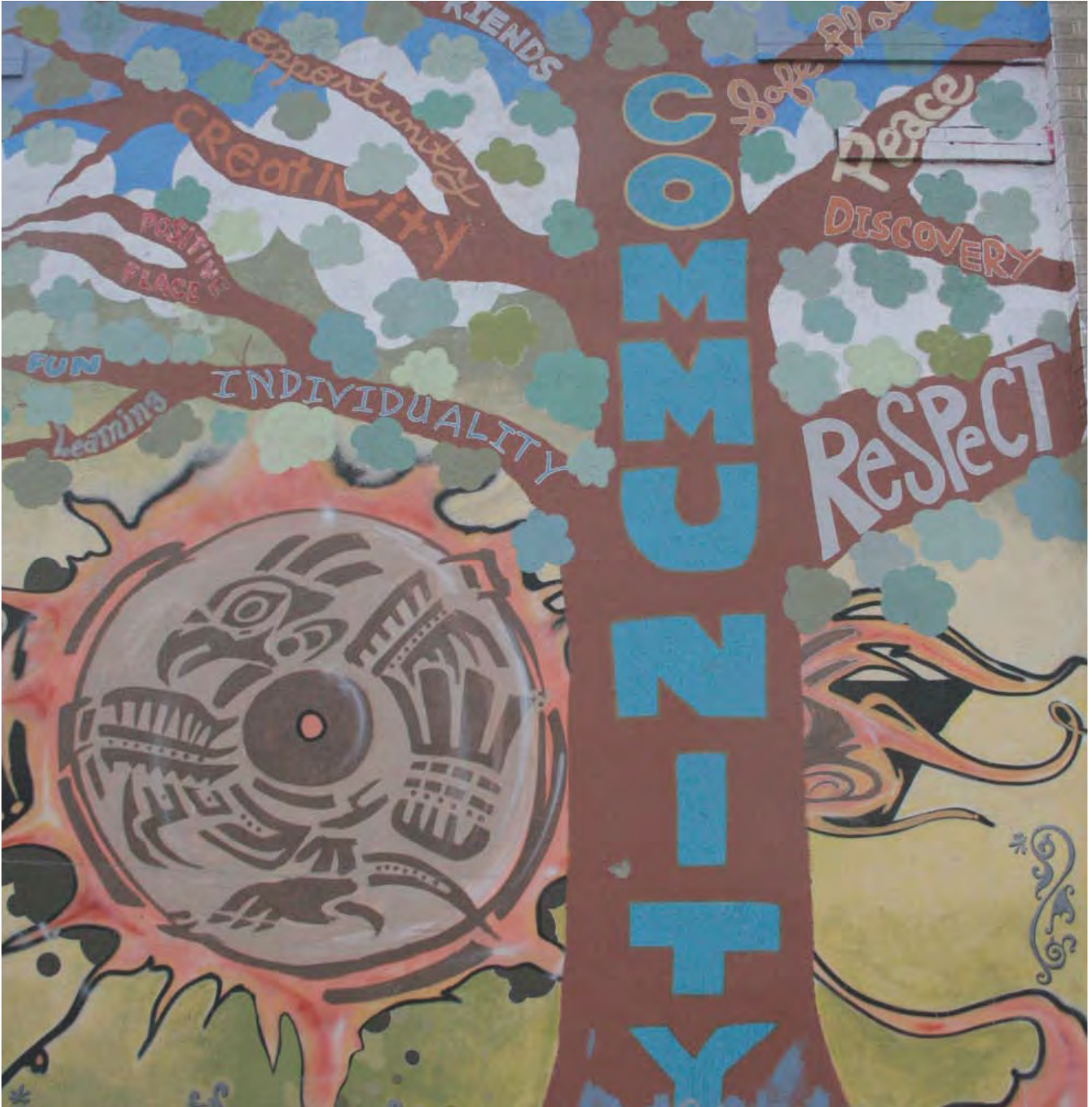


# Use of the Healthy Development Measurement Tool (HDMT) in Denver

Cross-Sector Partnerships for Development and Public Health  
South Lincoln Homes, Denver CO





# EXECUTIVE SUMMARY

The Denver Housing Authority (DHA) is undergoing planning for the redevelopment of South Lincoln Homes in Denver, a public housing project adjacent to the 10th & Osage light rail station. The proposed mixed-income, mixed-use redevelopment represents a significant opportunity for a positive impact to the residents of South Lincoln Homes as well as the surrounding neighborhood. Through the masterplanning process, a rapid Health Impact Assessment (HIA) was conducted to inform the plan, and as an outcome of this coordination, DHA elected to customize and apply the Healthy Development Measurement Tool (HDMT) at South Lincoln.

The intent of customization and application of the HDMT, a tool developed by the San Francisco Department of Public Health, is to build on the HIA, create a baseline, and set targets to guide further development of the masterplan, as well as the actual implementation. As a public agency, through HUD's direction, and with potential for coordination with other agencies and service providers, DHA will address aspects not always associated with typical development including community and supportive services (CSS). The CSS program typically includes needs assessments, case management, and building joint capacity, and management monitoring and evaluation. The focus is on support of families, assistance with informed relocation, and transition to housing self-sufficiency.

The HDMT is organized into 6 primary objectives or elements: Environmental Stewardship, Sustainable and Safe Transportation, Social Cohesion, Public Infrastructure, Adequate and Healthy Housing, and Healthy Economy, and outlines a series of indicators and development targets for each. The customization of the HDMT reflects modifications to place-specific information and coordination with metrics including LEED for Neighborhood Development (LEED-ND), the Sustainable Sites Initiative (SSI), and the Green Communities Criteria. This adaption and application to South Lincoln was completed over approximately 6 weeks.

During the course of this process, and with assistance from a peer review team, a set of recommendations, opportunities for collaboration and partnerships, and areas of further study were identified.

The needs assessment conducted as part of the initial Health Impact Assessment of South Lincoln residents and the surrounding community highlighted the following key issues.

- Increase physical activity:  
55% of community is obese or overweight
- Improve pedestrian & bike opportunities:  
Only 28% exercise aerobically 3 or more times a week
- Better access to health care:  
41% are not Denver Health patients and 30% don't have a "medical home"
- Improve mobility and traffic safety:  
65% do not have any type of motor vehicle; 54% take the bus
- Increase opportunity:  
The need to create jobs and self sufficiency
- Reduce crime:  
51% don't feel safe about being alone at night in the neighborhood - violence, gangs, drugs
- Increase opportunity for healthy eating:  
Only 13% have 5 or more servings of high fiber food
- Decrease distress:  
Severe economic and physical distress exists now



South Lincoln residents at a community meeting



The baseline HDMT indicators are consistent with these health issues for the La Alma/ Lincoln Park neighborhood and the South Lincoln residents. These include a lack of physical activity and pedestrian and bike opportunities, lack of healthy eating, access to health care, crime and fear of crime, and traffic safety.

The proposed redevelopment masterplan achieves the intent and many of the development targets of the Community Health Objectives; however, this review emphasizes the importance of services and programming for the health of the community. While the physical realm can address many areas of health, community and supportive services and attention to detail during implementation are essential to meet the objectives and goals of the project.

Key health objectives that were identified as issues through the HDMT application to South Lincoln include:

- Community Supportive Service (CSS) planning: if HOPE VI/Choice Neighborhood/other other federal funds are secured, CSS planning will be required. Numerous potential partners and issues are identified in the detailed recommendations, which will require coordination between DHA and service providers, city agencies, and potential retail and commercial tenants.
- Air quality and noise: Because of the site's location directly adjacent to the rail line, air quality and noise mitigation may be required to avoid a potential health issue. Further investigation is required to determine the impact and needed mitigation.
- Safety and security: Crime rates are statistically significantly higher in the La Alma/ Lincoln Park neighborhood than citywide. Beyond physical planning to encourage Crime Prevention Through Environmental Design (CPTED) principles, coordination with the Police Department is needed. In addition, safety of intersections for pedestrians and bicyclists can be improved through streetscape improvements and in conjunction with Public Works. This will also improve opportunities for physical activity on a daily basis.

- Healthy foods access: Access to healthy foods is very important to improve the health of residents. In addition to the proposed community garden, DHA should continue discussions with The Food Trust or other comparable entities, who support attracting a fresh food market to the neighborhood. In addition, work with the City of Denver to improve physical access to the current nearby stores including safe pedestrian and bicycle routes.
- Access to education and jobs: One of the strongest and most consistent predictors of a person's morbidity and mortality is a person's socioeconomic status (SES), measured by determining education, income, occupation, or a combination of these factors. Improving access to education, from Early Childhood Education to adult education, and jobs through partnering agencies and service providers is needed to improve the SES of residents.

Because DHA has incorporated public health considerations at this stage, there are a wide range of paths available to pursue these goals and objectives of redevelopment at South Lincoln. In addition, it is possible that the customized "Denver HDMT" could be used in other redevelopment efforts of DHA. Finally, this effort seeks to expand dialogue and awareness across sectors about the connection between development and public health. Through involvement of the peer review team and Advisory Panel, we hope to continue discussion about potential avenues for leveraging resources towards a common goal.



South Lincoln residents near their homes

DenverHDMT



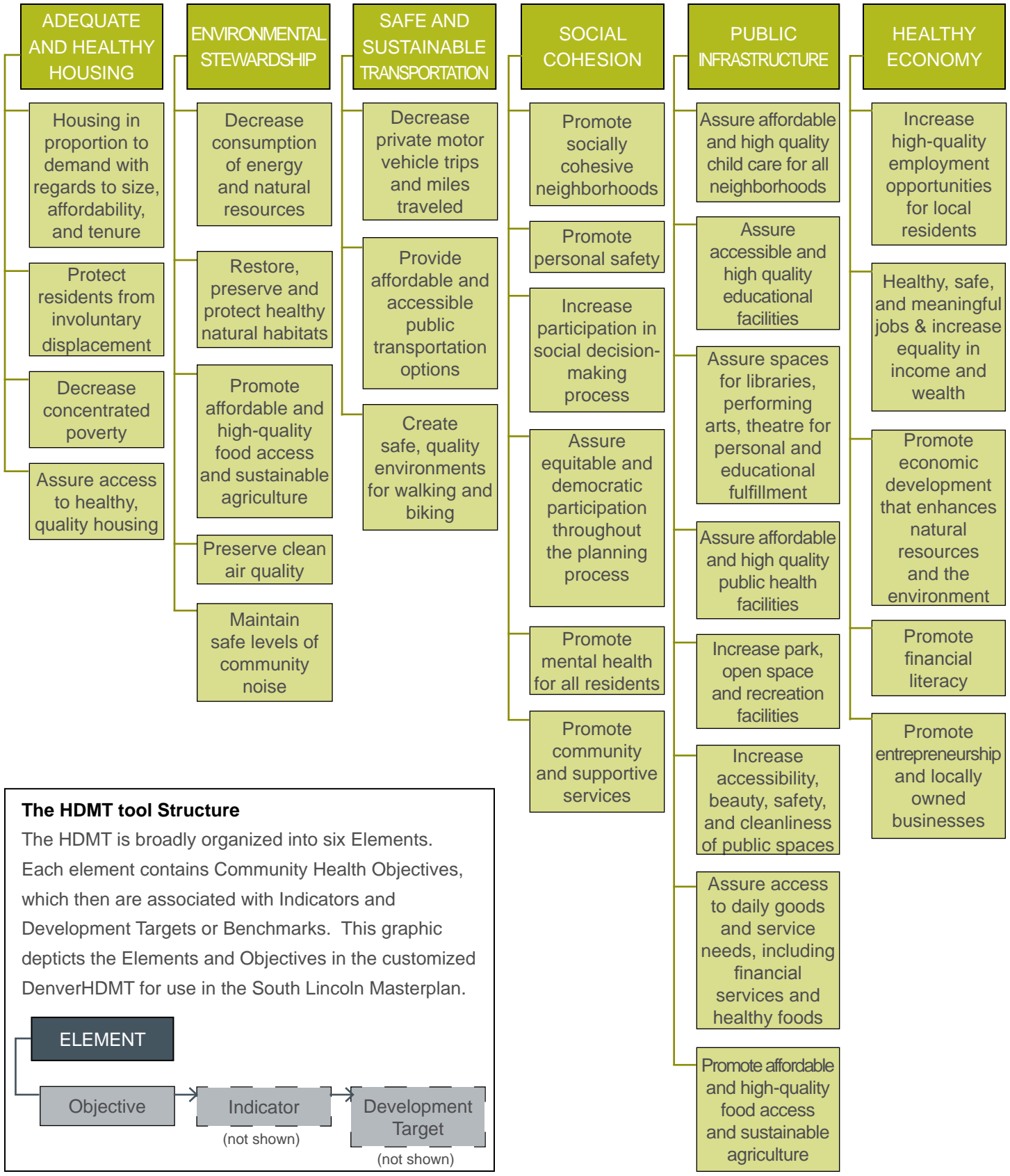
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SOUTH LINCOLN REDEVELOPMENT

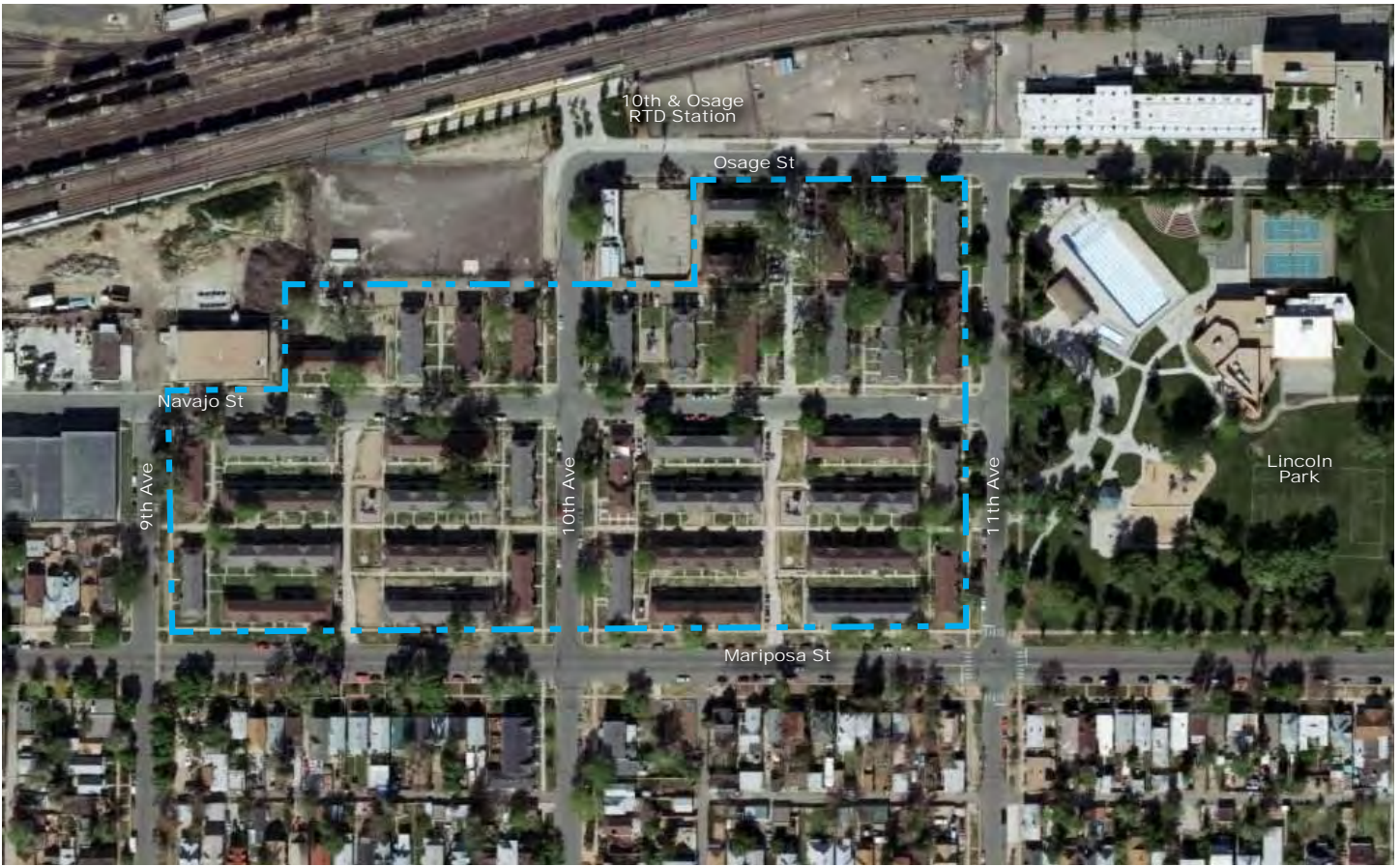


**The HDMT tool Structure**

The HDMT is broadly organized into six Elements. Each element contains Community Health Objectives, which then are associated with Indicators and Development Targets or Benchmarks. This graphic depicts the Elements and Objectives in the customized DenverHDMT for use in the South Lincoln Masterplan.

```

    graph LR
      ELEMENT[ELEMENT] --> Objective[Objective]
      Objective --> Indicator[Indicator]
      Indicator --> Target[Development Target]
      Indicator --- IndicatorText["(not shown)"]
      Target --- TargetText["(not shown)"]
  
