classroom Renovation	$12,000,000
60| Café in South Class	
61| South Classroom Outdoor	$525,000

Future Priorities

Additional parking resources, a new academic building for CCD, and relocation of the Early Learning Center are primary drivers for future priorities on Colfax Avenue. The 606-space parking garage along 7th Street between Colfax Avenue and Curtis Street could become an initial phase priority in order to balance neighborhood parking needs. This parking garage should be designed to activate 7th and Curtis Street with transparent ground floor uses.

Considerations for a new early learning center and child care building must include construction prior to demolition of the Early Learning Center and construction of a new CCD academic building between 7th and 9th Streets. For the CCD Academic Building (item 51) to move forward, the one story Children's College building must be demolished and the program moved to another location, ideally one with better vehicular access due to the nature of the program.

39| 7th St. Reconfiguration	$1,500,000
40| Water-Alignment	$326,837
42| Curtis Parking Garage	$11,200,000
49| Shared Academic Bldg.	$6,475,000
49a| New Early Learning Ctr.	$10,000,000
50| Demo Early Learning Center + Children's College	$111,000
51| CCD Academic Bldg.	$62,500,000
52| Site-Gateway at Colfax/9th	$375,000

Future Priorities at the Colfax Edge. View from the south.

Long-Range Build Out at the Colfax edge. View from south.

Long-Range Build Out

Full build out of the CCD neighborhood at Colfax Avenue should consider:

- Demolition of the remainder of the Technology Building in order to construct additional academic density on this site.
- Extension of the 9th Street Mall to Colfax Avenue, which could be completed as part of the City of Denver initiative to re-establish Colfax Avenue as a boulevard.

Long-range considerations for this edge include:

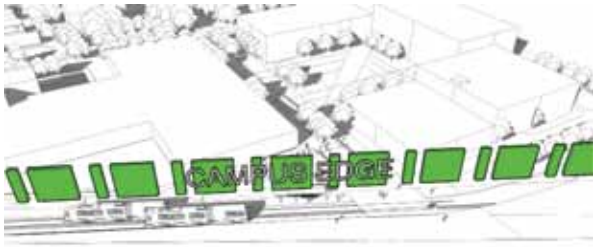
- Demolition of the St. Francis Center in order to construct additional academic density.

53| Demo Technology Bldg..	$360,000
54| Sanitary-Building 17	$120,109
55| Storm-Curtis St. Outfall	$360,621
56| Academic Bldg..-Colfax/10th	$63,000,000
58| West Classroom Renovation	$21,250,000
Future Opportunities:	
62| Demo St. Francis Ctr.	$66,000
63| CCD Academic Bldg.	$11,250,000

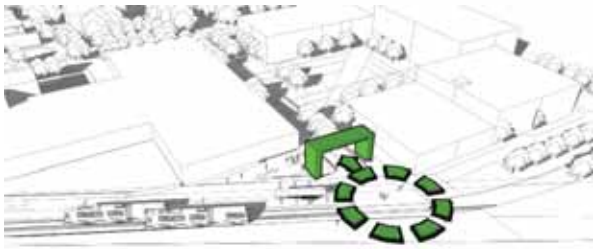
Key Principles +Objectives

Renovate the Technology Building

The Technology Building, located adjacent to the Colfax and 10th Street Light Rail Station, marks the primary pedestrian entrance to the Auraria Campus from Colfax Avenue. The current configuration of the building addresses this campus edge and pedestrian corridor with an opaque single story brick façade and a poorly screened loading dock.



Create a Permeable Edge



Provide a Gateway to the Pedestrian Core

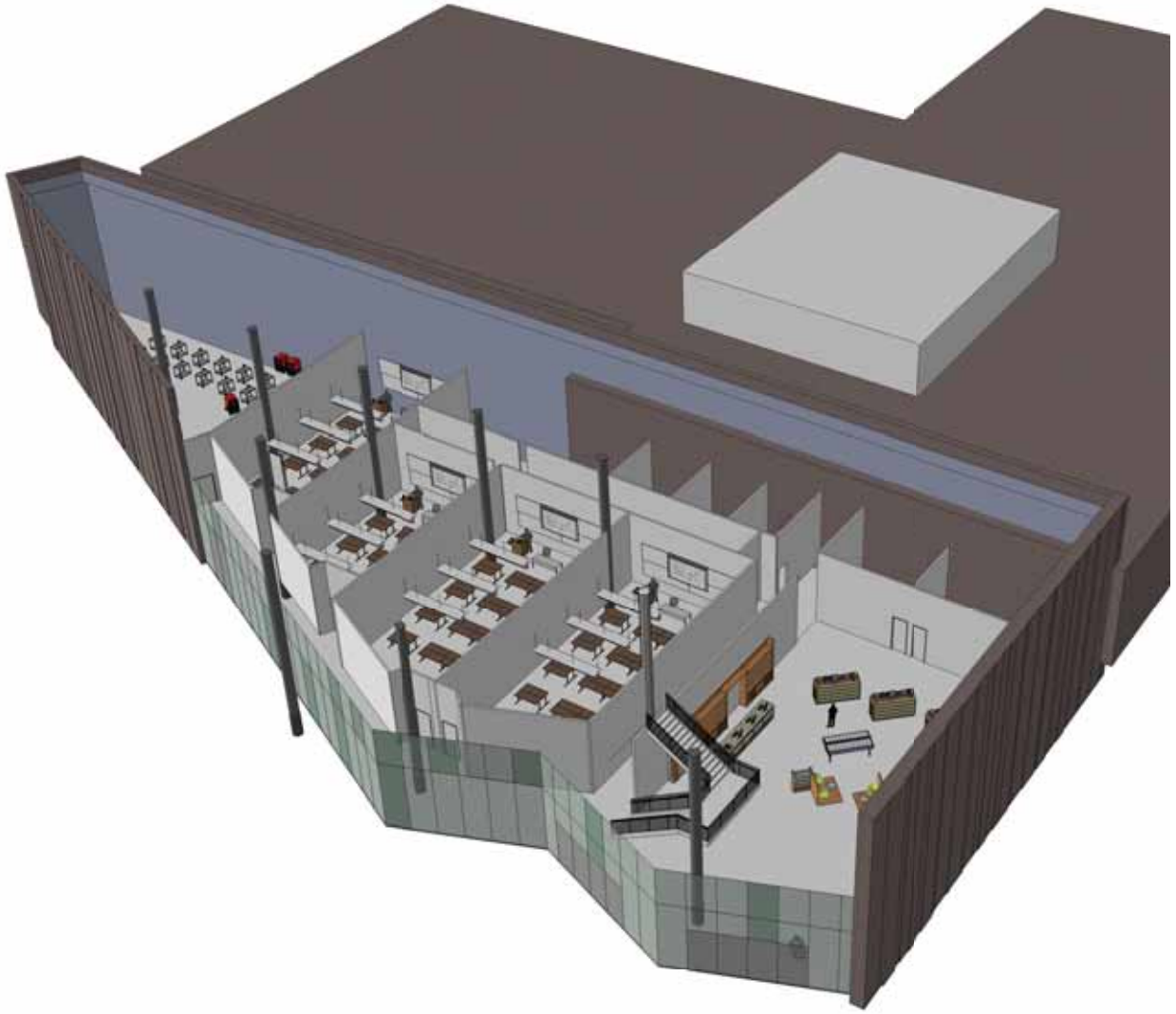
Enhance the Imageability of the CCD Edge

A mixed-use (academic and retail) addition to the Colfax Avenue edge of the Technology Building would bring the appropriate level of activity and scale to this underserved campus entry.

Technology Building Exiting Conditions

First Floor Addition

2nd Floor Addition



Technology Building Proposed Addition

Technology Building Concept

Building off an existing corridor within the Technology Building a two-story addition would include new academic spaces such as classrooms and a high-bay welding yard accessible from within the existing building. The south east corner of the addition would include a two-story cafe/retail space which would help to increase activity at the campus gateway and provide potential added revenue to the campus. The increased scale of the new addition would provide appropriate screening for the loading area. Integrated signage and architectural detail will ensure that the building will increase visibility to the campus and serve as a wayfinding element for visitors.

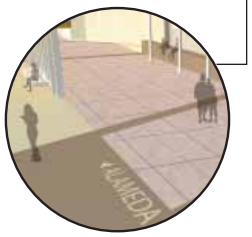
A New Front Door at Colfax + 10th Street

Existing Conditions at 10th Street and Colfax Avenue looking north

① Narrow and uninviting light rail platform and gathering area
② Opaque building facade as gateway
③ Lack of adequate seating
④ Lack of identifiable campus and institutional gateway signage

Future Campus Gateway at 10th Street + Colfax Avenue

Create an identifiable and appropriately scaled front door and gathering space



Provide transparent and active edges

Encourage comfortable places to sit and extend learning to the exterior environment

Utilize pedestrian scaled furnishings, signage and lighting elements

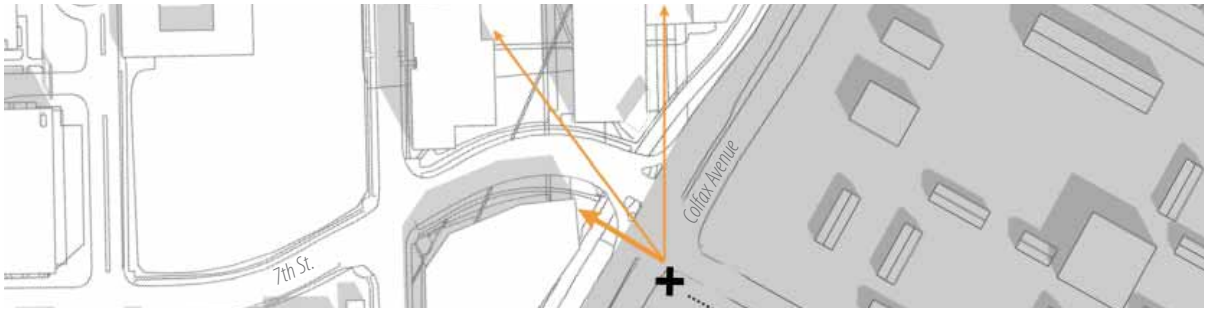
Provide Views to the 9th Street Mall and Campus
Extending the 9th Street Mall to Colfax will create an impressive gateway with direct views towards the historic 9th Street Mall. Embraced by new CCD academic buildings, the extended mall will serve as a catalyst for the integration of the campus and the city. The City of Denver's plans to develop Colfax Avenue into a divided boulevard will further connect the 9th Street Mall to the citywide green corridor system.

Visual Connections at Colfax and 9th Street

View from Colfax Avenue and 9th Street looking towards 9th Street Historic Park

Establish Vistas to Downtown Denver

The Colfax Avenue and 7th Street intersection accommodates 40% of incoming vehicular traffic to the campus. In the future, commercial development is envisioned on the ground floor of the proposed parking deck. Campus landmarks and landscape amenities are intended to create a more walkable environment. A dynamic urban atmosphere will infiltrate through planned vistas to downtown Denver.



Visual Connections at Colfax and 7th

View from Colfax and 7th Street looking towards downtown Denver

6 | 5th street

Introduction

5th Street provides opportunities to link existing student-oriented housing along this corridor with dining, athletics, academic swing space and incubator space adjacent to campus and the Auraria West Light Rail Station. The Strategic Implementation Plan builds upon the Auraria West Station Area Plan and 2012 Master Plan Update, envisioning the creation of a campus commercial corridor with vibrant mixed-uses along 5th Street.

As a future urban street on the Auraria Campus complete with active edges and ground floor retail, 5th Street should be the defining element of the western portion of campus. In coordination with the 2012 Master Plan Update, the Strategic Implementation Plan envisions building heights at 4-6 stories to maintain a neighborhood scale along a tree-lined street with on-street parking. Higher densities should be encouraged west of 5th Street adjacent to the light rail station.

Existing Conditions

The 5th Street neighborhood is currently defined by surface parking lots. The streetscape along 5th Street is a modest respite amongst the asphalt, exemplifying the characteristics and building blocks of a quality street, with on-street parking and well-scaled street trees.

The Auraria West Station, on axis with the Lawrence Street Mall, has added vitality and activity to the area. Unfortunately, the light rail tracks also currently serve to divide the neighborhood, and Campus Village does not provide a welcoming facade to the west. Nestled in the shadow of the freeways, the off-campus housing development fails to connect to the Administration Building and remainder of the Auraria Campus in a meaningful way.

Future development of this area must augment the streetscape dimensions of 5th Street with ground floor uses and active edges. Future housing and academic uses planned along 5th Street should consider transparency on the first levels and a mix of uses.

Existing Conditions of the 5th Street area. View from north.

Note: *All conceptual opinion of costs are for planning purposes and have been prepared at an order of magnitude and pre-design level. Utility costs were taken from the 2011 IMP Report. Further clarification of these assumptions can be found in Chapter 3. Costs are represented 2012 dollars and have not been escalated.*

Initial Priorities of 5th Street area. View from north.

Initial Priorities

MSU Denver is currently pursing relocation of its competitive athletic facilities south of Colfax Avenue. Consolidation of these uses will benefit both athletics and recreation programs, and serve to create a new identity for MSU Denver. This consolidated athletics area should consider:

- Location of soccer, tennis, baseball and softball
- Acquisition of property to complete ownership of the entire block
- Development of a multi-use athletics facilities building for lockers and storage

As part of a consolidated athletics area south of Colfax Avenue, the softball field should be located adjacent to baseball. This would require acquisition of two additional properties. If this location is not feasible for softball, the 2012 Master Plan Update has identified an alternate softball location along 5th Street.

76| Build Tennis Courts S. Colfax	$400,000
77| Sanitary-Colfax Prop. Realign	$221,480
78| Water-Ball Field Realignment	$169,737
79| Storm-South Campus	$814,769
80| Temporary Athletics Facilities	
81| Move Baseball S. Colfax	$2,000,000
82| Move Softball to Baseball Site	$750,000
83| Soccer S. of Colfax	$2,500,000
85| Athletics Facilities Bldg.	$2,500,000
90| Renovate Existing for Incubator	$2,500,000

Future Priorities

The 2012 Master Plan Update has provided opportunities for approximately 500,000 GSF of space west of 5th Street, assuming 4-5 story development that frames either side of the light rail tracks. This development could provide opportunities for:

- Apartment style residential units with kitchens
- Dormitory or suite style residential units without kitchens
- Incubator or academic swing space
- Ground level retail space

Additional near-term opportunities for 5th Street development include:

- A dining hall and/or student life building at 5th Street and the extension of the Lawrence Street Mall. This location could link residential and athletics and reduce pressure at the Tivoli Student Union.
- Relocated facilities office and laydown space south of Walnut Street and removal of these uses from 7th and Lawrence Streets.

84| Acquire 2 Properties for Softball	
84a| Move Softball S. of Colfax	$1,500,000
88| Sanitary-5th St. Realignment	$337,242
90a| Mixed Use Bldg.	$17,500,000
91a| MSU Denver Bldg.	$42,000,000
91b| Mixed Use Bldg.	$35,000,000
91d| Mixed Use Bldg. (By Others)	$35,000,000
92| Dining/Student Life 5th/Curtis	$5,000,000
93| Facilities/Police 5th + Walnut	$5,000,000
94| Relocate Facilities/Laydown	$1,000,000

Future Priorities of 5th Street area. View from north.

Long-Range Build Out of 5th Street area. View from north.

Long-Range Build Out

Long-range opportunities for the 5th Street area include:

- A parking garage on top of the facilities laydown space at Walnut and 5th Streets with offices and transparency to activate the 5th Street edge.
- An indoor athletics facility between 5th, 7th, and Curtis Streets to encourage further consolidation of MSU Denver athletics and removal of athletic programs from the PE/Event Center.
- Future academic buildings along 7th Street. These long-range opportunities fall within the MSU Denver neighborhood, and have not been given programmatic consideration at the time of this report.

95| Shared Laydown N. of Auraria	
96| Shared Co-Gen N. of Auraria	
97| 5th St. Parking Garage	$23,900,000
98| Demo Existing Facilities	$102,000
99| Storm-Detention (1) 7th/Curtis	$158,217
100| Remove Modular Classrooms	$136,818
101| Indoor Athletics 5th/Curtis	$26,250,000
102|Water-Lawrence St. Alignment	$310,288
103| Storm-Detention(2) 7th/Curtis	$761,589
104| Mixed Use Building 5th St.	$23,100,000
105| New Quad/Open Space	$1,125,000

Future Opportunities:

107| Academic Building 7th St.	$59,500,000
107a|Academic Building (2) 7th St.	$76,500,000
120| New Academic Bldg.	$75,000,000