```



The South Lincoln Homes and surrounding La Alma/ Lincoln Park neighborhood today



The final redevelopment masterplan for South Lincoln Homes

Denver **HD**MT



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**SOUTH LINCOLN REDEVELOPMENT**

# BACKGROUND AND CONTEXT

## HIA and HDMT

As a part of the masterplanning effort for South Lincoln Homes, a 15.1 acre Denver Housing Authority (DHA) property of 100 existing public housing units, a Health Impact Assessment (HIA) was conducted. This rapid HIA and masterplan was a 4-month process beginning April 2009. The HIA identified potential health impacts and recommended changes to optimize positive and minimize negative health consequences for the South Lincoln neighborhood. This assessment included community demographic and socioeconomic information and identified potential health issues using interviews, available surveys, and limited body measurement data, along with supportive evidence-based research and recommendations which informed the HIA and masterplan design.

It should be noted that a thorough resident, stakeholder, and community outreach process was an important part of the masterplanning effort. Outreach included work with the existing 10th & Osage Station Area Plan's Resident Advisory Committee and DHA Lincoln Resident Council, as well as creation of a thirty-member Steering Committee, stakeholder interviews, and public forums. In total, 123 small to large meetings and interviews were conducted between February and September 2009 to establish goals, provide feedback, and shape outcomes.

In addition to the HIA and masterplanning effort, DHA elected to work further on customizing the HDMT to improve its utility for Denver and specifically South Lincoln. This effort with the HDMT builds on the HIA work that has been completed, includes further data collection, and may offer additional and/or more specific recommendations.

## About the HDMT

The Healthy Development Measurement Tool (HDMT) was developed by the San Francisco Department of Public Health, and is a comprehensive evaluation metric to consider health in urban development plans, projects, and programs. The HDMT explicitly connects public health to urban development planning in efforts to achieve a higher quality social and physical environment that advances health. The HDMT is composed of 6 Elements: Environmental Stewardship, Sustainable and Safe Transportation, Social Cohesion, Public Infrastructure,

Adequate and Healthy Housing, and Healthy Economy.

The HDMT is structured by establishing Objectives in each Element, Indicators to describe those Objectives, and Benchmarks or Development Targets for each Objective.

## Denver HDMT customization and methodology

This project goal is to create a Denver HDMT for the Denver Housing Authority that can be used as a development metric to incorporate a health-based planning process, document the existing health of the community, and determine how the proposed redevelopment can impact the health of the community. The project was done in two phases: Phase 1 Customization of the HDMT for Denver, and Phase 2 Application of the Denver HDMT to the South Lincoln Homes Redevelopment Masterplan.

Phase 1 work included a review of the HDMT ([www.thehdmt.org](http://www.thehdmt.org)), and customization for a mixed-income revitalization project in Denver, CO. Our goals for customization included modifying information specific to San Francisco to that for Denver, as well as a review of the Environmental Stewardship section. We have done a review and evaluation of the indicators and development targets in all sections, and have also coordinated with metrics including LEED for Neighborhood Development (LEED-ND), the Sustainable Sites Initiative (SSI), and Enterprise Green Communities Criteria.

The feasibility of indicators for inclusion in this customized Denver HDMT was evaluated based on: their relevance to the specific development project (mixed-income urban revitalization project) in Denver, CO; the potential to affect change through the redevelopment; and the ease of data collection. The feasibility of development targets/benchmarks for inclusion in this customized Denver HDMT was evaluated based on their correlation of development target/benchmark as a proxy for improvement of the indicator and related to health outcomes, and whether the target was based on a recognized metric or empirical data.

In addition, this effort includes a cursory review to coordinate the HDMT with outcome goals for City and Statewide health initiatives, such as the LiveWell program and the Design for Health Checklist.

Further work could be done to seek opportunities for aligning the customized HDMT. The customized framework was developed in conjunction with our peer review team, and can be found at the end of this report.

### **Customization of the HDMT**

This customization maintained the structure and objectives, and most indicators within the tool. Areas which were adapted include:

- Adjust for Denver specific references
- Adjust some development targets to align with LEED-ND and SSI, and Green Communities
- Adjust to align with a mixed-income development/ HOPE VI perspective
- Coordinate with Denver Climate Action Plan
- Some streamlining to improve usability

As noted above, additional coordination with the comprehensive plan and other policy documents is possible. Adjustments to each Element are as follows.

#### Environmental Stewardship:

- Residential natural gas, electricity, and water use: added Green Communities Criteria and Energy Star references to target
- Waste disposal: added reference to Denver Climate Action Plan (50% demolition debris recycled)
- Proportion of green buildings: added Green Communities Criteria and Energy Star as references
- Stormwater: Added indicator and target references to SSI and LEED-ND
- New indicators: stormwater infiltration, habitat for ecosystem services/ GHG sequestration, outdoor spaces for mental well-being (SSI, LEED-ND prerequisite references in targets)
- Air quality: included distance to heavy rail in indicator
- Levels of community noise: modified target to comply with HUD requirements

#### Sustainable and Safe Transportation:

- Maintained objectives
- Modified indicators and targets for ease of use at South Lincoln
- Added references to LEED-ND, PEQI, and Denver Climate Action Plan

#### Social Cohesion:

- Separated Personal Safety as discreet objective
- Coordinated benchmarks with demonstrated improvement in Piton Foundation data: violent crimes, property crimes
- Suggested additional objectives to coordinate with CSS planning: Promote mental health and Promote community and supportive services

#### Public Infrastructure:

- New indicators: number of ECE and highly rated preschool programs within ½ mile
- Parks: add reference to LEED-ND and SSI in targets

#### Adequate and Healthy Housing:

- Suggest indicators to coordinate with CSS in relocation and phasing objective
- Add references in benchmarks to LEED-ND (diversity in housing types) and to Green Communities Criteria (healthy indoor living environment)

#### Healthy Economy:

- Added indicators: jobs accessible by walking, bike or transit, proportion of new jobs as “green collar”
- Included references to LEED-ND (housing and jobs proximity) and SES factors in benchmarks
- Suggest additional objectives to coordinate with CSS: financial literacy and entrepreneurship/locally owned businesses



### Denver HDMT Peer Review Team

- San Francisco Department of Public Health, Lili Fahrang, HDMT Project Manager (currently with Human Impact Partners)
- Colorado Department of Public Health and Environment, Jessica Osbourne, Active Community Environments and Physical Activity Coordinator
- Denver Department of Environmental Health, Stacey McConlogue, Program Director, Denver Healthy People 2010
- Tri-county Health Department, CO, Environmental Health Division, Carol MacLennan, Senior Policy Coordinator
- Nelson Nygaard, Jeremy Nelson, Senior Associate

### Advisory Panel

- City of Denver, Councilwoman Judy Montero, District 9
- City of Denver, Teresa St. Peter
- City of Denver, Kristin Krasnove, Senior Planner
- Colorado Health Department, Jessica Osbourne, Active Community Environments and Physical Activity Coordinator
- Colorado Health Foundation, Khanh Nguyen
- Denver Department of Environmental Health, Stacey McConlogue, Program Director, Denver Healthy People 2010
- Denver Public Health at Denver Health, Chris Urbina, M.D., M.P.H.
- Denver Public Health at Denver Health, Jennifer Wieczorek, M.P.H.
- Enterprise Community Partners, Melinda Pollack
- Kaiser Permanente, Corina Lindley
- Livewell Communities, Lonna Lindsay, Vice President of Policy
- Livewell Communities, Maren Stewart, Executive Director
- Metropolitan State College of Denver, Andriann Wycoff, Co-Director of CAMP, Director of Family Literacy and Assistant Professor of Chicana and Chicano Studies
- Partnerships for Healthy Communities, Merrick Weaver, Executive Director
- Perry Rose, Chuck Perry and Nicole Sherwood
- Reconnecting America, Catherine Cox Blair
- San Francisco Department of Public Health, Lili Farhang, HDMT Project Manager
- Tri-county Health Department, CO, Environmental Health Division, Carol MacLennan, Senior Policy Coordinator
- University of Colorado, Kevin Krizek, Active Communities/ Transportation and Associate Professor of Planning, Design, and Civil Engineering
- University of Colorado, Deborah Main, Ph.D., Health and Behavioral Sciences
- Urban Ventures, Susan Powers

### Project Team for the HDMT at South Lincoln

- Erin Christensen, Mithun
- Robert Matthews, Mithun
- Critter Thompson, Mithun
- Tammie Schacher, Mithun
- Karen Roof, EnviroHealth Consulting
- Kimball Crangle, Denver Housing Authority

DenverHDMT



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**SOUTH LINCOLN REDEVELOPMENT**

# THE SOUTH LINCOLN HOMES REDEVELOPMENT PROCESS

Denver Housing Authority (DHA) intends to redevelop South Lincoln Homes, currently functionally obsolete and sustaining unacceptable levels of concentrated poverty, above-average crime, and lacking opportunities for youth. The redevelopment will enhance opportunities for the public housing residents by creating a mixed-income community, enhanced links between the neighborhood and site, and increased likelihood for self-sufficiency.

South Lincoln Homes is owned and managed by DHA and contains 270 Public Housing units on 15.1 acres in the La Alma/ Lincoln Park neighborhood of Denver. DHA plans to redevelop the site to include a mix of housing products and target a range of income levels. New economic opportunities will foster a sustainable transit oriented development and cater to a broad resident base. The Masterplan was completed in 2009, and based on funding availability, redevelopment activity could begin within 12-18 months.

The goal for the South Lincoln Redevelopment is to create an energized transit-oriented community where people choose to live to experience a neighborhood that is environmentally sustainable, cultural diverse, close to downtown, and offers a spectrum of housing options. The South Lincoln redevelopment will integrate urban planning, design, and operations to promote economic, environmental, and social vitality. The planning and design effort is rigorous yet holistic, ensuring the delivery of cultural, economic, environmental and health benefits from the South Lincoln Redevelopment.

DHA's goal is to achieve a one-for-one (1:1) replacement of the existing housing in addition to offering new mixed-income residences and commercial space on the site. DHA also plans to develop a comprehensive community services program, including the creation of a variety of economic opportunities. The real focus of this plan will be the people who reside in and around South Lincoln Homes.

After the redevelopment Masterplan is completed, DHA will prepare a HOPE VI redevelopment application to include the final Phasing plan, Relocation Plan, and Demolition Plan, which is based on the final Masterplan Public Meeting

to discuss phasing plan and the relocation strategy with the residents and Local Resident Council (LRC). If funded, DHA will pursue next steps in planning, which include land use approvals and detailed design, Community and Supportive Services (CSS) planning (including working with some residents on the first stages of relocation), and architectural design of the first phases. Construction through the HOPE VI program is anticipated to be approximately 5 years in duration.

The goals for this redevelopment masterplan were developed in conjunction with resident and community input, as well as an organized Steering Committee. The project goals are listed below. It should be noted that the project goals have significant overlap with the primary objectives of the HDMT: Environmental Stewardship, Sustainable and Safe Transportation, Social Cohesion, Public Infrastructure, Adequate and Healthy Housing, and Healthy Economy.

## Project Goals: South Lincoln Final Redevelopment Masterplan

### GOAL A

Base the redevelopment plan on the current and long term physical, social, economic and environmental NEEDS of South Lincoln Residents.

*[GOAL B - combined with Goal E]*

### GOAL C

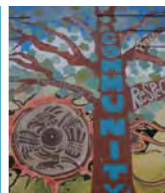
Use and implement an approach that promotes a sustainable & holistic site design and promote economic self sufficiency. A holistic site looks at integrated sustainable solutions on a site wide basis.

### GOAL D

Increase access to the outdoors by providing varied opportunities for open space and 'green' design solutions and materials.

### GOAL E

Provide mixed-income redevelopment. Replace public housing, expand affordable housing and attract market rate housing.



**GOAL F**

Provide opportunities to increase jobs and job training, particularly in emerging sectors of the economy.

**GOAL G**

Improve safety and security of homes, site amenities, public places and streets.

**GOAL H**

Provide opportunities for non-residential uses that serve the neighborhood in specific locations within and surrounding South Lincoln Park.

**GOAL I**

Provide amenities and site features that meet the needs of families and residents of different ages and cultures. Promote community interaction and active participation.

**GOAL J**

Create a redevelopment consistent with the positive physical qualities of the surrounding neighborhood, increases interconnections between South Lincoln and the neighborhood and include non-residential uses that benefit the La Alma / Lincoln Park residents.

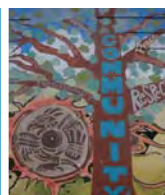
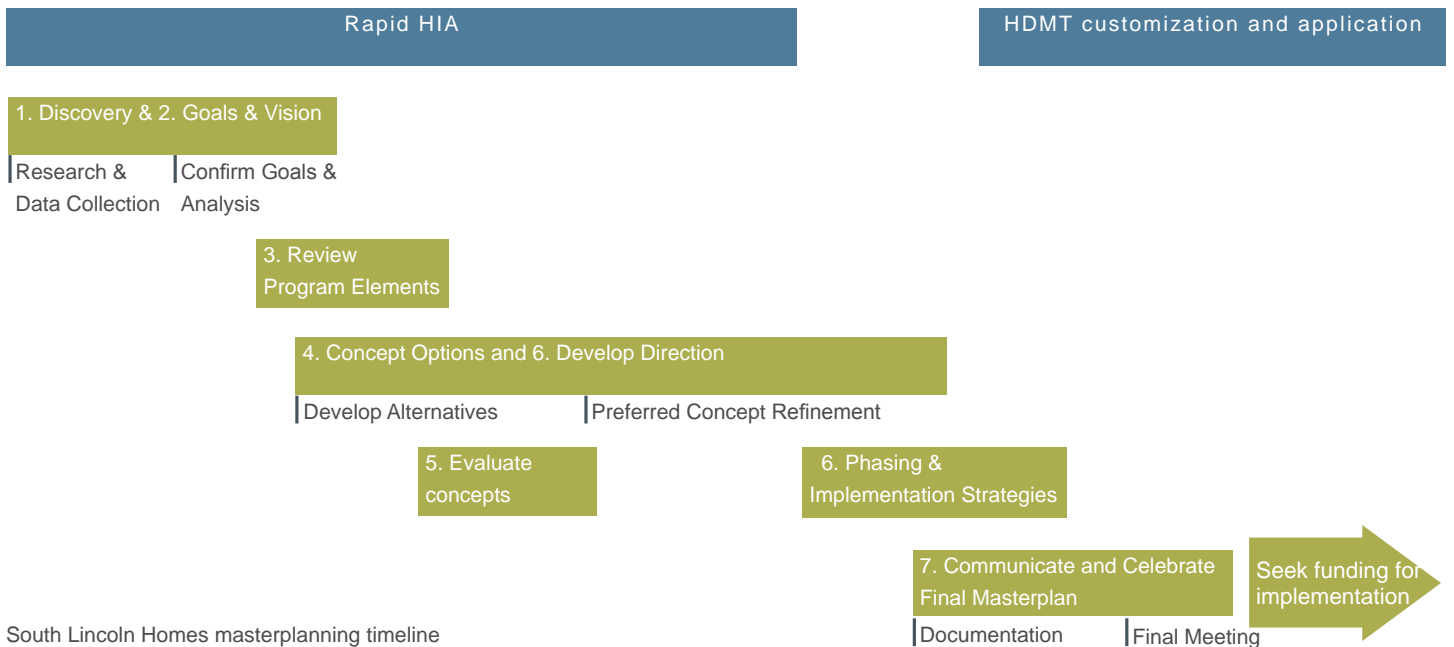
**GOAL K**

Expand the visibility and opportunities for art and creative ways to channel graffiti.

**GOAL L**

Incorporate and expand opportunities for education on the site, in the physical plan, in programming and in the community services that will be a part of redevelopment at South Lincoln. Promote hands-on experiences, community learning, and historical education.

April 2009				May				June				July				August				September					October			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4



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**SOUTH LINCOLN REDEVELOPMENT**

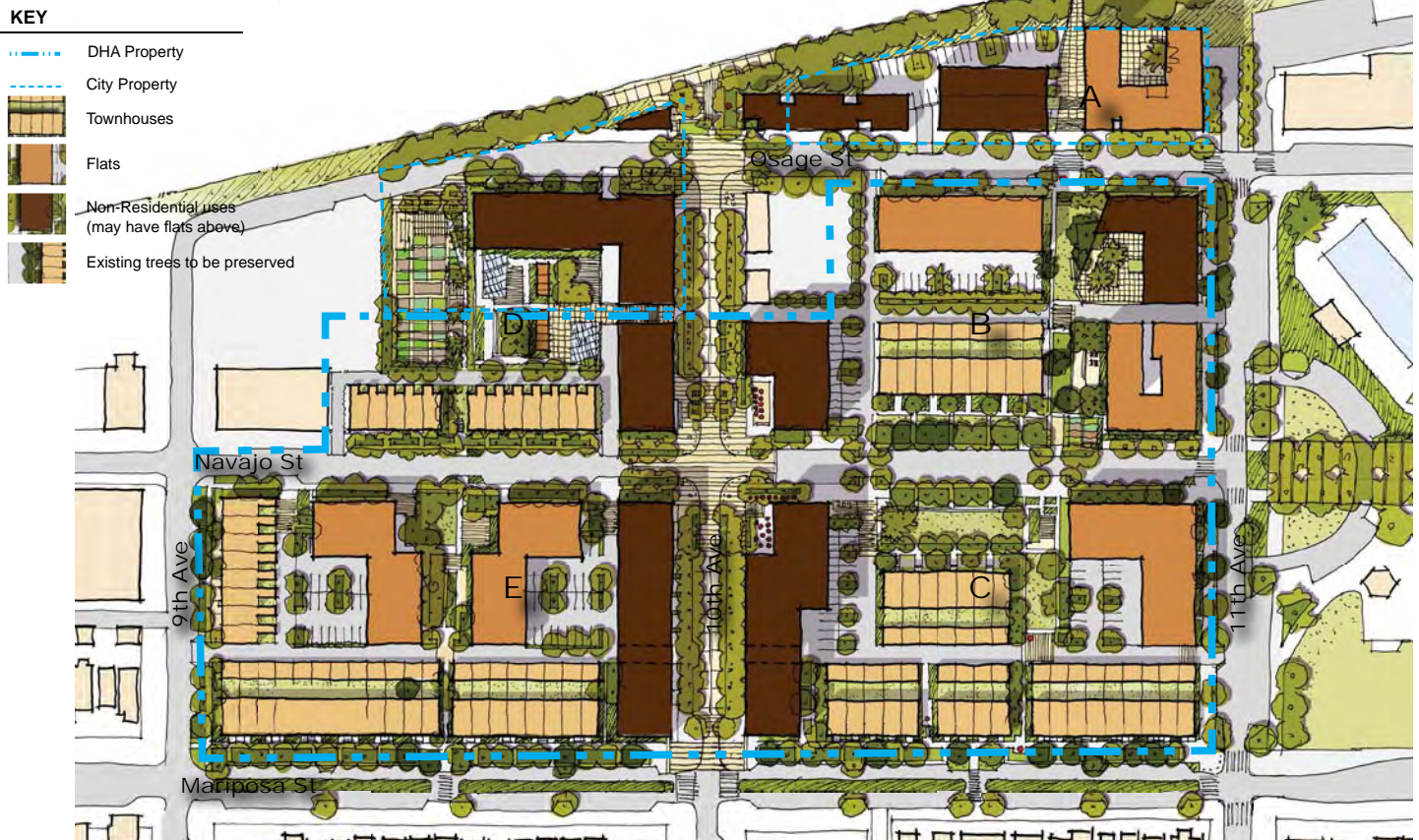
# REDEVELOPMENT MASTERPLAN FOR SOUTH LINCOLN HOMES

The preferred redevelopment masterplan represents a shared vision for the community, based on project goals, design team recommendations, and feedback from the community, residents, and stakeholders. The South Lincoln Homes redevelopment concept is focused around 10th Avenue, where the non-residential uses will make it an active street. It creates a promenade for a direct view to the light rail station, with art and sculpture to help with wayfinding. A public plaza provides flexible space for neighbors and visitors to gather, and could be closed to traffic for special occasions or festivals.

Family-friendly townhomes and lower buildings along Mariposa Street provide a transition to the historic neighborhood to the east. Open spaces have been designed to be publicly visible; homes face the open spaces promoting passive surveillance and security. The design also promotes safety by lining streets and sidewalks

with front doors and stoops allowing for added 'eyes on the street'. The emphasis is on 'green streets' with new tree plantings and comfortable sidewalk widths to encourage walking, making it easier to meet neighbors and provide better access to community amenities. Designated bike routes are delineated, providing access the Cherry Creek trail and the Platte River trails.

The redevelopment will include approximately 750 new residential units, in a mix of low-income public housing units, affordable tax credit units, and market rate units. These are distributed amongst approximately 75 family-style townhouses and 675 multi-family units. In addition, approximately 75,000 square feet of new commercial, community service, and retail will be provided in the ground floor of some buildings, especially along 10th Avenue.



The final redevelopment masterplan for South Lincoln Homes



# INTEGRATING PUBLIC HEALTH AND LAND USE PLANNING AT SOUTH LINCOLN

Nationwide, evidence shows that decisions about how we use land and build our environment have significant impacts on individual and population health, safety, and well-being, as well as impacts on community networks, economic growth, environmental sustainability and social equity (Roof K., Oleru N. (2008) Public Health: Seattle and King County's Push for the Built Environment. Journal of Environmental Health. Vol.71. No.1. p.1.).

Public health is not only about the physical health but should be thought of as multi-faceted, incorporating emotional well-being and social cohesion (Stokols, 1992). The Institute of Medicine stated that health includes not only health care and public health institutions, but also actors working in many other areas that impact health, such as housing, transportation, food production, urban and rural planning and environmental protection (Jackson, 2007).

By incorporating public health in the planning process, our goals are to:

- Identify potential impacts the redevelopment may have on health and wellbeing of the South Lincoln neighborhood;
- Suggest ways to improve overall health through evidence based health data and to assess potential human health risks; and
- Provide specific recommendations for the South Lincoln neighborhood to be incorporated in the redevelopment masterplan and throughout the redevelopment process

As part of the masterplanning team, we have incorporated a public health consultant, Karen Roof of EnviroHealth Consulting, to conduct a rapid HIA. This process helped the design team to identify potential health issues and tailor the design strategies to address these issues. By using and customizing the HDMT, we are able to build on the recommendations of the HIA and also to point to specific development targets for the redevelopment of South Lincoln Homes.

Our goal in using the Denver HDMT as a development metric at South Lincoln Homes is to inform and guide the design as it moves forward into implementation. Because of its comprehensive nature, this metric will help shape not only the physical form of the redevelopment, but also guide the community services, programming, and potential partnerships with service providers and institutions in the neighborhood.

# METHODOLOGY FOR THE SOUTH LINCOLN MASTERPLAN EVALUATION

## Application scope and aims

The application of the Denver HDMT to the South Lincoln Redevelopment Masterplan is intended to inform and guide the masterplan as it moves forward into land use approvals and implementation. The framework of the HDMT was used to structure the rapid HIA which was completed in July 2009. The aim of the Denver HDMT recommendations is to provide specific development targets to guide the evolution of the masterplan, as well as informing the Community and Supportive Services (CSS) planning associated with the HOPE VI program, should funding be secured by DHA. The scope of this work was completed over the period of two months, and was largely informed by previous site analysis and HIA evaluations. Finally, using the South Lincoln Redevelopment Masterplan as a case study for the Denver HDMT, we hope to add to the conversation around integrating land use and public health planning, and how these efforts could continue or be included in other planning projects by DHA or others in the Denver area. We see this as an opportunity to leverage the efforts of empirical research, policy, and practicalities of implementation to coordinate cross-sector investment for maximum benefit.

## Application process and methods

This application of the HDMT was limited to the South Lincoln Homes site, and was based upon the customized Denver HDMT made available to the peer review team in October 2009. Through the application, the assessment of existing conditions and health needs was based on indicator data for the South Lincoln site, typically as a part of the larger Auraria-Lincoln Park neighborhood (as compiled by the Piton Foundation, including census tracts 0831001800 and 0831001900). In addition, much of the indicator data was collected through the rapid HIA. The redevelopment masterplan was evaluated against existing conditions and HDMT development targets to assess whether it meets the HDMT objectives in each section (environmental stewardship, sustainable transportation, social cohesion, public infrastructure, adequate and healthy housing, and healthy economy). Through this process, recommendations to advance health were identified for the continued planning process.

## Data sources

For this evaluation, data was gathered from several sources, including census data, the Piton Foundation data, commuter surveys, police, public safety and other public records, site survey and some visual analysis, utility data, and GIS data. In addition, content was obtained from a South Lincoln Homes resident survey conducted by DHA. Data for various indicators is available at differing scales (site, block group, neighborhood, city); and therefore cannot always be used in direct comparison. Wherever possible, the source for a particular indicator has been noted.

## Caveats and limitations

Because the customization and application of the Denver HDMT was a rapid process, the process sought to identify areas for improvement related to health of the residents, as well as identify areas for continued coordination and study. It should also be noted that only data that were specifically available during the HDMT process were used. These data sets, where applicable, are noted in the following sections. Some of the indicators, development targets and benchmarks could be refined or evaluated as further data sets become available.



The Auraria - Lincoln Park neighborhood used for the Piton Foundation data. This area incorporates two census tracts, and is approximately 1240 acres. The South Lincoln Homes site, just over 1% of the neighborhood area at 15 acres, is central to this neighborhood.



# EVALUATION OF SOUTH LINCOLN REDEVELOPMENT MASTERPLAN

The redevelopment masterplan for South Lincoln Homes was evaluated based on the development targets established in the Denver HDMT. The assessment and recommendations are organized by the six elements of the tool:

- Environmental Stewardship
- Sustainable and Safe Transportation
- Social Cohesion
- Public Infrastructure
- Adequate and Healthy Housing
- Healthy Economy

The evaluation followed the structure of the HDMT, which sets out Objectives in each Section, Indicators to describe those Objectives, and Benchmarks or Development Targets for each Objective.

The following benchmarking, analysis, and recommendations focuses on the physical redevelopment Masterplan for South Lincoln Homes, and also provides recommendations for coordination with Community and Supportive Services for South Lincoln and for the broader neighborhood. Where noted, these recommendations have been incorporated into the Masterplan and design, which provides a framework for specific development proposals as each phase of redevelopment is implemented.

Additional recommendations shown in the “Recommendations” column denote additional actions that could be taken by either DHA or other agencies and/or partners that would support the objectives in the corresponding sections. Often these actions may have a scope broader than South Lincoln Homes, including other areas of the surrounding neighborhood.

## ES: Environmental Stewardship

The Environmental Stewardship element addresses how the built environment and urban development can reduce their impact on the natural world. The objectives seek to support the natural environment, as well as human well-being, by considering use of natural resources, habitats, food access, air quality, and noise.

The objectives and indicators in this element include:

ES.1 Decrease consumption of energy and natural resources

- Residential per capita natural gas use
- Total residential electricity use (kWh) per capita
- Gross per capita water use
- Annual per capita waste disposal
- Proportion of solid waste recycled and composted
- Proportion LEED, Green Communities, and Energy Star Rated certified buildings and green buildings
- Percent of stormwater infiltrated on site and/or impact on storm sewer

ES.2 Restore, preserve and protect healthy natural habitats

- Proportion of land retained as natural areas
- Areas of public open space per 1,000 population
- Percentage of tree canopy coverage
- Retain and add proportionate (per capita) enhancements to existing habitat for ecosystem services and GHG sequestration value
- Provide access to outdoor spaces for mental wellbeing

ES.3 Promote affordable and high-quality food access and sustainable agriculture

- Proportion of households within 1 mile of a farmer’s market
- Proportion of households with 1/2 mile access to a community- supported agriculture (CSA) drop-off site
- Percentage of tree canopy coverage

ES.4 Preserve clean air quality

- Proportion of households living near busy roadways
- Proportion households living within 300 meters of major industrial stationary sources of air pollution

ES.5 Maintain safe levels of community noise

- Average daytime and nighttime outdoor noise levels

In the application of the Denver HDMT, South Lincoln Homes was evaluated in relationship to its surrounding La Alma/ Lincoln Park neighborhood, as well as to the City of Denver. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

### Existing Conditions and Baselines

Resource use was studied for the South Lincoln Homes site only. The development, built in 1954, is comprised of 39 two story brick buildings. Because the buildings are over 50 years old, the mechanical systems and fixtures are not efficient compared to modern construction. In addition, they do have air conditioning, which results in a lower energy demand. For the 270 public housing units, the energy usage is approximately 23,615,802 BTU/yr/capita in natural gas and 1381 kwh/year/capita in electricity<sup>1</sup>. The potable water usage is approximately 26,583 gallons/year/capita, which also includes a share of the common area irrigation requirements<sup>2</sup>. As an urban site, there are no identified natural resource areas or significant habitat. Within 1/2 mile, multiple parks provide more than 10 acres of open space per 1000 population. The Denver Civic Center Outdoor Farmers Market is held weekly in the summer and is just over 1 mile from the site. No known CSA drop offs are in the vicinity, although there is a food bank at the Denver Inner City Parish. The site is not within proximity of busy roadways which may cause health issues based on traffic volume<sup>3</sup>; however, the immediate proximity to heavy rail to the west of the site may pose an air quality issue.

### Plan Evaluation based on Development Targets

#### ES Redevelopment Masterplan Strengths

- The masterplan proposes aggressive energy strategies, with a goal of 75% of energy demand covered by renewables.
- The site is near to a seasonal farmers market and proposes a community garden on site.
- The masterplan proposes a neighborhood stormwater strategy, using right-of-way for infiltration.