Key Principles +Objectives

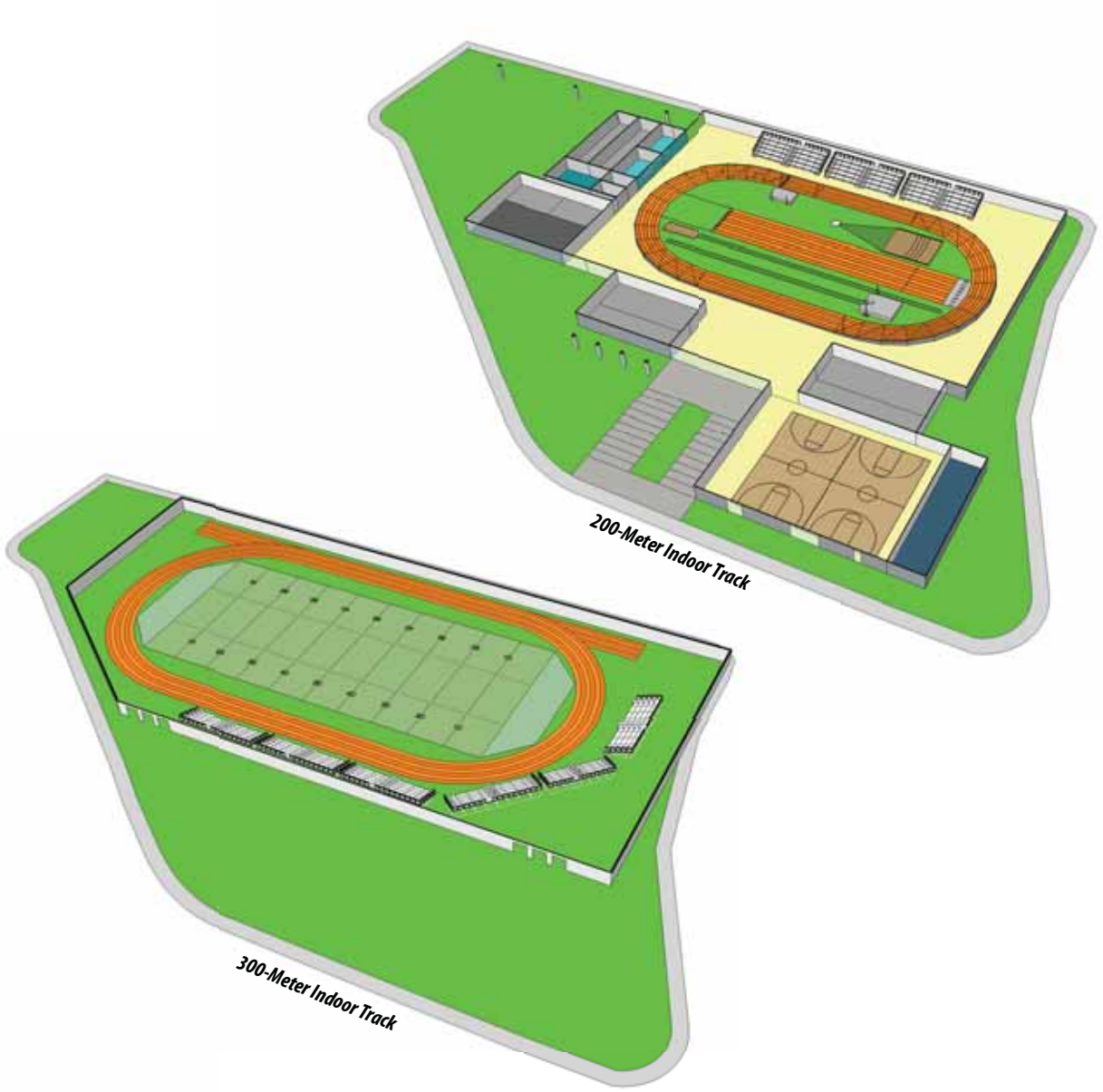
MSU Denver Indoor Athletics

The Strategic Implementation Plan envisions development of an indoor athletics facility for MSU Denver on Curtis Street between 5th Street and 7th Street. This concept builds on principles for this block established in the 2012 Master Plan Update. This location for an indoor athletic facility is driven by:

- Proximity to MSU Denver's relocated outdoor athletic facilities immediately south of Colfax Avenue
- Adjacencies to future housing planned along 5th Street
- Collocation of a new student oriented dining facility west of 5th Street
- Proximity to the Auraria West Light Rail Station

Elements that should be considered as part of an indoor facility that do not compete with athletic space south of Colfax Avenue include:

- Practice court facilities (Basketball and/or Tennis)
- Practice field facilities
- Locker facilities
- Storage space
- Athletic training and/or weight facility
- Offices for athletics and Human Performance and Sport



Key Principles +Objectives

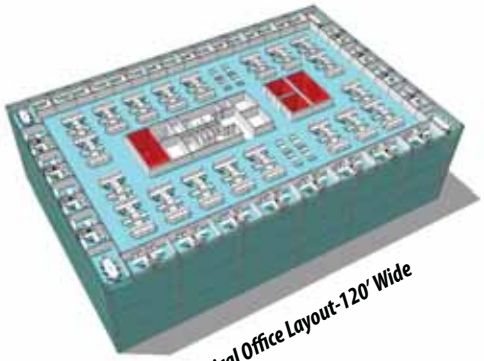
Incubator/Swing Space

There is tremendous potential to activate the 5th Street corridor over the next 20 years. Through discussions with the institutional leadership and review of the 2012 campus master plan, several important building and land uses are recommended. They include: incubator space, swing space, housing, parking, and facilities space. In the near-term, the existing Printing & Distribution building should be used to test incubator space receptivity with city and corporate partners. Potential incubator space uses include green businesses and the industry of sustainability. These are growing areas of interest for both the Auraria academic community and The City of Denver.

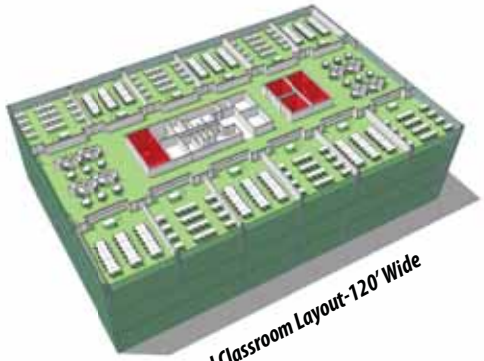
In addition, Auraria is severely limited by a pronounced lack of swing space on campus. This facility type is recommended on 5th Street and is envisioned to provide flexible, temporary space for each institution to implement their respective neighborhood vision. This space would allow the balancing of classroom and office space during renovation and/or new construction. Both swing space and incubator space work well together and could serve as stand-alone, joined, or vertically stacked facilities. These building opportunities should be strongly considered for mixed-use public-private partnerships. Flexible and innovative building typologies should be explored that mix office, classroom, and even housing models. The diagrams highlighted below explore idealized 70' and 120' building layouts.

Additional student housing, parking, and facilities space are also realistic long-term land uses for 5th Street corridor of campus. The current off-campus Student Village housing is not desirable in the competitive housing marketplace. If this housing stock was renovated and activated by additional on or off campus housing, and by adjacent incubator/ swingspace, this area of campus could become a much more desirable destination. Moreover, campus-wide parking continues to be a concern, particularly in the 10 plus year horizon. Planning consideration should be given to adding additional surface and structured parking resources. Long term parking opportunities should also include space for campus facilities (offices, shop space, exterior lay-down space, central shipping/ receiving, etc.). These facilities office spaces and select shop spaces should be considered for relocation into future parking.

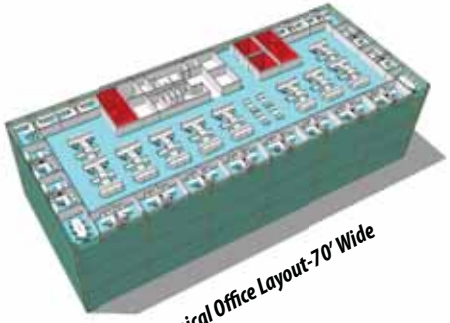
Typical Residential Layout-70' Wide



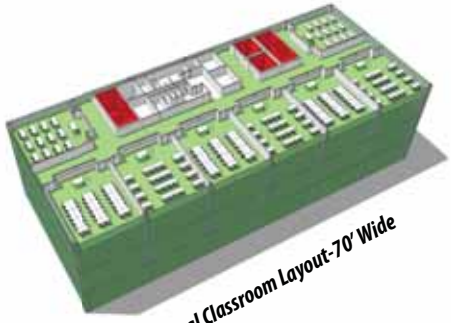
Typical Office Layout-120' Wide



Typical Classroom Layout-120' Wide



Typical Office Layout-70' Wide



Typical Classroom Layout-70' Wide

Gateway at 5th and Lawrence

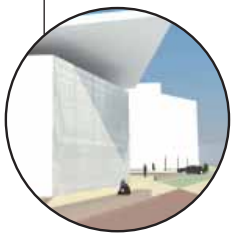
Existing Conditions at 5th Street and Lawrence looking towards Auraria West Station

① Minimal landscape treatment
② Opaque building facades and street walls
③ Surface parking lots

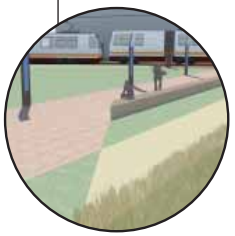
Future Auraria West gateway

Encourage multi modal access for pedestrians, bicyclists and transit passengers

Develop transparent facades and iconic moments as a gateway from the light rail station



Utilize unique paving materials to emphasize primary pedestrian routes



Strategically place street furniture and amenities to encourage generate a vibrant urban streetscape

5th Street and Walnut Street

The campus area west of 7th Street is completely bounded by viaducts. Currently, the transportation infrastructure creates an unpleasant pedestrian experience. The gateway of 5th and Walnut Streets serves as an important connection point between campus and the Sports Authority Field at Mile High Light Rail Station, together with its adjacent sports facilities. Therefore, improvements are needed to transform the visual barrier to a new campus gate.