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1 Data source: DHA utility records  
2 Data source: DHA utility records  
3 Data source: Denver DOT. No road segments with over 10,000 trips/day within 50 meters of the site



<b>ES: ENVIRONMENTAL STEWARDSHIP</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>ES.1 Decrease consumption of energy and natural resources</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• ES.1.a Residential per capita natural gas use</li> <li>• ES.1.b Total residential electricity use (kWh) per capita</li> <li>• ES.1.c Gross per capita water use</li> <li>• ES.1.d Annual per capita waste disposal</li> <li>• ES.1.e Proportion of solid waste recycled and composted</li> <li>• ES.1.f Proportion LEED, Green Communities, and Energy Star Rated certified buildings and green buildings</li> <li>• ES.1.g Percent of stormwater infiltrated onsite and/or impact on storm sewer</li> </ul>	<p>The proposed design supports these goals: stormwater - SSI Credit 3.16 or LEED-ND Credit GIB 8, 10 Optional Criteria points in energy section of Green Communities Criteria (75% energy demand provided by renewables) and Energy Star whole house certification for townhouses, 5 Optional Credits in water section of Green Communities Criteria.</p>	<p>Divert at least 75% of construction waste, provide facilities for recycling and compost (consider community compost at the community garden).</p> <p>Pursue SSI, Green Communities, and LEED-ND credits through project development.</p>	<p>Implement during detailed design and construction.</p> <p>Include environmental metrics in agreements with private developers if some parcels are sold.</p>
<p>ES.2 Restore, preserve and protect healthy natural habitats</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• ES.2.a Proportion of City land retained as natural areas</li> <li>• ES.2.b Areas of public open space per 1,000 population</li> <li>• ES.2.c Percentage of tree canopy coverage</li> <li>• ES.2.d Retain and add proportionate (per capita) enhancements to existing habitat for ecosystem services and GHG sequestration value</li> <li>• ES.2.e Provide access to outdoor spaces for mental wellbeing</li> </ul>	<p>The site does not contain any designated natural resource areas. Within 1/2 mile, multiple parks provide more than 10 acres of open space per 1000 population. The project proposes continuous street trees, consistent with the Mile High Million program.</p>	<p>To retain and support habitat for ecosystem services and GHG sequestration, confirm that the proposed planting meets SSI Credit 3.6 (biomass density). Develop design of outdoor spaces to enhance mental well being per SSI Credit 4.7.</p>	<p>Both plant biomass and outdoor space qualities to enhance well-being should be addressed in detailed design and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>ES: ENVIRONMENTAL STEWARDSHIP</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>ES.3 Promote affordable and high-quality food access and sustainable agriculture</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>ES.3.a Proportion of households within 1 mile of a farmer's market</li> <li>ES.3.b Proportion of households with ½ mile access to a community-supported agriculture (CSA) drop-off site</li> </ul>	<p>The Denver Civic Center Outdoor Farmers Market is held weekly in the summer and is just over 1 mile from the site. No known CSA drop offs are in the vicinity, although there is a food bank at the Denver Inner City Parish. An on-site community garden is proposed as part of redevelopment.</p>	<p>Implement the community garden as proposed, including support space such as storage. Work with DUG where possible. Consider working with organizations to promote a CSA drop-off on site.</p>	<p>Detailed design and implementation for community garden. CSS planning for CSA drop-off.</p>
<p>ES.4 Preserve clean air quality</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>ES.4.a Proportion of households living near busy roadways</li> <li>ES.4.b Proportion households living within 300 meters of major industrial stationary sources of air pollution</li> </ul>	<p>The site is not within proximity of busy roadways which may cause health issues based on traffic volume; however, the immediate proximity to heavy rail may pose an air quality issue. Assessments should be done.</p>	<p>Confirm that the site is not in proximity of stationary sources of air pollution, or within 150 meters of truck routes. Mitigate if necessary.</p>	<p>Conduct assessment during design development.</p>
<p>ES.5 Maintain safe levels of community noise</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>ES.5.a Average daytime and nighttime outdoor noise levels</li> </ul>	<p>No known noise assessment has been done.</p>	<p>Because of the proximity of the site to heavy rail, a noise assessment should be conducted. Perform an exterior noise assessment to determine if levels are above 65 dB Ldn, per HUD regulations and 24 CFR 51B.</p>	<p>Perform assessment to incorporate any necessary mitigation strategies in Phase 1 construction of the senior building.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

**ST: Sustainable and Safe Transportation**

The Sustainable and Safe Transportation element recognizes transportation as a major influence on the health and well being of residents. It examines the amount of vehicle miles traveled (VMT), which is a significant contributor to greenhouse gases and therefore impacts air quality. The objectives also promote affordable, accessible transportation options and improving the quality and safety of pedestrian and bicycle environments.

The objectives and indicators in this element include:

**ST.1 Decrease private motor vehicles trips and miles traveled**

- VMT per capita compared to citywide and other station area populations
- Intersection density per square mile, compare existing conditions to proposed

**ST.2 Provide affordable and accessible public transportation options**

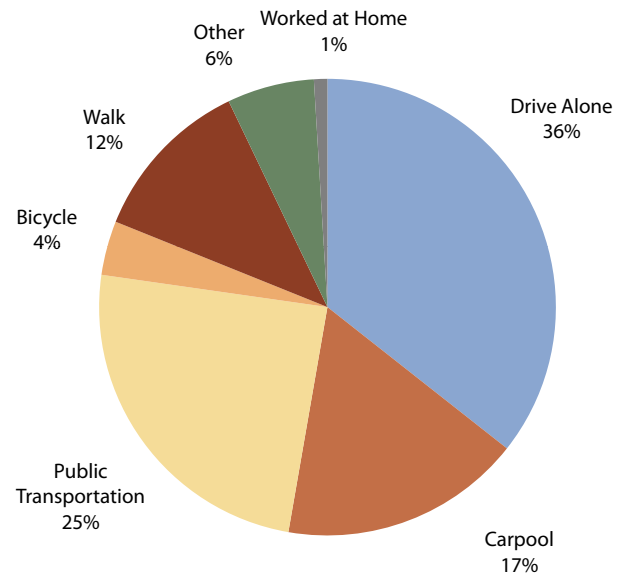
- Proportion of commute trips made by public transit, biking, and/or walking
- Proportion of average income spent on transportation expenses
- Proximity of project site to transit options

**ST.3 Create safe, quality environments for walking and biking**

- Bicycle infrastructure, including ratio of miles of bike lanes and paths to miles of road
- Pedestrian infrastructure, including ratio of miles of sidewalk to miles of road
- Number of bicycle and pedestrian collisions and fatalities
- Area score on the Pedestrian Environmental Quality Index (PEQI)
- Density and mix of uses

In the application of the Denver HDMT, the South Lincoln site was evaluated in relationship to its surrounding La Alma/ Lincoln Park neighborhood, as well as to the City of Denver. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

Resident Mode Split



Existing Auraria-Lincoln Park neighborhood character is "low traffic"

**Existing Conditions and Baselines**

The existing character of the site and surrounding neighborhood is "low traffic" in nature. For example, according to US Census data, rates of car ownership for the South Lincoln site and the surrounding neighborhood are relatively low:

- Over 40% of households in the plan area own no vehicles ("no-car households"), and another 33% of households own just 1 vehicle ("low-car households").
- Existing average auto ownership for the plan area is less than 1 car per household (0.98 cars/unit).
- As shown in the adjacent figure, nearly 2/3rds of households in the plan area commute to work by non-auto modes (transit, carpool, bicycle, on-foot, etc.).

Because vehicle ownership and mode share for residents are relatively low, and because there are few through streets (especially in the east-west travel direction) that could serve external "cut through" vehicle trips, traffic volumes on most streets serving the South Lincoln Homes site and surrounding neighborhood are quite low.

The baseline VMT for South Lincoln block group is 24.4 per day per person over 18 versus citywide of 33.6 per day per

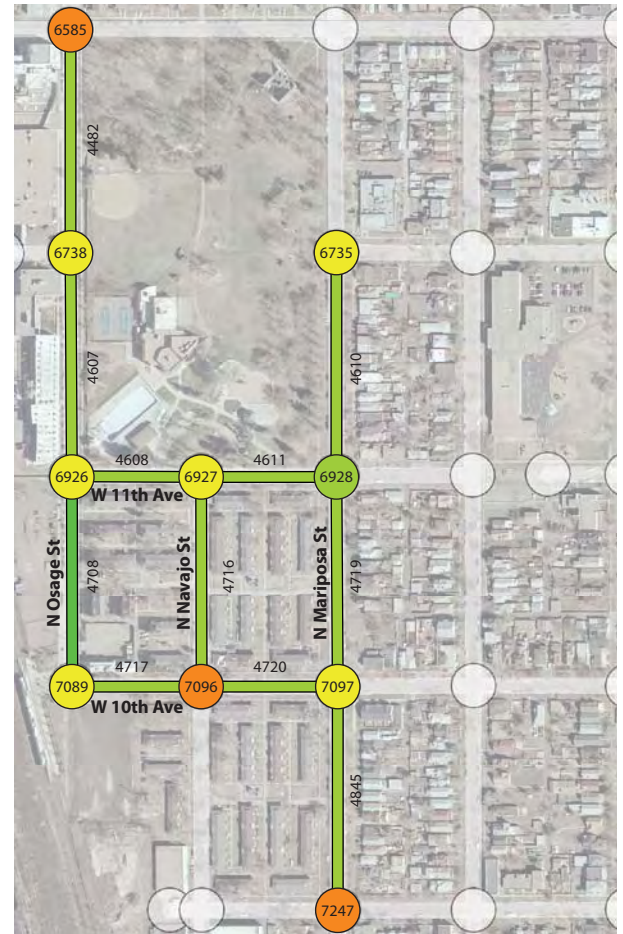
person over 18<sup>1</sup>. Within the project area, the intersection density is equivalent to 293 intersections per square mile, which represents a fairly interconnected, urban condition.

However, it should be noted that several barriers such as the rail lines to the west of the site and Cherry Creek to the east of the site do create some accessibility issues. Most streets in the site area are excessively wide which can contribute to speeding, thereby discouraging walking and biking and creating a higher likelihood that a pedestrian or bicyclist will be injured or killed if collisions do occur. In addition to accident data that was made available, the team also conducted a Pedestrian Environmental Quality Index (user based audit drawing on published research from numerous cities to assess how the physical environment impacts whether people walk in a neighborhood) for most intersections and street segments in the project area. The PEQI audit shows that most intersections do not meet basic pedestrian safety conditions.

1 Data source: Nelson Nygaard

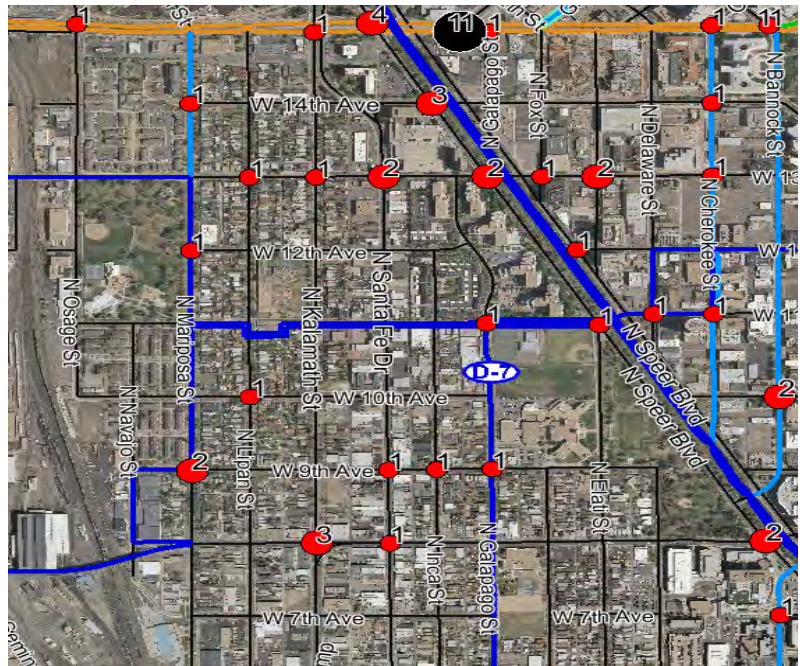
**PEQI Intersection and Street Scores**

- 0 - 20 Environment not suitable for pedestrians
- 21 - 40 Poor pedestrian conditions
- 41 - 60 Basic pedestrian conditions
- 61 - 80 Reasonable pedestrian conditions
- 81 - 100 Ideal pedestrian conditions

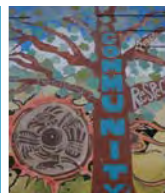


PEQI audit results at South Lincoln Homes

- Fatal Bike Accidents
- Bike Accidents
  - 1 Non-Fatal
  - 2-4 Non-Fatal
  - 5-8 Non-Fatal
  - 9-12 Non-Fatal
- Denver County (Boundary)
- Denver Bike Routes
  - Grid Bike Routes
  - Offstreet Grid Bike Routes
  - Neighborhood Bike Routes
  - Off Street Bike Routes
  - Denver Bike Lanes
  - Proposed Regional Bike Routes
- Grid Bike Routes
- Neighborhood Bike Routes
- Off Street Bike Routes



Historical bicycle accident data in La Alma/ Lincoln Park neighborhood



**Plan Evaluation based on Development Targets**  
**ST Redevelopment Masterplan Strengths**

- The site is served by excellent transit options, a bicycle network, and a variety of uses and amenities within walking distance.
- Transit affordability is not an issue for the broader neighborhood of La Alma/ Lincoln Park<sup>1</sup>; however, in a resident survey, 58% indicated that transportation cost for work commute is an issue.
- There is potential to include a variety of transportation

1 Data source: Center for Neighborhood Technology H+T index



H+T Index | Gas Cost Impacts | Greenhouse Gas Impacts | Custom Comparison

Region: Denver--Boulder--Greeley, CO CHANGE REGION

Household Income: \$51,088 | Household Size: 2.53 | Workers per Household: 1.34

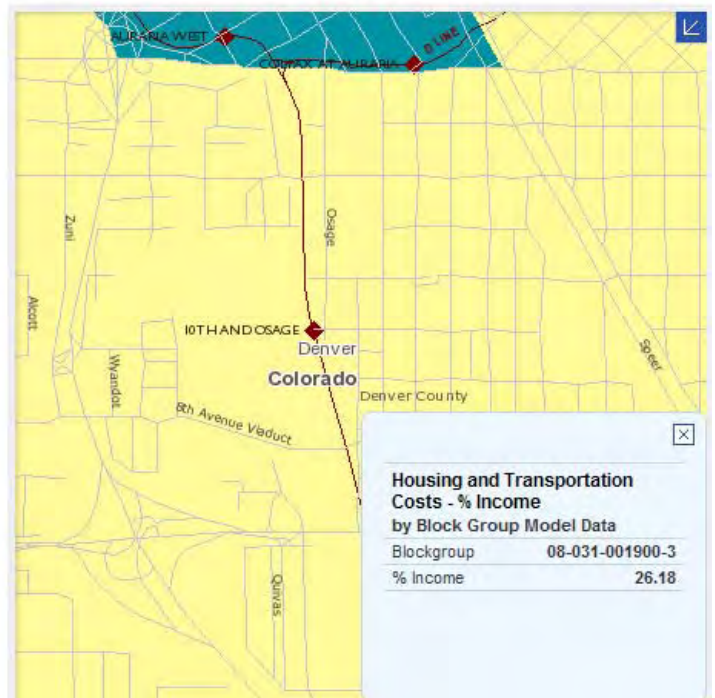
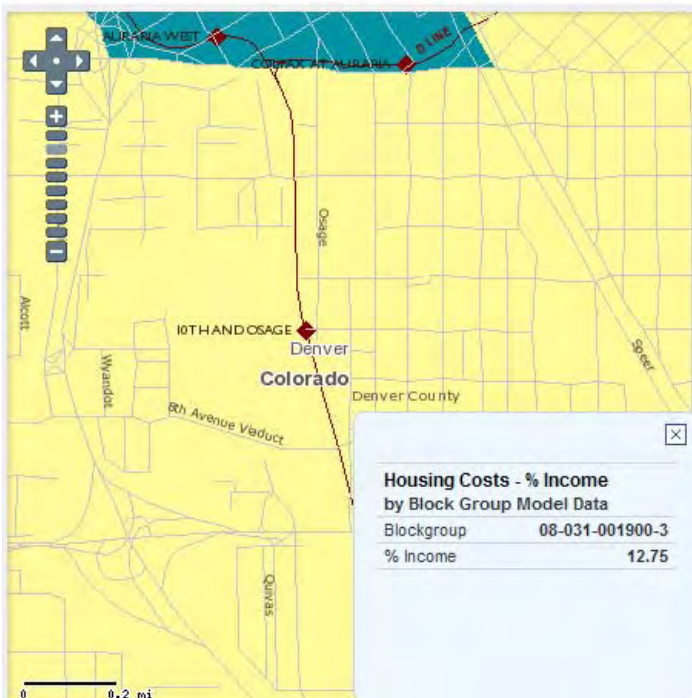
LEGENDS: [Icons]