View beneath the Auraria Parkway Bridge at 5th Street

New sound barrier screen and decorative reinforcement elements for the concrete overpass at Auraria Parkway will create a visually interesting gateway image for students and visitors. The area beneath the viaduct can also be activated by shaded seating and other social amenities. This type of gateway should also be considered for other similar situations on the Auraria Campus, including the Colfax overpass and access to MSU Denver's consolidated athletics area.

Visual Connections at 5th and Walnut

View from 5th Street Looking south below Auraria Parkway

7 | auraria parkway edge

Introduction

Auraria Parkway is redefining itself as an edge and gateway for the Auraria Campus and MSU Denver. Initial phase priorities will augment MSU Denver's newly constructed Student Success Building (SSB) and soon-to-open Hospitality Learning Center (HLC) in the near-term. Long-range plans for the parkway envision a fully developed urban edge that welcomes visitors, provides a front door for MSU Denver, and serves as a link to the Pepsi Center and future development to the north.

Existing Conditions

Twenty five thousand cars per day traverse Auraria Parkway, emphasizing its prominence as a connector in the City of Denver and front door for the Auraria Campus. The corridor is currently defined on the north by the Pepsi Center, which seems to loom over the soccer, softball, and baseball fields located south of the parkway. New construction south of the parkway have given a new front door and image for MSU Denver and the Auraria Campus:

- HLC with 150-key room hotel and 28,000 SF of Academic Space at Auraria Parkway and 12th Street.
- 145,000 SF Student Success Building at Auraria Parkway and 9th Street.

These new facilities will drive additional activity along the Auraria Parkway corridor, emphasizing the need for:

- Increased image and branding along the edge.
- Improved connectivity across Auraria Parkway.
- Additional planning and construction to further complete this edge condition.

Existing conditions at Auraria Parkway. View from Pepsi Center looking east towards downtown Denver.

Initial Priorities at Auraria Parkway. View from Pepsi Center looking east towards downtown Denver.

Initial Priorities

MSU Denver is currently considering a program plan for an aviation and aerospace engineering building immediately west of the SSB along Auraria Parkway. Envisioned as a home for classrooms, labs, offices, and an international flight training program with potential for private partnership opportunities, this building has the potential to further re-shape Auraria Parkway. Additional projects that should be considered in conjunction with the construction of the aviation and aerospace engineering building include:

- Streetscape reconfigurations (road diet) for 7th Street that balances the need for an enhanced pedestrian scale and walkable corridor with periodic event traffic needs from the Pepsi Center.
- Realignment of the sanitary line in 7th Street should be considered as part of the road diet.
- New alignment of the 9th Street water line suggested in the 2012 IMP Report should also be considered as part of new construction along Auraria Parkway.

35|	7th/Auraria Aviation/Aerospace	$67,500,000
36|	Sanitary-7th St. Realignment	$743,852
37|	Water-9th St. Alignment	$156,049

Future Priorities

Future priorities for Auraria Parkway focus on relocation of MSU Denver's athletic facilities and development of the Tivoli Shared Special Events Field. See Chapters 4 and 6 for further information regarding these initiatives. Relocation of the athletic facilities and development of the Shared Events Field allows for consideration for future MSU Denver development on Auraria Parkway between 11th Street and the Tivoli Parking Structure north of the Tivoli Student Union.

16| Shared Tivoli Events Field	See Chapter 4
81| Move Baseball S. Colfax	See Chapter 6
82| Move Softball to Baseball Site	See Chapter 6
83| Soccer S. of Colfax	See Chapter 6
84a| Move Softball S. of Colfax	See Chapter 6

Future Priorities at Auraria Parkway. View from Pepsi Center looking east towards downtown Denver.

Long-Range Build Out at Auraria Parkway. View from Pepsi Center looking east towards downtown Denver.

Long-Range Build Out

Full realization of the Auraria Parkway edge provides several academic footprints for MSU Denver's long-range build out. Considerations for future development include:

- Location of an expansion for MSU Denver's HLC for the block west of 11th Street facing Tivoli Field. If direct adjacency to the existing HLC building is desired, an alternate location for this hotel expansion could be east of 11th Street.
- Future development along the 7th Street corridor should address the street with doors and transparency, and provide adequate space for pedestrian and bicycle circulation.
- A future academic building at Larimer and 9th Streets could provide arts space for MSU Denver, allowing the King Center to redevelop as a pure theater and performance arts building.

22| Bldg. at Walnut + 10th/11th	See Chapter 4
23| MSU Denver Academic Bldg.	See Chapter 4
68| King Center Renovation	$6,250,000
69| Sanitary-9th St. Alignment	222,670
70| Plaza Building Renovation	$18,500,000
75| Academic Bldg..-Larimer/9th	$40,000,000
106| New Academic Bldg.	$59,500,000
106a| New Academic Bldg.	$76,500,000
109| Parking Garage Replacement	$20,000,000

Key Principles +Objectives

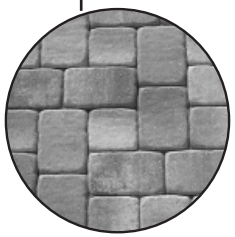
Enhance Visibility and Create Pedestrian Connections across Auraria at 7th

Existing Conditions at 7th Street and Auraria Parkway looking southeast

① Expansive pavement at intersections
② Medians do not provide pedestrian refuge areas in crosswalks
③ Surface parking lots do not provide a welcoming front door
④ Lack of campus entry signage

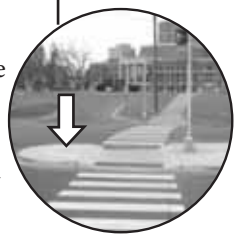
Future Pedestrian Connections across Auraria Parkway and Newly Identified Gateways at 7th Street

Utilize paving materials to remind vehicles that they are entering a pedestrian campus zone



Provide clear bike lane and medians to replace one lane of vehicular traffic on 7th

Provide pedestrian refuge areas in medians to enhance pedestrian safety



Utilize signage to provide a gateway to the Auraria campus and MSU Denver neighborhood

8 | speer edge + urban core

Introduction

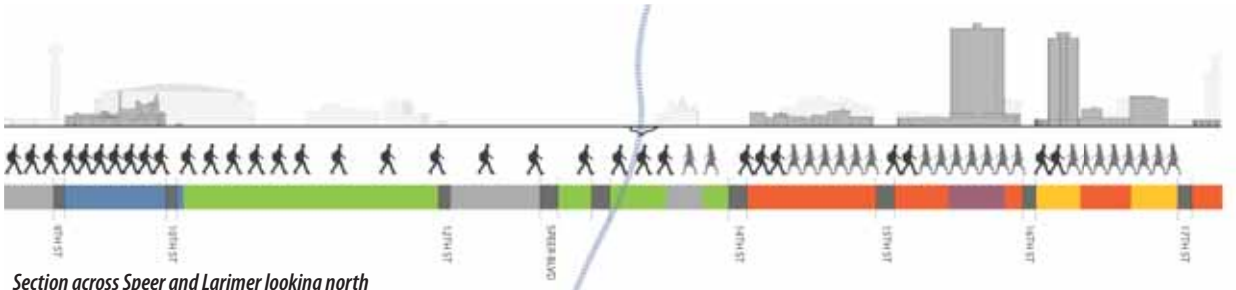
Speer Boulevard currently acts as a dividing line between downtown Denver and the Auraria Campus. Several priorities were tested as part of the Strategic Implementation Plan, including:

- Rethinking the corner of 14th and Larimer Streets as a gateway for CU Denver
- Providing a green space connection along Larimer Street by replacing surface parking lots with vegetation
- Encouraging continuation of the vibrancy and intimacy of Larimer Square into the campus through implementation of multi-use structures and character filled walkways along Larimer Street
- Enhancing view corridors and vistas into campus at Lawrence Street and Arapahoe Street