**Housing Costs - % Income** CHANGE

Total Housing Costs - % Income			
Statistics	Region		Viewable Area on Map Below
Block Groups	1,925 (1,870 with data)		14 (14 with data)
Minimum	5.9 %		
Average	28.1 %		18.6 %
Maximum	110.4 %		64.8 %
Households	993,634		6,502

**Housing and Transportation Costs - % Income** CHANGE

Total Housing and Transportation Costs - % Income			
Statistics	Region		Viewable Area on Map Below
Block Groups	1,925 (1,870 with data)		14 (14 with data)
Minimum	20.2 %		20.2 %
Average	47.4 %		32.7 %
Maximum	132.9 %		78.7 %
Households	993,634		6,502



Housing + Transportation Affordability Index for the South Lincoln Block Group indicates that the average household does not spend more than 45% of their income on housing and transportation costs (Image credit and source: Center for Neighborhood Tehcnology).

demand management strategies in the redevelopment.

**ST Redevelopment Masterplan Areas for Improvement**

- Most intersections in the project area do not meet basic pedestrian safety conditions per the PEQI survey that was conducted (see figure to the right). Include traffic calming elements and signage to improve safety in detailed design and implementation.
- Historically, a high a number of bicycle accidents occur along 13th Avenue, 9th Avenue and Mariposa Street. Work with the City to improve safety through traffic calming.

<b>ST: SUSTAINABLE AND SAFE TRANSPORTATION</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>ST.1 Decrease private motor vehicles trips and miles traveled</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• ST.1.a VMT per capita compared to citywide and other station area populations</li> <li>• ST.1.b Intersection density per square mile, compare existing conditions to proposed</li> </ul>	<p>Baseline VMT for South Lincoln block group is 24.4 per day per person over 18 versus citywide 33.6 per day per person over 18 (source: Nelson\Nygaard. <i>Please note the methodology used is different than that for the Denver GHG Inventory, and VMT cannot be directly compared</i>).</p>	<p>Implement Transportation Demand Management (TDM) (LEED-ND NPD Credit 8), with a benchmark of 15% reduction in per capita VMT (19.5 VMT/day/per capita or 24.6 VMT/day/per driver).</p>	<p>CSS planning, detailed design and implementation.</p> <p>Track commute habits and VMT after redevelopment is completed.</p>
<p>ST.2 Provide affordable and accessible public transportation options</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• ST.2.a Proportion of commute trips made by public transit, biking, and/or walking</li> <li>• ST.2.b Proportion of average income spent on transportation expenses</li> <li>• ST.2.c Proximity of project site to transit options</li> </ul>	<p>The Auraria-Lincoln Park neighborhood spends less than 45% AMI on transportation plus housing expenses (per CNT, meeting the benchmark). Project is within 1/2 mile of 4 bus lines and 5 LRT lines at 10th &amp; Osage station (combined 414 weekday boardings and 283 weekend boardings available), meeting benchmarks of LEED-ND SLL Prerequisite 1 Opt. 3, Green Communities Criteria Site, Location and Neighborhood Fabric Credit 2.7, and earning 7 points in LEED-ND SLL Credit 3.</p>	<p>For transit stops, install specific shelters and racks, identify future stops, and provide info and schedules (LEED-ND NPD Credit 7).</p> <p>Coordinate with RTD and the City on proposing additional bus stops or modified routing to link the LTR station at 10th &amp; Osage with bus lines.</p> <p>Promote a goal of 25% of commute trips made by walking, bicycling, or transit.</p>	<p>Include transit stops and shelters, and coordinate with RTD and the City in detailed design and implementation.</p> <p>Track commute habits through implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>ST: SUSTAINABLE AND SAFE TRANSPORTATION</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>ST.3 Create safe, quality environments for walking and biking</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• ST.3.a Bicycle infrastructure, including ratio of miles of bike lanes and paths to miles of road</li> <li>• ST.3.b Pedestrian infrastructure, including ratio of miles of sidewalk to miles of road</li> <li>• ST.3.c Number of bicycle and pedestrian collisions and fatalities</li> <li>• ST.3.d Area score on the Pedestrian Environmental Quality Index (PEQI)</li> <li>• ST.3.e Density and mix of uses</li> </ul>	<p>The site is near to an extensive bike network, and proposes connected bike lanes. The proposed plan incorporates walkable streets per LEED-ND standards, including frontage on public streets and facades close to the sidewalk.</p> <p>The proposed density of approximately 65 du/acre and mix of uses within 1/4 mile support and motivate walking for daily needs, meeting LEED-ND NPD Credit 3: Mixed-Use Neighborhood Centers and NPD Prerequisite 2: Compact Development.</p>	<p>Incorporate bike racks/ storage per LEED-ND SLL Credit Include traffic calming elements and signage to improve safety of all intersections in the site.</p> <p>A high incidence of bicycle accidents has been recorded along Mariposa. Work with the City to improve safety through traffic calming.</p> <p>Consider ongoing tracking of pedestrian and bicycle counts, pedestrian and bicycle accidents, and PEQI score to monitor progress.</p>	<p>Include bike racks/ storage and networks in detailed design and development. Begin discussions with the City on traffic calming measures through implementation.</p> <p>Tracking of pedestrian and bicycle safety indicators should occur after redevelopment is completed.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

## SC: Social Cohesion

The Social Cohesion element addresses both personal safety and security as well as social cohesion and cultural elements. It also promotes participation and an equitable planning process.

The objectives and indicators for this element include:

### SC.1 Promote socially cohesive neighborhoods

- Residential mobility
- Proportion of population within 1/2 mile from community center

### SC.2 Promote personal safety

- Number of violent crimes
- Number of property crimes

### SC.3 Increase participation in social decision-making process

- Voting rates/community space

### SC.4 Assure equitable and democratic participation throughout the planning process

- Community comment and outreach
- Language and cultural translation services

### SC.5 Promote mental health for all residents

### SC.6 Promote community and supportive services

In the application of the Denver HDMT, the South Lincoln site was evaluated in relationship to its surrounding La Alma/ Lincoln Park neighborhood. The components included in the proposed redevelopment plan were also considered. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

## Existing Conditions and Baselines

Strong social networks are usually developed over time, and when neighborhoods experience high levels of residential mobility, residents are less likely to develop social cohesion. In the Auraria-Lincoln Park neighborhood, 39.95% of the households have been living at their current

address less than 1 year, as compared to 28.68% citywide<sup>1</sup>. In a resident survey conducted by DHA, 53% strongly or somewhat agreed that the neighborhood is close knit, and 63% strongly or somewhat agreed that people in the neighborhood generally get along with each other. In terms of safety and security, both the number of violent crimes and number of property crimes are significantly higher in the Auraria-Lincoln Park neighborhood than citywide. The total crime rate is 196.7 per thousand in Auraria-Lincoln Park compared to 68.8 per thousand citywide, and the violent crime rate is 15.2 per thousand compared to 5.7 per thousand citywide<sup>2</sup>. It should be noted that in the DHA resident survey, 40% strongly agreed that the police have a good response time in the neighborhood. As a part of the outreach for the masterplanning effort, a total of 123 small to large community meetings and interviews were coordinated and held between February and September 24th, 2009.

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1 Data source: Piton Foundation, 2000

2 Data source: Piton Foundation, 2000



## Plan Evaluation using Development Targets

### SC Redevelopment Masterplan Strengths

- Community space will be provided in redevelopment; seek to coordinate use with various agencies and services.
- A variety of open spaces are provided for interaction, including the proposed 10th Avenue Plaza, seeking to link neighborhood residents, visitors and artists from the Santa Fe Arts district, and light rail passengers
- An extensive outreach effort during masterplanning sought participation

### SC Redevelopment Masterplan Areas for Improvement

- As the masterplan evolves and Community and Supportive Services planning begins in conjunction with the HOPE VI program, continue to work with partners, service providers, and coordinate amenities to serve the needs of the residents.
- To address the crime rate and perceived security of the residents, consider working with the Police Department or other service providers to support community policing, neighborhood watch groups, and community organizing.
- Work with public agencies or partners to continue tracking demographic and indicator data during implementation and after the project is completed.

<b>SC: SOCIAL COHESION</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>SC.1 Promote socially cohesive neighborhoods</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• SC.1.a Residential mobility</li> <li>• SC.1.b Proportion of population within ½ mile from community center</li> </ul>	<p>Residential mobility (living at address for less than 1 year) in Auraria-Lincoln Park was 39.95% in 2000, compared to 28.68% in Denver (Piton Foundation). It is within walking distance of the La Alma rec center, the senior center, and the proposed redevelopment may include community space.</p>	<p>In design of open space, meet SSI Credit 4.8 to promote social interaction, and promote educational, afterschool, and other related opportunities for youth. Consider partnering with other agencies for these opportunities.</p>	<p>Detailed design, CSS planning, and implementation.</p>
<p>SC.2 Promote personal safety</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• SC.2.a Number of violent crimes</li> <li>• SC.2.b Number of property crimes</li> </ul>	<p>The design promotes natural surveillance and eyes on the street through CPTED principles.</p>	<p>Track the number of violent and property crimes to monitor progress. Consider working with the Police Department or other service providers to support community policing, neighborhood watch groups, and community organizing.</p>	<p>Maintain CPTED principles through design and implementation.</p>
<p>SC.3 Increase participation in social decision-making process</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• SC.3.a Voting rates/ community space</li> </ul>	<p>The design includes community space which could be used for election voting station, community meetings, afterschool programming, tutoring/ mentoring, senior center or other social programs.</p>	<p>Work with service providers and agencies to coordinate use of public/ community spaces in the redevelopment.</p>	<p>CSS planning and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

SC: SOCIAL COHESION			
PRIMARY OBJECTIVES AND INDICATORS	BENCHMARKS AND DEVELOPMENT TARGETS*	RECOMMENDATIONS	TIMING FOR INCORPORATION IN PLANNING PROCESS
<p>SC.4 Assure equitable and democratic participation throughout the planning process</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• SC.4.a Community comment and outreach</li> <li>• SC.4.b Language and cultural translation services</li> </ul>	<p>In total 123 small to large community meetings and interviews were coordinated and held between February and September 24th, 2009. Translation was available for Spanish, Vietnamese, and Somali speakers. Information about the project was posted on the DHA website, as well as in the project office, available to the public.</p>	<p>Continue to meet targets as the design and implementation process evolves.</p>	
<p>SC.5 Promote mental health for all residents</p>		<p><b>Further study needed to coordinate indicators and benchmarks with CSS requirements.</b></p> <p>Consider addressing counseling, substance abuse, and providing space at rents affordable to nonprofit providers for recommended programming and coordinated with health clinics, providers, or related facilities</p>	
<p>SC.6 Promote community and supportive services</p>		<p><b>Further study needed to coordinate indicators and benchmarks with CSS requirements.</b></p> <p>Consider addressing establishing eligibility of all residents, complete case management intakes and Individual Management Plans, and providing resources and space for tracking and ongoing implementation support of IDPs</p>	

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

## PI: Public Infrastructure

The Public Infrastructure element addresses amenities and services available to residents and employees in a neighborhood. The areas of public infrastructure include child care, educational facilities, libraries, museums and the arts, public health facilities, parks and open space, accessibility of those spaces, daily goods and services, and access to food.

The objectives and indicators for this element include:

PI.1 Assure affordable and high quality child care for all neighborhoods

- Maximum capacity of licensed child care facilities and proportion of 0-14 year olds
- Number of Early Childhood Learning centers within 1/2 mile of site
- Number of highly rated preschool programs within 1/2 mile of site

PI.2 Assure accessible and high quality educational facilities

- Proportion of households within 1/2 mile of a public elementary school
- Proportion of children within 30 minute public transit access to public middle and/ or high school

PI.3 Assure spaces for libraries, performing arts, theatre, museums, concerts, and festivals for personal and educational fulfillment

- City-serving art/cultural facilities within 1/2 mile of a regional transit stop
- Designated federal, state, and city funding for the arts
- Proportion of population within 1/2 mile and 1 mile of a public library
- Public art works and population density per square mile
- Local, culturally relevant art in building design/structure
- Amount of public and/or community gathering locations (libraries, churches, clubs) with established extended hours agreements and programming, including multi-use programming shared by city, schools, community and other nonprofit providers

PI.4 Assure affordable and high quality public health facilities

- Public health facilities within 1/2 mile of a regional

transit stop

PI.5 Increase park, open space and recreation facilities

- Proportion of population within 1/4 mile of a neighborhood or regional park
- Proportion of population within 1/4 mile of a recreation facility

PI.6 Increase accessibility, beauty, safety, and cleanliness of public spaces

- Distribution of public plazas in commercial business districts
- Street tree population
- Proportion of sidewalk lengths with pedestrian scale lighting
- Public plaza or parks exposed to shadow from buildings
- Location of fire stations

PI.7 Assure access to daily goods and service needs, including financial services and healthy foods

- Neighborhood completeness indicator for key public services
- Neighborhood completeness indicator for key retail services
- Proportion of population within 1/2 mile from bank or credit union

PI.8 Promote affordable and high-quality food access and sustainable agriculture

- Proportion of population within 1/2 mile of a full service supermarket
- Density of fast food restaurants
- Proportion of households within 1 mile of a farmer's market
- Proportion of households with 1/2 mile access to a community-supported agriculture (CSA) drop-off site
- Proportion of households with 1/4 mile access to a community garden
- Density of take-out alcohol outlets

In the application of the Denver HDMT, the South Lincoln site was evaluated in relationship to its surrounding La Alma/ Lincoln Park neighborhood. The components

DenverHDMT



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EnviroHealth Consulting



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May 2010 Denver HDMT Final Report

**SOUTH LINCOLN REDEVELOPMENT**

included in the proposed redevelopment plan were also considered. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

### Existing Conditions and Baselines

The South Lincoln site and La Alma/ Lincoln Park neighborhood has access to many amenities and services. Amenities within 1/4 mile of the site include: Greenlee Elementary School (K-8), Colorado Charter High School, Lincoln Park and the La Alma Rec Center, Sunken Gardens Park and the Cherry Creek Trail, and two convenience stores. Amenities that are within 1/2 mile of the site include: four early childhood education centers (ECE), and three highly rated<sup>1</sup> preschool programs, West High School, many art and cultural spaces including the Santa Fe Arts District and a few theaters, Denver Health, a Boys and Girls Club, a supermarket (King Soopers), and two credit unions. Greenlee Elementary School and West High School are not proficient in many educational categories<sup>2</sup>. It should also be noted that within 1/2 mile of the site there are 6 fast food restaurants, and 11 liquor stores and bars. Although more analysis is required, this prevalence may be higher than elsewhere in the city.