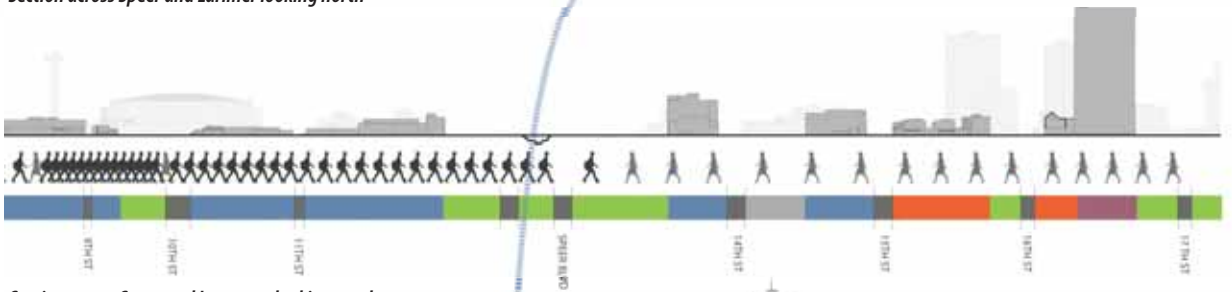
Contextual Analysis

Existing Contextual Condition of Speer Boulevard

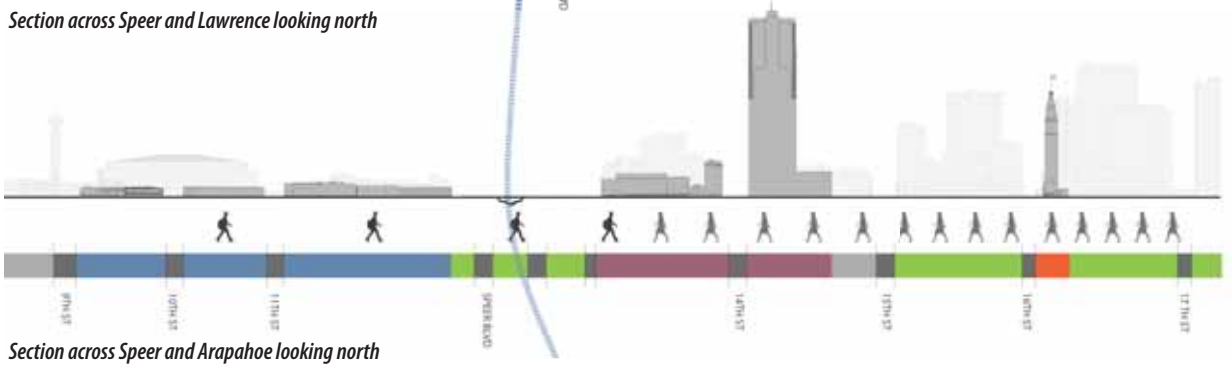
Planned Contextual Condition of Speer Boulevard



Section across Speer and Larimer looking north



Section across Speer and Lawrence looking north



Section across Speer and Arapahoe looking north

Analysis shows that the Speer Boulevard gateways do not create a continuous walkable linkage between the downtown and the campus. Parking lots, vacant fields and undesirable street walls are barriers for interactions between the downtown and the campus area. Previous studies done by Feher & Peers Transportation Consultants and Space Syntax highlight the changes in pedestrian behavior between downtown and the campus.

Legend

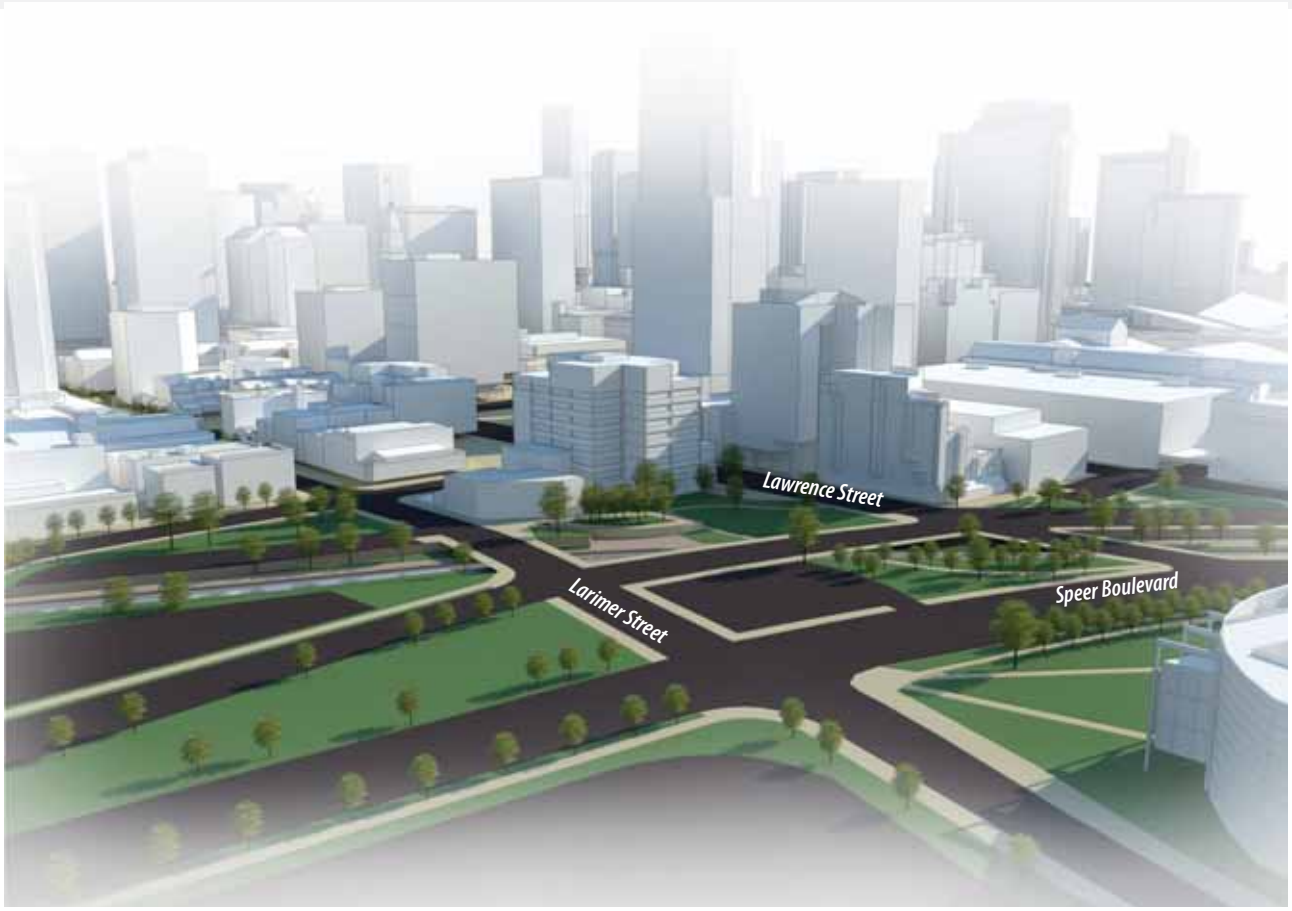
- Academic
- Commercial
- Office
- Hotel
- Green Space
- 50 Pedestrians Per Hour

Existing Conditions

Speer Boulevard serves as a major edge and gateway to the Auraria Campus. It is defined by its vehicular activity with eight lanes of traffic and several parking areas. The result is an expanse of concrete and asphalt that leaves a pedestrian feeling out of place. There is also a lack of verticality and vegetation, which renders the space as boundless and sparse; leaving passerby's fully exposed to the elements.

However, Speer Boulevard is cradled between bustling downtown Denver and the Auraria Campus. Its location, with a purposeful design could provide several opportunities for the community. Potential for the Speer Boulevard/Larimer Street corridor include:

- Creation of a cherished green space in a densely developed area
- Extension of the downtown area that infuses urban vitality into the campus setting
- Development of an identifiable gateway that helps brand the campus and entrance to the CU Denver neighborhood



Existing Conditions at Speer Boulevard edge. View from Northeast campus looking southeast towards downtown Denver.

Key Principles +Objectives

Create an Improved Landscape Connection between downtown and the Auraria Campus

Larimer Street looking east towards downtown

1. Poor definition of space
2. High traffic volume creates unsafe pedestrian environment
3. Lack of character
4. Large expanse of surface parking and lack of vegetation
5. No public spaces that promote a gathering or sitting

Larimer Street Landscape and Streetscape Improvements

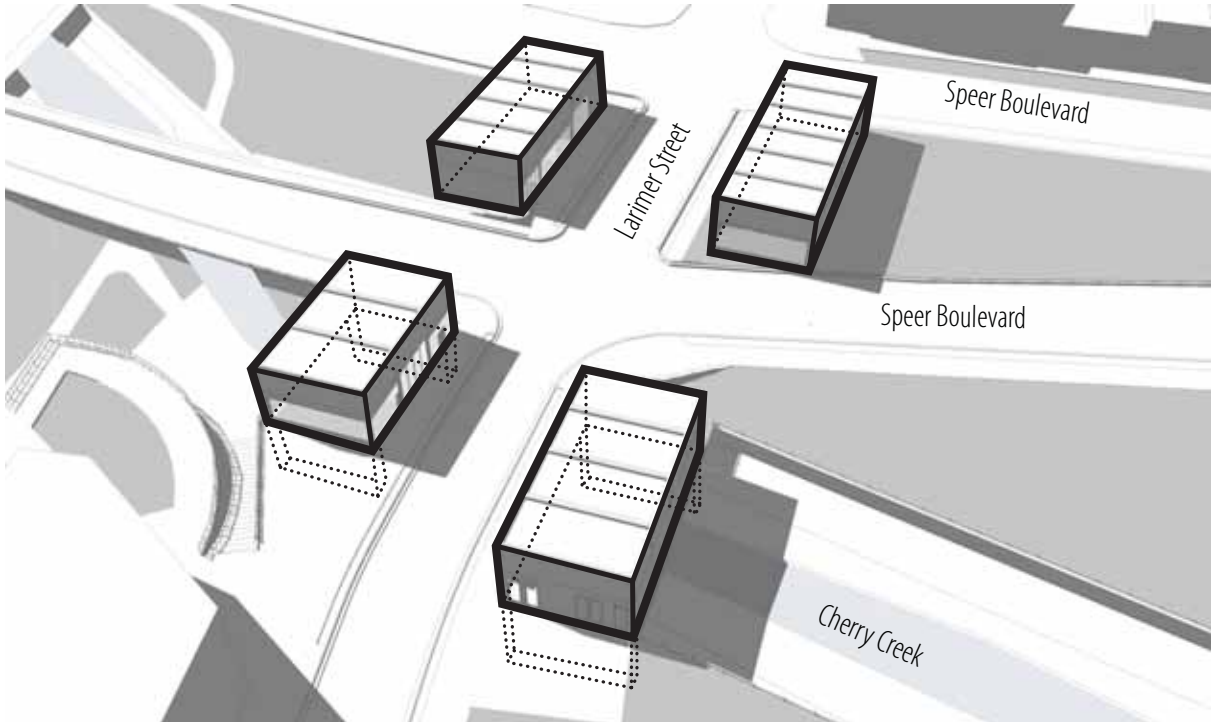
Utilize lighting features to create a human-scale intimacy reminiscent of Larimer Square

Encourage vegetated buffer to create separation between vehicles and pedestrians

Develop memorable and identifiable seating areas to encourage interaction and sociability

Utilize simple, multi-functional benches that allow a place to sit and stay along the street

Create a Programmatic and Retail Connection between downtown and the Auraria Campus



Birds-eye view of the Larimer Street Bridge and building relationship

① Narrow walks and encroaching guardrails

② Undefined space and lack of built form

③ Lack of vegetation and landscape character

④ Space is scaled for the vehicle, not pedestrians

Existing Conditions on Larimer at Cherry Creek looking northwest

A new Vision for the Larimer Street Bridge


2
3
4

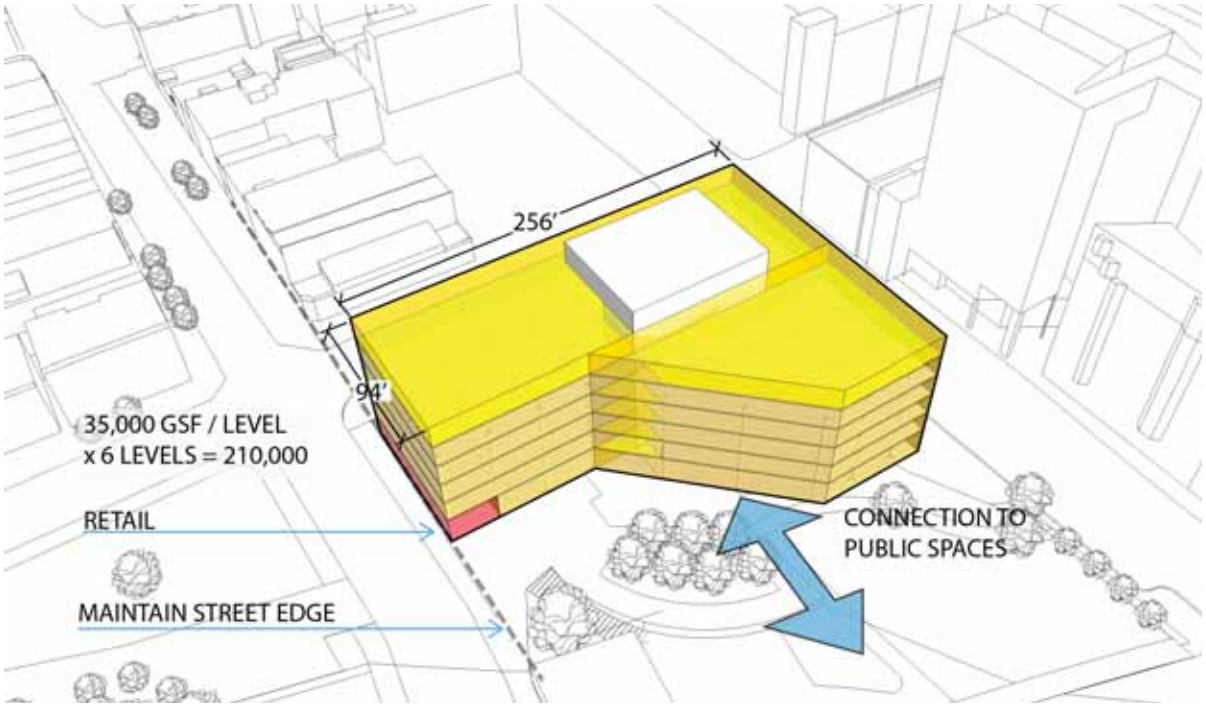
Encourage Development Opportunities at Larimer and 14th Street

CU Denver is well positioned to take advantage of a prime location in downtown Denver with a building located at the corner of 14th and Larimer Streets. This location is desirable for a private sector developer if a portion of the space were to include office space, retail space, housing, or a combination of these uses in addition to academics.

The most aggressive option for this area includes demolition of the existing buildings and examining new construction on this site that is not limited by legacy architecture. The site is large enough to support one or two building footprints, depending on the programmatic requirements.

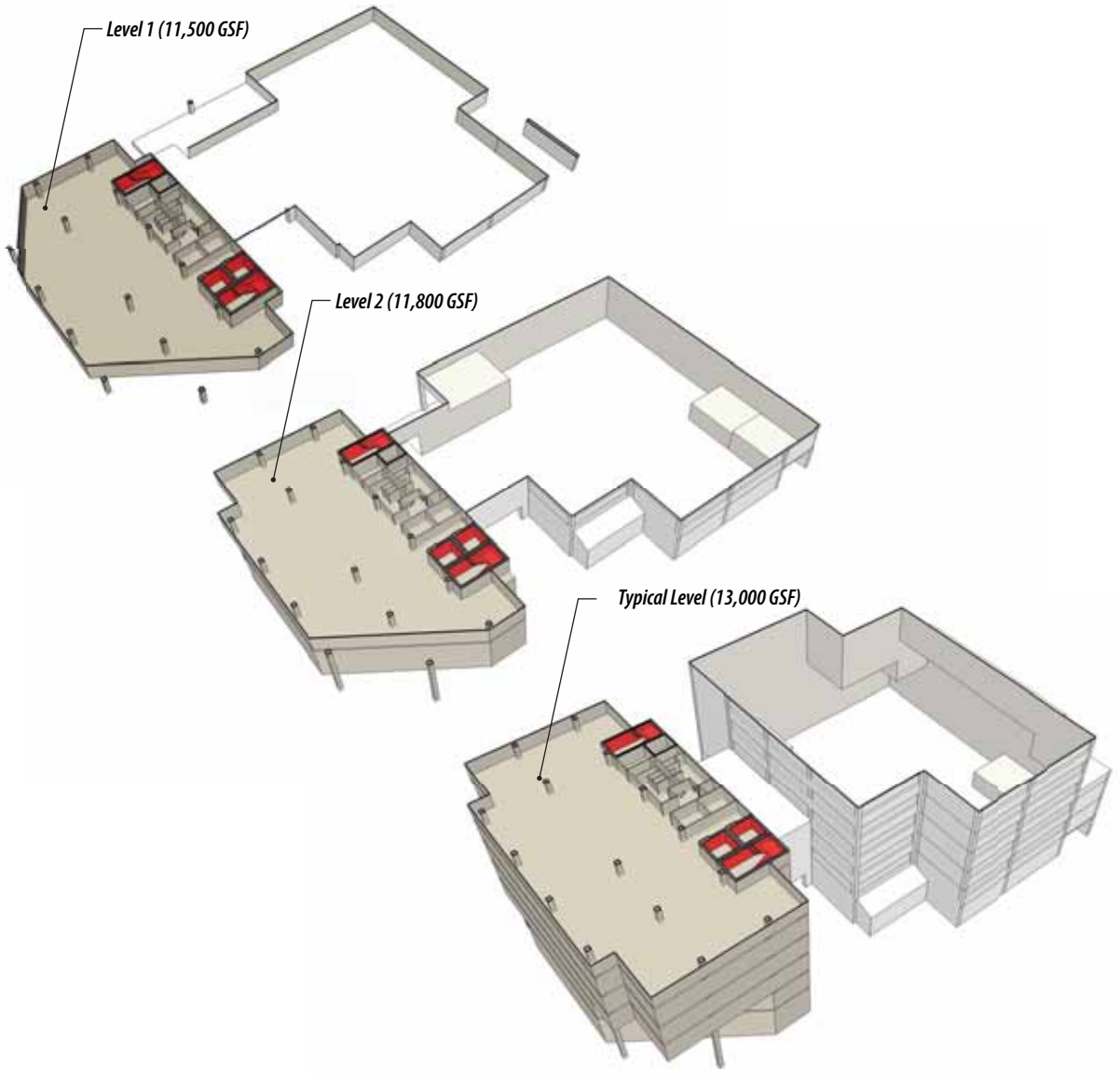
Key site constraints are the outdoor public amenities and Cherry Creek to the west, and the need to extend the activity of Larimer Square farther into campus.