### Evaluation of Plan based on Development Targets

#### PI Redevelopment Masterplan Strengths

- The site location in the La Alma/ Lincoln Park neighborhood has excellent access to transit, key public services and retail services. It is also well located in relation to art and cultural facilities, parks, and open space.
- The masterplan includes a variety of public spaces, open space, and enhances connectivity to neighborhood amenities.

#### PI Redevelopment Masterplan Areas for Improvement

- As the masterplan moves forward into entitlement

1 Data source: Denver Preschool Program, [www.dpp.org](http://www.dpp.org), score of 3 or above on a scale of 0-4

2 Data source: Piton Foundation

and implementation, partnerships with local service providers, agencies, and non-profits will be very important to support ongoing needs. The recommendations provide guidance to set these priorities during CSS planning.

- Although the DHA will include some community services in the redevelopment of South Lincoln Homes, it will also be important to work with City agencies such as the school district and library system to actively support coordination of those services in the overall La Alma/ Lincoln Park neighborhood. As an active participant shaping the future of the neighborhood, it is important for DHA to continue their involvement and partnerships with the City.

<b>PI: PUBLIC INFRASTRUCTURE</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>PI.1 Assure affordable and high quality child care for all neighborhoods</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• PI.1.a Maximum capacity of licensed child care facilities and proportion of 0-14 year olds</li> <li>• PI.1.b Number of Early Childhood Learning centers within ½ mile of site</li> <li>• PI.1.c Number of highly rated preschool programs within ½ mile of site</li> </ul>	<p>Four (4) ECE learning centers are located within 1/2 mile of the site. Three (3) highly rated (3 or above out of 0-4 scale from www.dpp.org) preschool programs are located within 1/2 mile of site.</p>	<p>Pursue a relationship with a non-profit childcare provider or consider including a childcare provider in commercial space on site.</p>	<p>CSS planning and implementation</p>
<p>PI.2 Assure accessible and high quality educational facilities</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• PI.2.a Proportion of households within 1/2 mile of a public elementary school</li> <li>• PI.2.b Proportion of children within 30 minute public transit access to public middle and/or high school</li> </ul>	<p>The project site is located within 1/4 mile of Greenlee Elementary School (K-8), and within 1/2 mile of West High School and Colorado Charter High School. The schools are also accessible via public transit. Greenlee and West are not proficient in many educational categories per Piton Foundation data.</p>		<p>CSS planning and implementation</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>PI: PUBLIC INFRASTRUCTURE</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>PI.3 Assure spaces for libraries, performing arts, theatre, museums, concerts, and festivals for personal and educational fulfillment</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.3.a City-serving art/cultural facilities within 1/2 mile of a regional transit stop</li> <li>PI.3.b Designated federal, state, and city funding for the arts</li> <li>PI.3.c Proportion of population within 1/2 mile and 1 mile of a public library</li> <li>PI.3.d Public art works and population density per square mile</li> <li>PI.3.e Local, culturally relevant art in building design/structure</li> <li>PI.3.f Amount of public and/or community gathering locations (libraries, churches, clubs) with established extended hours agreements and programming, including multi-use programming shared by city, schools, community and other nonprofit providers</li> </ul>	<p>The project site is located within 1/2 mile of many art and cultural spaces. In addition, locations for public art have been identified in the masterplan. Representatives from the Santa Fe arts district were included in stakeholder interviews.</p>	<p>Continue to include the art community and local artists work in the detailed design and implementation.</p> <p>Continue to support the Byers Branch Library and potential for a new Resource Library at the site.</p> <p>Work with local service providers to established extended hours agreements and programming for public and/or community gathering locations.</p>	<p>CSS planning and implementation</p>
<p>PI.4 Assure affordable and high quality public health facilities</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.4.a Public health facilities within 1/2 mile of a regional transit stop</li> </ul>	<p>Denver Health is located just over 1/2 mile from the site.</p>	<p>Work with Denver Health to extend the FREE shuttle past 9am-3pm everyday for nearby South Lincoln residents. Post shuttle information at community kiosk, at the on site office location and printed on community materials.</p>	<p>Immediate items include notification of shuttle service.</p> <p>CSS planning and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>PI: PUBLIC INFRASTRUCTURE</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>PI.5 Increase park, open space and recreation facilities</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.5.a Proportion of population within 1/4 mile of a neighborhood or regional park</li> <li>PI.5.b Proportion of population within 1/4 mile of a recreation facility</li> </ul>	<p>The site has proximity to Lincoln Park, Sunken Garden Park, and the Cherry Creek Trail. Although organizational changes are possible, the residents have enjoyed access to the La Alma Recreation Center (in Lincoln Park) as well as the Boys and Girls Club (8th and Inca) within 1/2 mile. The masterplan also proposes new open space within the site.</p>		
<p>PI.6 Increase accessibility, beauty, safety, and cleanliness of public spaces</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.6.a Distribution of public plazas in commercial business districts</li> <li>PI.6.b Street tree population</li> <li>PI.6.c Proportion of sidewalk lengths with pedestrian scale lighting</li> <li>PI.6.d Public plaza or parks exposed to shadow from buildings</li> <li>PI.6.e Location of fire stations</li> </ul>	<p>The masterplan proposes a new public plaza at 10th Avenue and Navajo Street, along with streetscape amenities such as street trees and pedestrian lighting.</p>	<p>Steps should be taken to ensure maintenance of these spaces.</p>	<p>Continue to include during detailed design and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>PI: PUBLIC INFRASTRUCTURE</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>PI.7 Assure access to daily goods and service needs, including financial services and healthy foods</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.7.a Neighborhood completeness indicator for key public services</li> <li>PI.7.b Neighborhood completeness indicator for key retail services</li> <li>PI.7.c Proportion of population within 1/2 mile from bank or credit union</li> </ul>	<p>The site location meets the benchmark for proximity to key public services, key retail services, and a bank or credit union using the “neighborhood completeness factors” (per HDMT). In addition, the masterplan proposes a new community garden on site.</p>	<p>Work with Denver Urban Gardens (DUG) on implementation of the community garden.</p>	<p>CSS planning and implementation</p>
<p>PI.8 Promote affordable and high-quality food access and sustainable agriculture</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>PI.8.a Proportion of population within 1/2 mile of a full service supermarket</li> <li>PI.8.b Density of fast food restaurants</li> <li>PI.8.c Proportion of households within 1 mile of a farmer’s market</li> <li>PI.8.d Proportion of households with ½ mile access to a community-supported agriculture (CSA) drop-off site</li> <li>PI.8.e Proportion of households with ¼ mile access to a community garden</li> <li>PI.8.f Density of take-out alcohol outlets</li> </ul>	<p>The project site is within 1/2 mile of a supermarket. The Denver Civic Center Outdoor Farmers Market is held weekly in the summer and is just over 1 mile from the site.</p> <p>Additional information is needed to determine indicators including density of fast food restaurants and density of take-out alcohol outlets. <i>NOTE: See appendix for food availability and food pricing surveys completed for the rapid HIA.</i></p>	<p>Consider working with DUG or another organization to bring a CSA drop off on or near the site.</p> <p>Analyze the density of fast food restaurants and take-out alcohol outlets near to the site as compared with the City.</p> <p>Continue to work with the Food Trust to advocate for an additional grocery or market to provide a healthy food supply near to the site.</p>	<p>Coordinate on CSA drop off during CSS planning and implementation.</p> <p>Ongoing coordination with the Food Trust.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

## Adequate and Healthy Housing

The Adequate and Healthy Housing element addresses the quality and variety of housing available, as well as the integration of new residents with an existing population. It promotes diversity of affordability, tenure, and unit size as supporting a healthy community.

The objectives and indicators in this element include:

HH.1 Preserve and construct housing in proportion to demand with regards to size, affordability, and tenure

- Proportion of housing production to housing need by income category
- Proportion of households paying greater than 50% of their income on their homes/rent
- Proportion of renter and owner occupied housing

HH.2 Protect residents from involuntary displacement

- Number of housing units and types prior and after development

HH.3 Decrease concentrated poverty

- Multi-group diversity index
- Median per-capita income
- Median household income
- Proportion living below the poverty level

HH.4 Assure access to healthy, quality housing

- Number of per capita code violations for housing safety and habitability in the past year

In the application of the Denver HDMT, the South Lincoln site was evaluated in relationship to its surrounding La Alma/ Lincoln Park neighborhood, as well as to the City of Denver. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

### Existing Conditions and Baselines

There are approximately 548 residents living in the 270 public housing units in South Lincoln Homes. The South Lincoln block group is more compact than the typical Denver neighborhood, with a density of 5.79 households/acre, compared to a citywide density of 2.47 households/

acre. The Auraria-Lincoln Park neighborhood contains approximately 3,009 households, with an average household size of 2.51 people, as compared to 2.24 people per household citywide<sup>1</sup>.

The median household income for the Auraria-Lincoln Park neighborhood is \$38,480, compared to \$55,129 citywide, and the % families in poverty in Auraria-Lincoln Park is 37.05%<sup>2</sup>.

In general in the Auraria-Lincoln Park neighborhood, the average household does not pay more than 45% of their income on housing and transportation costs<sup>3</sup>; however

1 Data source: U.S. Census, 2000

2 Data source: Piton Foundation, 2000

3 Data source: Center for Neighborhood Technology

HOMEOWNERSHIP (source: Piton Foundation)			
Indicator	Auraria-Lincoln Park	Denver	Data Year
# Housing Units	3,009	274,735	2007
% Housing Owner-Occupied	19.86%	52.48%	2000
% non-Latino White Homeowners	17.06%	62.62%	2000
% African-American Homeowners	4.84%	48.37%	2000
% Latino Homeowners	30%	49.11%	2000
% Asian/Pacific Islander Homeowners	8.18%	44.87%	2000
Median Income for Home Purchasers	\$59,950	\$65,400	2003
Average Loan Amount for Home Purchasers	\$179,064	\$203,763	2003



38.6% of renters are paying more than 30% of income on housing<sup>1</sup>. The multi-group diversity index for the Auraria-Lincoln Park neighborhood is 0.613<sup>2</sup>.

### **Evaluation of Plan based on Development Targets**

#### **HH Redevelopment Masterplan Strengths**

- The proposed program for redevelopment includes a mix of housing types, size, affordability levels, and tenure (scoring a high rating on the Simpson Diversity Index).
- Relocation compensation and assistance is included in the plan.

#### **HH Redevelopment Masterplan Areas for Improvement**

- Inclusion of Green Communities Criteria should be considered for design of homes and/or design guidelines.
- Coordinate a process for tracking demographics to demonstrate improvement in: Multi-group diversity index, median per-capita income, median household income, and proportion living below the poverty level.

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1 Data source: Piton Foundation, 2000

2 Data source: Piton Foundation, 2000



<b>HH: ADEQUATE &amp; HEALTHY HOUSING</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>HH.3 Decrease concentrated poverty</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• HH.3.a Multi-group diversity index</li> <li>• HH.3.b Median per-capita income</li> <li>• HH.3.c Median household income</li> <li>• HH.3.d Proportion living below the poverty level</li> </ul>	<p>Per the 2000 census data, the Auraria-Lincoln Park neighborhood Multi-group diversity index was 0.613. Median household income was \$38,480 (vs. \$55,129 citywide), and proportion of families in poverty was 37.05%. Note that the intent and proposed housing mix of the redevelopment and in-neighborhood relocation goal aims to decrease concentration of low-income housing.</p>	<p>Track demographics to demonstrate improvement in: Multi-group diversity index, median per-capita income, median household income, and proportion living below the poverty level.</p> <p>Pursue in-neighborhood relocation goals through implementation.</p>	<p>Track demographics and indicators after construction is completed.</p>
<p>HH.4 Assure access to healthy, quality housing</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• HH.4.a Number of per capita code violations for housing safety and habitability in the past year</li> </ul>	<p>Masterplan recommends meeting Green Communities Criteria Mandatory Credits under Section 7: Healthy Living Environment</p>	<p>Include these criteria in design of homes and/or design guidelines.</p>	<p>Detailed design and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

## Healthy Economy

The Healthy Economy element addresses economic activities and impacts that may occur with development. It examines employment opportunities, and the quality of jobs created, financial literacy, and promotes economic development that is environmentally sensitive and supports local business and entrepreneurship.

The objectives and indicators in this element include:

### HE.1 Increase high-quality employment opportunities for local residents

- Jobs paying wages greater than or equal to the self-sufficiency wage
- Proportion of jobs accessible by transit, walking or bicycle

### HE.2 Increase jobs that provide healthy, safe, and meaningful work and increase equity in income and wealth

- Proportion of population covered by health insurance
- Jobs providing sick day benefits to employees
- Proportion of unemployed served annually by job training programs

### HE.3 Promote economic development that protects and enhances natural resources and the environment

- Businesses meeting or exceeding city green business standards
- Proportion of locally owned business

### HE.4 Promote financial literacy

### HE.5 Promote entrepreneurship and locally owned businesses

In the application of the Denver HDMT, the South Lincoln site was evaluated in relationship to its surround La Alma/ Lincoln Park neighborhood, as well as to the City of Denver. The strengths and areas for improvement are summarized below. Following this summary is a chart indicating recommendations related to each of the specific objectives in this section, including an indication of timing related to the redevelopment process.

## Existing Conditions and Baselines

In the Auraria-Lincoln Park neighborhood, there is a 10.63% unemployment level. The average annual wage is \$33,208, with 55.38% of jobs in the service industry, and 37.05% of families are below the poverty level<sup>1</sup>. As a point of reference, the self-sufficiency wage for Denver County 2008 is \$19.66/hr for a family of 1 adult, 1 preschool child, and 1 school age child<sup>2</sup>. In the DHA resident survey, 75% indicated that they are unemployed, and 38% have a medical condition which prevents them from working. Other barriers to employment include difficulty with stress and unreliable transportation. A majority of residents (85%) do not have a savings account, and are not interested in learning how to open one (83%).

## Plan Evaluation based on Development Targets

### HE Redevelopment Masterplan Strengths

- A number of major employers are located within approximately 1/2 mile of the site.
- Strong desire to incorporate green jobs and other employment opportunities

### HE Redevelopment Masterplan Areas for Improvement

- More specific plans for tracking and monitoring demographic data and job training opportunities.
- Consider discussions with major employers in the area on how to improve access to jobs for the residents
- Seek partners and enhance job training and employment opportunities in the 10th & Osage Station Area to take advantage of proximity to transit and promote reduced need for private auto transport.

1 Data source: U.S. Census, 2002

2 Data source: Self Sufficiency Standard, Center for Women's Welfare, [www.selfsufficiencystandard.org](http://www.selfsufficiencystandard.org). The Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies and without private/informal assistance.