Based on CU Denver's programming, these buildings could house the School of Architecture and Media/ Arts classroom space. This development could be a public-private sector collaborative opportunity.



A second, less aggressive option for the 14th Street and Larimer Street site is to demolish the existing annex and reconstruct a new building in this location. This reconstructed building is envisioned to contain academics, housing, office, and retail space. In this option, the existing School of Architecture would be an in-place renovation candidate. The new facility, as envisioned, could be a robust public-private partnership housing CU Denver Media/ Arts and related programs. The first several floors of the new building could be leased to the private sector, lessening the overall financial burden to the institution. Upper levels of a new facility may include partnership opportunities with Denver ABC or PBS television affiliates, as they have expressed interest. This public private partnership would not only help fund a new building for CU Denver, but it would also create synergy between students and a private sector partner. This initiative could be structured with either CU Denver or a private developer leading the effort.

Finally, this block could be further improved with a cooperative agreement with the City of Denver. In this scenario, the public park area adjacent to the building should be viewed as an urban amenity and redeveloped with transparency, outdoor active learning spaces, and visual connectivity to campus.



Create Campus Views at Speer Boulevard + Lawrence Street

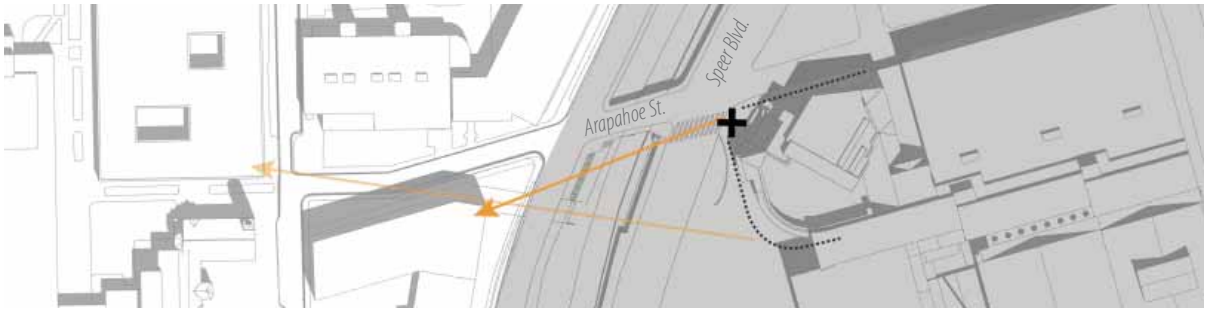
The gateway at Speer Boulevard and Lawrence Street accommodates large volume of pedestrian traffic from the Lawrence Mall to the downtown area. It is also a major access point for the Cherry Creek bike trail. The view towards Lawrence Mall and St. Cajetan Church will serve as an important wayfinding feature for the campus. The proposed CU Denver addition of the Science Building should consider continuation of the more modern character of campus already begun in this area.

Visual Connections at Speer and Lawrence

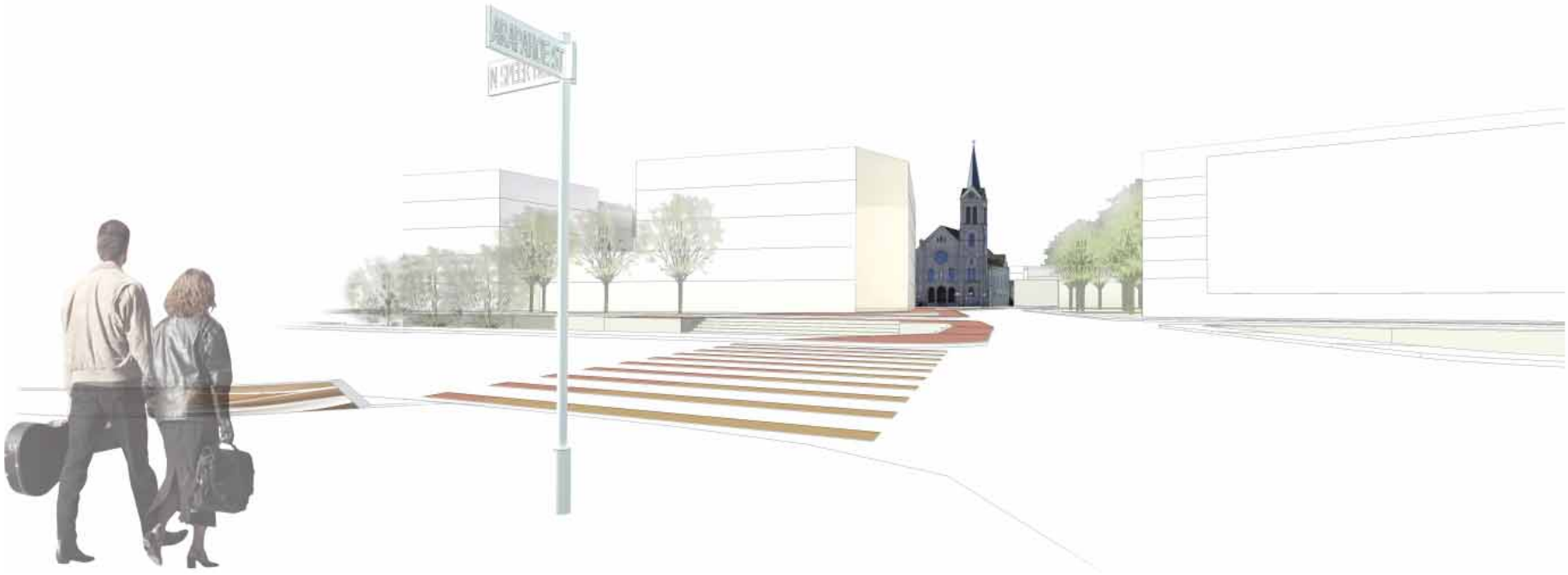
View from Speer Boulevard towards the Lawrence Mall

Encourage View Corridors at Speer Boulevard+ Arapahoe

As an important connection between St. Elizabeth's Church and Denver Center for the Performing Arts, the gateway at Speer and Arapahoe bears significant cultural meanings. Views should be preserved directly to the church from the intersection of Speer and Arapahoe, and visual connections between the west entrance of the Performing Arts Center and the campus should be well-maintained.



Visual Connections at Speer and Arapahoe



View towards St. Elizabeth Church

9 | next steps + funding strategies

Introduction

This chapter provides specific recommendations for "now-term" actions that need to be addressed to prepare for the implementation of immediate priorities identified in this study. Highlighting the need for Auraria and the three institutions to continue to refine strategies for campus growth in light of future demand, this chapter also addresses the impact of eLearning, and the tradeoff between expanding growth beyond the campus boundaries and campus densification. Also provided are specific recommendations for the further analysis of priorities that are unlikely to receive traditional state funding in the foreseeable future.

"Now-Term" Priorities

Initial Institutional Actions

The initial actions for development at the campus-wide level that were identified during the study include the following:

- Complete due diligence work on campus utility infrastructure capacity and identify funding requirements and development triggers
- Development of a swing space and incubator building on the shared campus neighborhood on 5th street.
- Establishing a strategy for student housing to support future growth without requiring investment or development risk to Auraria or its partner institutions.
- Further investigate concepts for the redevelopment of the Tivoli field and surrounding development to create the area as the activated "heart" of the Auraria campus.

Individual Campus Actions

The initial actions for development within each neighborhood that were identified during the study include the following:

- Pursue individual neighborhood Master Plan's, including detailed academic space needs and traffic/transportation studies
- Development of Academic Building 1 (AB1) for CU Denver on the corner of Larimer and Speer streets
- Development of a mixed use building at 14th and Larimer
- Development of Aviation Technology building for MSU Denver along Auraria Parkway
- Development of tennis, baseball and soccer fields for MSU Denver south of Colfax
- Re-development of the Technology Building at Colfax Gateway at 10th Street in the CCD neighborhood

In addition to these specific infrastructure and building needs, there is an overarching need for the campus community to evaluate its long term development strategy. This is particularly relevant given the anticipated demographic demand for growth over the next 20 years.

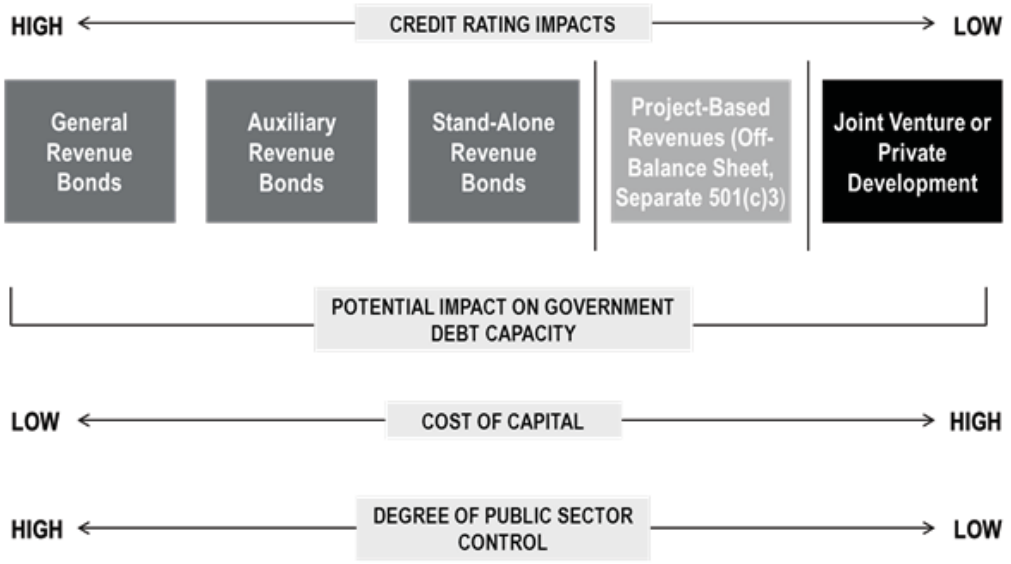
- Understand trade-off between investing in campus focused development versus developing in surrounding neighborhood
- Evaluate the impact of online learning on future campus demographics and classroom demand.
- Revisit the historic vision of Auraria as a "commuter campus" as compared to an "urban campus" and the corresponding implications to campus densification and ancillary student life amenities such as housing.

Funding Considerations

Currently, AB1 and the Aviation Technology building are slated to be developed using traditional funding sources, which will likely include tax exempt debt funding through a bond issuance. However, for the utility infrastructure upgrades, the 14th and Larimer development, and swing space/incubator building, no traditional funding sources have been identified and receiving state approval for issuing university debt to fund these is unlikely. As a result, the institutions should purse alternative funding mechanisms to support these needs. With the exception of the infrastructure upgrades, there is sufficient private sector demand to support utilizing public private partnership structures to affordably achieve these developments at minimal risk to the institutions.

Development Alternatives and Public Private Partnerships (P3)

There are many forms of P3 and every structure needs to reflect the unique goals, constraints, economics and risks of the project, as would be the case for the development priorities suggested for P3 consideration. Displayed in the adjacent figure, there is a spectrum of development alternatives and each option has different benefits and risks. Therefore, it is important that each potential development and funding structure be evaluated in light of the needs and constraints of the project. Some of the key considerations in this evaluation process will include the nature of the development, cost of debt, risk, expertise, balance sheet impact and timing.



If, after preliminary analysis, a project seems to meet the criteria for a successful P3, the following steps should be followed to secure an appropriate private sector partner and, through the procurement process, leverage the knowledge of the private sector to determine the best way for the project to meet its functional, social and economic goals.

Create a Vision - For every project, it is essential that each institution have a well-defined project vision that can be supported by key stakeholders and is realistic given market dynamics. At this early stage, complex plans and multiple scenarios are not needed. A vision that creates excitement and addresses the key needs of the public entity is the critical ingredient to building momentum.

Model the Economics - Prior to making a determination on how to proceed with the development, the institution should to create a pro forma model of the desired development that is informed by program need and current real estate and construction market data. This early analysis is relatively inexpensive and provides an early read to the functional and financial viability of the project for both the public and the private partner.

Test the Market – Prior to commencing a formal procurement process it is important to test and discuss each development opportunity with potential private sector partners. This is usually accomplished through informal discussions with potential partners in which the project vision and opportunity is described and its potential benefits and risks are discussed. This informal process serves several critical purposes:

- Provides the public sector entity with a sense of the market interest for the project.
- Identifies any fatal flaws in the initial concept that might result in a less than favorable.
- Serves a marketing purpose by providing an early warning to potential partners about the opportunity and allowing the institution to "talk up" the project without being under the restrictions that govern a formal procurement.

- The feedback from the private sector gives the institution valuable input that may further refine the initial vision for the project and gain further alignment among internal stakeholder prior to initiating a formal procurement.

Requesting a Concept and Selecting a Short List – Typically, finding a private sector development partner is accomplished using a two –step procurement process. In the first stage of the procurement, a document is released that requests information and conceptual responses from potential private sector partners. In this document the institution describes the project and its principal objectives generally and advertises widely or narrowly as it wishes for potential partners to come forward with project teams and statements of experience and financial qualifications. The institution then chooses a limited number of teams to go forward to the more detailed RFP selection phase. There are three main goals for this stage of the procurement:

- Establish minimum requirements for respondents to qualify for consideration in a subsequent Request For Proposal (RFP) stage
- Provide respondents with the opportunity to creatively respond to how they would meet goals of the project. As mentioned earlier, each project will have unique goal set to support its vision, but common elements of consideration generally include; approach to a design concept, credentials of the team and their proposed approach, proposed financial and ownership structure, risk mitigation plans, schedule considerations, communication plans, etc.
- Use the qualifications of the respondents and the quality of their responses as a mechanism to determine a short list of respondents to move onto the RFP stage.

If successfully employed, this process will determine short list of candidates to move to the RFP stage and, by further vetting ideas and concepts received from the private sector, will help further refine the vision, concepts and supporting structures needed to successfully execute the project, which can then be incorporated in the language of the RFP.

Selecting a Preferred Partner – At this stage a formal RFP is issued to the short-listed respondents from the prior stage. By using the prior stage to narrow the field of respondents it serves to make the RFP phase more attractive to serious offerors because the competitive ranks have been thinned. The goal of this stage is to determine who you want to award the project to. Where the prior stage is more open ended and is looking for respondents to provide creative approaches to how they think the partnership should be structured, designed and executed to meet the goals and requirements articulated, at this stage the framework of the project should be determined and respondents should be asked to provide very specific and detailed responses to the elements of this structure.

Negotiating the Contract – Once a partner has been selected the finish line is in sight, but it still has not been crossed. At this juncture the offers provided by the winning respondent in the RFP need to be contractually formalized. Although the key elements of the relationship should be understood leading into contracting, public private development partnerships are highly complex with many details that need to be considered and negotiated. Therefore, the final contracting process should seek to clearly define the roles, responsibilities, obligations and liabilities of both parties.

Alternative Funding Strategies for Initial Priority Projects

There are several near term needs that will not likely be achieved with traditional funding. As a result, Auraria and its partner institutions should quickly evaluate the viability of various alternative funding mechanisms that can be used to accomplish this development. The following provides specific initial recommendations for further evaluating these areas of need in order to establish a market viable strategy for their funding.

Utility Infrastructure

- Finalize utility infrastructure capacity analysis and develop cost estimates for upgrades.
- Establish priorities for investment, with timeline and development triggers.
- Develop an internal funding strategy between the three schools to support investments in the utility infrastructure
- Investigate the ability to tap into the private sewer main on Larimer

Perform initial due diligence and feasibility analysis for developing a building on 5th street to support shared needs for swing space, grant programs and incubator space.

- Develop programmatic requirements for swing space and establish construction criteria
- Perform initial cost estimates for facility
- Establish pro forma development model assuming that building will be constructed under a lease/leaseback structure using a public private partnership between Auraria, a 501 c3 and a fee developer.
- Conduct outreach with the City and private sector to seek partners and further clarify needs for Incubator
- Present conceptual development package to Auraria stakeholders

Perform initial due diligence and feasibility analysis for developing student housing on campus.

- Work with Auraria to develop initial program and location concepts for on campus housing
- Update initial housing model program and cost assumptions
- Proforma financial model of student housing economics to determine market feasibility of development
- Informal meetings with housing developer to inform design criteria and market demand
- Present findings to Auraria Stakeholders

Evaluate development options for CU Denver's Media Arts and Architecture programs on 14th and Larimer.

- Refine programmatic requirements
- Establish viable development options including associated massing concepts and GSF assumptions:
    - Build new building on site to Media Arts and continue to renovate existing building for Architecture
    - Build new Architectural building on site and move Media Arts into existing Architecture building
    - Renovate existing Architectural building and lease space in Denver to house Media Arts.
- Develop initial construction cost estimates for each scenario
- Model new development scenarios using both conventional financing assumptions (100% university financed) and alternative financing and development assumptions using a public private partnership
- Present Findings to CU Denver leadership
- Investigate opportunities for partnership in media arts building with local television stations