<b>HE: HEALTHY ECONOMY</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>HE.1 Increase high-quality employment opportunities for local residents</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>HE.1.a Jobs paying wages greater than or equal to the self-sufficiency wage</li> <li>HE.1.b Proportion of jobs accessible by transit, walking or bicycle</li> </ul>	<p>Per LEED-ND SLL Credit 5: Housing and Jobs proximity, (OPTION 2), the following major employers are within approximately 1/2 mile of the site: Denver Health, Denver Water, the Auraria Campus.</p>	<p>The majority of jobs created should meet the self-sufficiency wage for Denver County (\$19.66/hr). Note that Section 3 construction jobs will be created by the redevelopment. Seek to enhance resident access to existing jobs in the area (Denver Health, Denver Water, and Auraria).</p>	<p>Coordinate during CSS planning and construction.</p>
<p>HE.2 Increase jobs that provide healthy, safe, and meaningful work and increase equity in income and wealth</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>HE.2.a Proportion of population covered by health insurance</li> <li>HE.2.b Jobs providing sick day benefits to employees</li> <li>HE.2.c Proportion of unemployed served annually by job training programs</li> </ul>	<p>Per the Piton Foundation, in the Auraria-Lincoln Park neighborhood (2002 data), 55.38% residents held service jobs, 37.05% families were in poverty, 10.63% unemployment rate, and \$33,208 was the average annual wage.</p>	<p>Track demographics to demonstrate improvement in socioeconomic status (SES) (see benchmarks).</p> <p>100% of the jobs created should provide health insurance, sick day benefits, and 80% of the jobs created should provide retirement benefits.</p>	<p>Track demographic data after redevelopment is complete.</p> <p>Set this goal during CSS planning and attracting non-residential tenants.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

<b>HE: HEALTHY ECONOMY</b>			
<b>PRIMARY OBJECTIVES AND INDICATORS</b>	<b>BENCHMARKS AND DEVELOPMENT TARGETS*</b>	<b>RECOMMENDATIONS</b>	<b>TIMING FOR INCORPORATION IN PLANNING PROCESS</b>
<p>HE.3 Promote economic development that protects and enhances natural resources and the environment</p> <p>Indicators:</p> <ul style="list-style-type: none"> <li>• HE.3.a Businesses meeting or exceeding city green business standards</li> <li>• HE.3.b Proportion of locally owned business</li> </ul>		<p>Seek to incorporate green jobs training and green jobs. Pursue during CSS planning and implementation (specifically energy retrofits).</p> <p>Support the retention and development of locally owned businesses by giving first priority to locally owned businesses or by creating permanent lease terms favorable to locally-owned businesses as a community benefit. Include support for or prioritize businesses with green business practices.</p> <p>Enhance job training and employment opportunities in the 10th &amp; Osage Station Area to take advantage of proximity to transit and promote reduced need for private auto transportation.</p>	<p>Set this goal during CSS planning and attracting non-residential tenants</p>
<p>HE.4 Promote financial literacy</p>	<p>Potential Indicators:</p> <ul style="list-style-type: none"> <li>• Credit repair and education</li> <li>• First-time homeownership training</li> </ul>	<p><b>Recommend further study to coordinate indicators and benchmarks with CSS planning and requirements.</b> Consider the following indicators and targets: credit repair and education and first time homebuyer training.</p>	<p>CSS planning and implementation.</p>

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

HE: HEALTHY ECONOMY			
PRIMARY OBJECTIVES AND INDICATORS	BENCHMARKS AND DEVELOPMENT TARGETS*	RECOMMENDATIONS	TIMING FOR INCORPORATION IN PLANNING PROCESS
HE.5 Promote entrepreneurship and locally owned businesses	Potential Indicators: <ul style="list-style-type: none"> <li>• Number of resident-owned businesses</li> <li>• Number of Section 3 contracts associated with the project</li> <li>• Provide space and under favorable terms (e.g., % of sales rent) in the project for new and relocated locally-owned businesses</li> </ul>	<b>Recommend further study to coordinate indicators and benchmarks with CSS planning and requirements.</b> Consider the following indicators and targets: number of resident owned businesses, number of Section 3 contracts associated with the project, and provide space and under favorable terms (e.g., % of sales rent) in the project for new and relocated locally-owned businesses.	Set this goal during CSS planning and attracting non-residential tenants

\*For a detailed listing of every development target, please refer to the customized Denver HDMT.

## NEXT STEPS

### Recommended next steps and additional study

In initial stages of reviewing the HDMT, there were several areas and objectives which were immediately identified that could coordinate very well with the Community and Supportive Services planning that occurs in conjunction with the HOPE VI program.

There is potential to use the HDMT metric to guide development objectives and track progress for the comprehensive planning and redevelopment process, including physical, economic, environmental, and human capital realms. This metric can be used on a broad range of redevelopment projects seeking holistic change. It should be considered for use in other mixed-income redevelopment efforts in the Denver metropolitan area.

The team suggests that the Denver HDMT could be further refined to include indicators, development targets, and benchmarks used to measure success in the CSS and human capital realms of redevelopment planning. In the customized Denver HDMT, these objectives have been noted as "Recommended for further study".

Other areas for future potential refinement and coordination include:

- Add references to Denver policy and regulatory documents such as the Comprehensive Plan and the Denver Climate Action Plan. The SFDPH HDMT includes references to San Francisco regulations, which have been omitted in this customized Denver HDMT.
- Consider using the Denver HDMT to help guide the neighborhood planning process underway at La Alma - Lincoln Park.
- Ongoing data availability. Seek a steward for the data library.
- Develop a monitoring plan and responsibility to determine progress. Aim to coordinate monitoring with post-occupancy evaluation, when there will be significant time between phases, or at the completion of development activity and occupancy.

- Periodic coordination with referenced metrics and standards: This work references the 2nd public draft of LEED-ND issued May 15, 2009, and the Sustainable Sites Initiative Guidelines Draft issued in 2008. Since the completion of this report, a newer draft of SSI has been issued, now called SITES, and an updated LEED-ND rating system is anticipated in early 2010. Because these metrics will continue to evolve with the latest science and best practices, we recommend an annual update to coordinate with the Denver HDMT.

In addition to these areas of further coordination, an important next step is establishing partnerships and opportunities for leverage with other agencies and foundations. There are several areas and objectives in the Denver HDMT where "Consider future partnerships or collaboration" has been noted.

Finally, there are several near term or immediate items which have been identified that could have a positive impact on the health of the residents. These include the following key items, and area also noted in the specific recommendations that follow.

- Work with Denver Health to extend the free shuttle to the hospital past 9 am - 3 pm each day. Post information regarding the shuttle at the on site office, and any other community locations including bus stops.
- Post information regarding WIC discount healthy food vouchers which can be used at the three closest grocery stores to the site. Women need to call 303-692-2400 to sign up for the program.
- Post information regarding the seasonal Denver Civic Center Outdoor Farmers Market (held weekly in the summer).
- Consider partnering with Operation Frontline ([http://strength.org/operation\\_frontline/colorado/](http://strength.org/operation_frontline/colorado/)) to conduct healthy grocery shopping education and nutrition classes. Consider partnering with Cooperative Extension to provide education for low-income residents.

DenverHDMT



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May 2010 Denver HDMT Final Report

SOUTH LINCOLN REDEVELOPMENT

# THE DENVER HDMT METRIC

## Denver HDMT customization and methodology

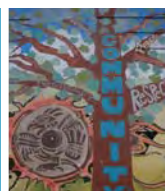
This project goal is to create a Denver HDMT for the Denver Housing Authority that can be used as a development metric to incorporate a health-based planning process, document the existing health of the community, and determine how the proposed redevelopment can impact the health of the community. The work is broken into two phases: Phase 1 customization of the HDMT for Denver, and Phase 2 application of the Denver HDMT to the South Lincoln Homes Redevelopment Masterplan.

Our Phase 1 work has consisted of a review of the HDMT ([www.thehdmt.org](http://www.thehdmt.org)), and customization for a mixed-income revitalization project in Denver, CO. Our goals

for customization include modifying information specific to San Francisco to that for Denver, as well as a review of the Environmental Stewardship section. We have done a review and evaluation of the indicators and development targets in all sections, and have coordinated with metrics including LEED for Neighborhood Development (LEED-ND) and the Sustainable Sites Initiative (SSI). This work references the 2nd public draft of LEED-ND issued May 15, 2009, the Sustainable Sites Initiative Guidelines Draft issued in 2008, and the Green Communities Criteria 2008.

The application was limited to the South Lincoln Homes site, and was based upon the customized Denver HDMT made available to the peer review team in October 2009.

ES: ENVIRONMENTAL STEWARDSHIP		
INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
<b>ES.1</b>	<b>Decrease consumption of energy and natural resources</b>	
ES.1a	Residential per capita natural gas use	Benchmark: If the project is a new mid-size multi-family or new small residential (1–4 units) project, does it achieve 7 or more Optional Criteria points or more in the energy section of the Green Communities Criteria checklist AND does it comply with Energy Star whole house certification? If the project is a mid-size commercial project (new or alteration), large commercial tenant improvement or major alteration, new high-rise residential, or new large commercial project, does it earn 8 points in the “Energy and Atmosphere Credit 1: Optimize Energy Performance” under the LEED checklist?
ES.1b	Total residential electricity use (kWH) per capita	
ES.1c	Gross per capita water use	Benchmark: If the project is a new mid-size multi-family or new small residential (1–4 units) project, does it achieve 5 Optional Credits in the water section of Green Communities Criteria? If the project is a mid-size commercial project (new or alteration), large commercial tenant improvement or major alteration, new high-rise residential, or new large commercial project, does it earn 3 points in “Water Efficiency” credits under the LEED checklist?



## ES: ENVIRONMENTAL STEWARDSHIP

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
ES.1d	Annual per capita waste disposal	<p>Benchmark #1: Does the project divert 75% or more of all non-hazardous construction and demolition debris for recycling and/or salvage? If the project is a mid-size commercial project (new or alteration), large commercial tenant improvement or major alteration, new high-rise residential, or new large commercial project, does it earn 1 point under “Materials and Resources Credit 2.2: Construction Waste Management: Divert 75% From Disposal” from the LEED checklist? AND</p> <p>Benchmark #2: If the project is a new mid-size multi-family or new small residential (1–4 units) project, does it achieve at least 75% construction waste diversion? If the project is a mid-size commercial project (new or alteration), large commercial tenant improvement or major alteration, new high-rise residential, or new large commercial project, does it earn credit under “Materials and Resources Credit 3.1 or 3.2” from the LEED checklist?</p> <p>Policy Reference: The Denver Climate Action Plan recommends a Statewide demolition debris recycling program, which proposes that at least 50 percent of demolition debris that can be recycled be removed by a contractor prior to final land-clearing activities at a demolition site.</p>
ES.1e	Proportion of solid waste recycled diverted from landfill	<p>Benchmark: Does the project provide facilities and services for users to recycle and compost waste?</p> <p>Policy Reference: The Denver Climate Action Plan recommends “Enhance Recycling Programs” as a primary recommendation, setting a goal of doubling the present recycling rate.</p>



## ES: ENVIRONMENTAL STEWARDSHIP

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
ES.1f	Proportion of LEED, Green Communities, and Energy Star Rated certified buildings and green buildings	Benchmark: If the project is a new mid-size multi-family or new small residential (1–4 units) project, does it meet all Mandatory Credits AND achieve at least 35 Optional Credits on the Green Communities Criteria checklist AND comply with Energy Star requirements? OR If the project is a mid-size commercial project (new and alterations), is it LEED Silver? OR If the project is a large commercial tenant improvement or major alteration or new large commercial project, is it LEED Gold certified? If the project is a new high-rise residential project, is it LEED Silver certified?
ES.1g	Percent of stormwater infiltrated on site and/or reduction of impact on storm sewer	Benchmark: Meet Sustainable Sites Initiative (SSI) Credit 3.16; Manage water on-site: replicate the hydrology on the site OR earn at least 2 points on LEED for Neighborhood Development (LEED-ND) Credit GIB 8: Stormwater Management
<b>ES.2</b>	<b>Restore, preserve and protect healthy natural habitats</b>	
ES.2a	Proportion of City land retained as natural areas	Benchmark: If the project develops or alters land deemed to be significant natural resource areas, does the project preserve or restore 20% of the development parcel area to a natural condition with regard to flora? OR Meet SSI Credit 3.10: Preserve and restore natural wildlife habitat and SSI Prerequisite 3.3 Preserve special status trees, AND LEED-ND SLL Credit 7 and 8: Site Design for and Restoration of Habitat
ES.2b	Acres of public open space per 1,000 population	<p>Benchmark: Does the project meet or achieve a standard of 10 acres of publicly accessible open space per 1,000 population in the planning area?</p> <p>Policy reference: [IN PROGRESS] Reference open space requirements in Denver Comprehensive Plan</p>
ES.2c	Percentage of tree canopy coverage	<p>Benchmark: Does the project provide a continuous row of appropriately spaced trees at all streets adjacent to the project?</p> <p>Policy Reference: The Tree by Tree – The Mile High Million program of Greenprint Denver has a goal to plant one million trees over the next 20 years to increase the canopy and provide shade, adding to energy efficiency.</p>



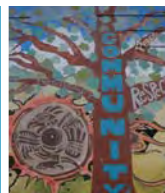
## ES: ENVIRONMENTAL STEWARDSHIP

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
ES.2d	Retain and add proportionate (per capita) enhancements to existing habitat for ecosystem services and GHG sequestration value [IN PROGRESS]	Benchmark: Meet SSI Credit 3.6: Preserve and restore plant biomass on-site: Determine the biomass density index (BDI) for initial and planned conditions for the site, using the guidelines below. BDI can be thought of as the density of plant layers covering the ground. The calculations are summarized in the Site Biomass Density Index Calculation Worksheet.
ES.2e	Provide access to outdoor spaces for mental wellbeing	Benchmark: Meet SSI Credit 4.7: Provide outdoor spaces for mental restoration
<b>ES.3</b>	<b>Promote affordable and high-quality food access and sustainable agriculture</b>	
ES.3a	Proportion of households within 1 mile of a farmer's market	Benchmark: Is the project within 1 mile of a regular farmer's market?
ES.3b	Proportion of households with 1/2 mile access to a community-supported agriculture (CSA) drop-off site	Benchmark: Does the project provide a community supported agriculture drop-off site?
ES.3c	Proportion of households with 1/4 mile access to a community garden	Benchmark: Does the project create and maintain a community garden on-site or provide safe access to off-site community garden resources within 1/4 mile?
<b>ES.4</b>	<b>Preserve clean air quality</b>	
ES.4a	Proportion of households living near busy roadways	Benchmark: Where sensitive uses are proposed in locations where greater than 100,000 vehicles per day are within 150 meters, or 50,000 vehicles per day are within 100 meters or 10,000 vehicles per day are within 50 meters, does the project analyze potential air quality impacts on sensitive uses AND based on analysis, either avoid locating sensitive uses OR reduce traffic levels sufficiently to mitigate air quality impacts, OR provide an HVAC system with filtration to reduce/mitigate infiltration of vehicle emissions?



## ES: ENVIRONMENTAL STEWARDSHIP

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
ES.4b	Proportion households living within 300 meters of major industrial stationary sources of air pollution	Benchmark: Does the project avoid locating sensitive uses in close proximity to stationary sources of air pollution? (Note: the 2005 CARB Air Quality and Land Use Handbook provides guidance for buffers for selected stationary sources)
ES.4c	Proportion of households living within 150 meters of designated truck routes and xx meters of active diesel railroad rights of way [IN PROGRESS]	Benchmark: Where sensitive uses are proposed within 150 meters of a truck route, does the project analyze potential air quality impacts on sensitive uses AND either avoid locating the sensitive use, OR reduce truck traffic on the adjacent route, OR provide an HVAC system with filtration to reduce/mitigate infiltration of vehicle emissions?
<b>ES.5</b>	<b>Maintain safe levels of community noise</b>	
ES.5a	Average daytime and nighttime outdoor noise levels	Benchmark: Perform exterior noise assessment if site is located within 15 miles of a military or civilian airport, 1,000 feet from a road or 3,000 feet from a railroad to determine if noise levels are >65 dB Ldn. Comply with regulations set out in 24 CFR 51B. ( <a href="http://www.hudnoise.com">www.hudnoise.com</a> )



<b>SC: SOCIAL COHESION</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>SC.1</b>	<b>Promote socially cohesive neighborhoods</b>	
SC.1a	Residential mobility [IN PROGRESS]	Benchmark: [IN PROGRESS]
SC.1b	Proportion of population within 1/2 mile from community center	Benchmark #1: Is the project within 1/2 mile of a community center? AND
		Benchmark #2: Does the project contribute funding (via impact fee or community benefits agreement) towards a existing community center or to the construction of a new community center?
SC.1c	Indicator [IN PROGRESS]	<p>"Benchmark: Does the project include environmental design elements and community programs that promote and enhance social interaction and integration? Meet SSI Credit 4.8 Credit Provide outdoor spaces for social interaction, OR Actions consistent with this benchmark would include but are not limited to:</p> <ul style="list-style-type: none"> <li>- incorporating public open space, public parks, public plazas, recreational centers, community facilities or other gathering places into project design</li> <li>- enhancing access to existing neighborhood or regional parks and recreational facilities</li> <li>- funding maintenance or programming at parks, recreational centers, public art or public performance spaces</li> <li>- sponsoring a neighborhood organization that supports community building</li> <li>- sponsoring civic and cultural activities that promote social interaction"</li> </ul>



<b>SC: SOCIAL COHESION</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
SC.1d	Indicator [IN PROGRESS]	"Benchmark: Does the project promote educational, after school, and other related opportunities for youth? Actions consistent with this benchmark would include but are not limited to: <ul style="list-style-type: none"> <li>- using schools as multi-use community facilities</li> <li>- funding school infrastructure development explicitly for use as multi-use facilities</li> <li>- supporting arts, after school programs, and other activities in recreation centers, parks, and schools</li> <li>- funding cultural events using local parks, recreation and open spaces"</li> </ul>
<b>SC.2</b>	<b>Promote personal safety</b>	
SC.2a	Number of violent crimes	"Benchmark #1: Demonstrate improvement in the number of violent crimes compared to existing conditions. (data from piton.org) NOTE consider using CPTED principles and supporting community policing, neighborhood watch groups, and, community organizing related to blight abatement"
SC.2b	Number of property crimes	"Benchmark #1: Demonstrate improvement in the number of property crimes compared to existing conditions. (data from piton.org) NOTE consider using CPTED principles and supporting community policing, neighborhood watch groups, and, community organizing related to blight abatement"
<b>SC.3</b>	<b>Increase participation in social decision-making process</b>	
SC.3a	Voting rates/community space	Benchmark: Does the project create a meeting room or other sheltered public space with the appropriate lavatory and other facilities that could be used as an election voting station, community meetings, after school programming, tutoring/ mentoring, senior center or other social program?
<b>SC.4</b>	<b>Assure equitable and democratic participation throughout the planning process</b>	



<b>SC: SOCIAL COHESION</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
SC.4a	Indicator [IN PROGRESS]	Benchmark: Does the planning process ensure adequate opportunities for the community to comment on development plans AND
SC.4b	Indicator [IN PROGRESS]	Benchmark: If the project triggered an NEPA/SEQA/SEPA process, were 4 or more of the following outreach activities conducted: e.g., town hall meeting, charrette, promotion of social citizenship, consensus conference, mailings to affected communities, community surveys, development of community advisory board and/or citizen planning committee, planning workshops, focus groups, public hearings, open houses, panel discussions, neighborhood meetings, small in-home meetings, planning fairs, and referendum. AND"
SC.4c	Indicator [IN PROGRESS]	Benchmark: Was there appropriate language AND cultural translation services available for the demographics of the affected community AND
SC.4d	Indicator [IN PROGRESS]	Benchmark: Was information about the proposed project made publicly available AND
SC.4e	Indicator [IN PROGRESS]	"Benchmark: Were the communities potentially affected by the proposed project targeted for outreach (if needed in the appropriate language) in at least 5 of the following 8 locations: e.g., local newspapers, local public library and City Hall, local radio stations, community television public announcements, local churches, local community or recreational facilities, local schools, local clinics."
<b>SC.5</b>	<b>Promote mental health for all residents</b>	
SC.5a	Counseling	CSS specific; recommend for future study
SC.5b	Substance Abuse	CSS specific; recommend for future study

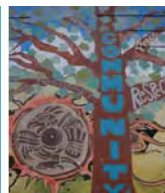
<b>SC: SOCIAL COHESION</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
SC.5c	Provide space at rents affordable to nonprofit providers for recommended programming and coordinated with health clinics, providers, or related facilities	CSS specific; recommend for future study
<b>SC.6</b>	<b>Promote community and supportive services</b>	
SC.6a	Establish eligibility of all residents; complete case management intakes	CSS specific; recommend for future study
SC.6b	Complete Individual Developments Plans	CSS specific; recommend for future study
SC.6c	Provide resources and space for tracking and ongoing implementation support of IDPs	CSS specific; recommend for future study

<b>ST: SUSTAINABLE AND SAFE TRANSPORTATION</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>ST.1</b>	<b>Decrease private motor vehicles trips and miles traveled</b>	
ST.1a	VMT per capita compared to citywide and other station area populations	Benchmark #1: Demonstrate a reduction in VMT per capita AND Benchmark #2: Earn 1 points to meet LEED-ND NPD Credit 8: Transportation Demand Management Policy Reference: Per Denver's Climate Action Plan, demonstrate a 15% reduction in VMT per capita by 2012.
ST.1b	Intersection density per square mile, compare existing conditions to proposed	Benchmark: Meet LEED-ND NPD Prerequisite 3: Connected and Open Community
<b>ST.2</b>	<b>Provide affordable and accessible public transportation options</b>	
ST.2a	Proportion of commute trips made by public transit, biking, and/or walking	Benchmark #1: Goal Total of 25% commute trips made by transit, biking, or walking AND Benchmark #2: Meet requirements of LEED-ND NPD Credit 7: Transit Facilities
ST.2b	Proportion of average income spent on transportation expenses	Benchmark: 45% or less of average income spent on combined transportation and housing expenses OR Does the project subsidize public transit passes for households earning <200% of the poverty line?
ST.2c	Proximity of project site to transit options	Benchmark: comply with LEED-ND SLL Prerequisite 1: Smart Location, OPTION 3 (consistent with earning 6 points in Green Communities Criteria Site, Location and Neighborhood Fabric Credit 2.7 Transportation Choices) AND earn at least 3 points under LEED-ND SLL Credit 3: Locations With Reduced Automobile Dependence
<b>ST.3</b>	<b>Create safe, quality environments for walking and biking</b>	



## ST: SUSTAINABLE AND SAFE TRANSPORTATION

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
ST.3a	Bicycle infrastructure, including ratio of miles of bike lanes and paths to miles of road	Benchmark: Comply with LEED-ND SLL Credit 4: Bicycle Network and Storage requirements
ST.3b	Pedestrian infrastructure, including ratio of miles of sidewalk to miles of road	Benchmark: Comply with LEED-ND NPD Prerequisite 1: Walkable Streets AND earn at least 3 points in LEED-ND NPD Credit 1: Walkable Streets
ST.3c	Pedestrian and cyclist volume (pedestrian and bike count) [IN PROGRESS]	Benchmark: In progress
ST.3d	Number of bicycle and pedestrian collisions and fatalities	Benchmark #1: Demonstrate a reduction in bicycle and pedestrian collisions and fatalities AND
		"Benchmark #2: a) identify areas (intersections, streets, small areas) where pedestrian injury collisions have occurred in or near the project area OR b) identify where potential future conflicts exist in or near the project area (e.g., when new residents or employees are being introduced to an area with a previously low population and/or high traffic volumes on streets) AND target pedestrian environment improvements to those areas"
ST.3e	Area score on the Pedestrian Environmental Quality Index	Benchmark: Demonstrate that all intersections and street segments score at least 60 out of 100 on the PEQI.
ST.3f	Density and mix of uses	Benchmark: Comply with LEED-ND NPD Prerequisite 2: Compact Development AND earn at least 2 points on LEED-ND NPD Credit 3: Mixed-Use Neighborhood Centers
ST.4f	Area score on the Pedestrian Environmental Quality Index [SECONDARY]	(same as above) Score on PEQI of 60 or higher out of 100



<b>PI: PUBLIC INFRASTRUCTURE</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>PI.1</b>	<b>Assure affordable and high quality child care for all neighborhoods</b>	
PI.1a	Maximum capacity of licensed child care facilities and proportion of 0-14 year olds	Benchmark: If the project is over 10,000 square feet, does it: build a child care facility on-site OR establish a relationship with a non-profit to provide a child care facility in Denver?
PI.1b	Number of Early Childhood Learning centers within 1/2 mile of the site	Benchmark: Number of ECE learning centers within 1/2 mile of site based on info from www.denverearlychildhood.org and/or www.qualistar.org. [IN PROGRESS]
PI.1c	Number of highly rated preschool programs within 1/2 mile of the site	Benchmark: Number of highly rated (3 or above out of 0-4 scale from www.dpp.org) preschool programs within 1/2 mile of site. [IN PROGRESS]
<b>PI.2</b>	<b>Assure accessible and high quality educational facilities</b>	
PI.2a	Proportion of households within 1/2 mile of a public elementary school	Benchmark #1: Meet requirements of LEED-ND NPD Credit 15: Neighborhood Schools, AND
		Benchmark #2: Does land use siting ensure public school students' public transit commute is less than 30 minutes?
PI.2b	Proportion of children within 30 minute public transit access to public middle school and/or high school	Benchmark #2: Does land use siting ensure public school students' public transit commute is less than 30 minutes?



<b>PI: PUBLIC INFRASTRUCTURE</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>PI.3</b>	<b>Assure spaces for libraries, performing arts, theatre, museums, concerts, and festivals for personal and educational fulfillment</b>	
PI.3a	City-serving art/cultural facilities within 1/2 mile of a regional transit stop	Benchmark #1: Does the project protect and maintain existing art work on site in accordance with applicable state and federal laws AND/OR create space for murals, public art, or public performances? AND
		Benchmark #2: If project is a new art/cultural facility, is it sited within 1/2 mile of existing or proposed regional transit stop?
PI.3b	Designated federal, state, and city funding for the arts	Benchmark #1: Is the project within 1/2 mile of public art or public performance space? AND
		Benchmark #2: Does the project contribute 1%? of total construction costs to the creation of public art or public performance on-site OR into a public fund for arts purposes?
PI.3c	Proportion of population within 1/2 mile and 1 mile of a public library	Benchmark #1: Is the project located within 1/2 mile of a public library? AND
		Benchmark #2: Does the project contribute funding (via impact fee or community benefits agreement) towards construction of a new library facility, expansion of an existing library facility, and/or programming and materials for the library?
PI.3d	Public art works and population density per square mile	Benchmark #1: Is the project within 1/2 mile of public art or public performance space? AND
		Benchmark #2: Does the project contribute 1% of total construction costs to the creation of public art or public performance on-site OR into a public fund for arts purposes?
PI.3e	Local, culturally relevant art in building design/structure [IN PROGRESS]	Benchmark #1: If the project is new commercial use larger than 50,000 square feet or new residential larger than 50 units, were local artists/artisans or neighborhood cultural councils consulted about how the pedestrian-level design of the building could promote/reinforce the neighborhood's cultural vitality and identity? AND



<b>PI: PUBLIC INFRASTRUCTURE</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
PI.3f	Amount of public and/or community gathering locations (libraries, churches, clubs) with established extended hours agreements and programming, including multi-use programming shared by City, Schools, community and other nonprofit providers	Benchmark: IN PROGRESS
<b>PI.4</b>	<b>Assure affordable and high quality public health facilities</b>	
PI.4a	Public health facilities within 1/2 mile of a regional transit stop	Benchmark: If a new hospital or major clinical care facility, is it located within 1/2 mile of a regional transit stop or does it provide free public shuttle service from regional transit services?
<b>PI.5</b>	<b>Increase park, open space and recreation facilities</b>	
PI.5a	Proportion of population within 1/4 mile of neighborhood or regional park	Benchmark #1: Meet SSI Credit 4.5: Provide opportunities for outdoor physical activity AND LEED-ND NPD Credit 9: Access to public and civic spaces AND
		Benchmark #2: Does the project contribute funding (via impact fee or community benefits agreement) towards existing open space or to the construction of new open space or parks facilities?
PI.5b	Proportion of population within 1/4 mile of a recreation facility	Benchmark #1: Meet SSI Credit 4.5: Provide opportunities for outdoor physical activity AND LEED-ND NPD Credit 10: Access to Recreation facilities AND
		Benchmark #2: Does the project contribute funding (via impact fee or community benefits agreement) towards a existing recreational facility or to the construction of a new recreational facility?



<b>PI: PUBLIC INFRASTRUCTURE</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>PI.6</b>	<b>Increase accessibility, beauty, safety, and cleanliness of public spaces</b>	
PI.6a	Distribution of public plazas in commercial business districts [IN PROGRESS]	Benchmark: If a commercial project over 25,000 sq ft in a commercial business district, does the project contribute funding (via impact fee or community benefits agreement) towards construction of a new public plaza or maintenance/programming at an existing plaza?
PI.6b	Street tree population	Benchmark: Does the project provide a continuous row of appropriately spaced trees at all streets adjacent to the project?
PI.6c	Proportion of sidewalk lengths with pedestrian scale lighting [IN PROGRESS]	Benchmark: Does the project provide lighting fixtures on streetscapes within or adjacent to the project at current city standards for adequacy of sidewalk and street lighting?
PI.6d	Public plaza or parks exposed to shadow from buildings [IN PROGRESS]	Benchmark: Does building design for the project include all feasible measures to maximize sunshine on sidewalks and plazas?
PI.6e	Location of fire stations	Benchmark: Is the project within a 5 minute response time by a nearby fire station?
<b>PI.7</b>	<b>Assure access to daily goods and service needs, including financial services and healthy foods</b>	
PI.7a	Neighborhood completeness indicator for key public services	Benchmark: Is the project within 1/2 mile of an area that has 8 out of 11 common public services that contribute to neighborhood completeness?  Neighborhood public services include: childcare/daycare, community garden, hospital and public health clinic, library, open spaces, neighborhood or regional parks of 1/2 acre or more, performance/cultural space, post office, public art, recreational facility, and public school.

<b>PI: PUBLIC INFRASTRUCTURE</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
PI.7b	Neighborhood completeness indicator for key retail services	"Benchmark: Is the project within 1/2 mile of an area that has 9 out of 12 common retail services that contribute to neighborhood completeness? Neighborhood serving retail includes: auto repair, banks/credit unions, beauty salon/barber shop, bike repair, dry cleaner, eating establishments, gym/fitness center, hardware store, laundromat, pharmacy, retail food market (including supermarket, produce store, and other retail food stores), entertainment (i.e. video store or movie theater)."
PI.7c	Proportion of population within 1/2 mile from bank or credit union	Benchmark: Is the project within 1/2 mile of a bank or credit union?
<b>PI.8</b>	<b>Promote affordable and high-quality food access and sustainable agriculture</b>	
PI.8a	Proportion of population within 1/2 mile from a full service supermarket	Benchmark #1: For residential uses, is the project within 1/2 mile of a supermarket? OR
		Benchmark #2: Does the development create a new on-site or off-site "healthy food supply" within 1/2 mile?
		"Healthy food supply is defined as: 1) providing a minimum of 5,000 square feet of retail space for a general line of food and nonfood grocery products intended for home preparation, consumption and utilization; 2) providing at least 50% of a general line of food products intended for home preparation, consumption and utilization; 3) providing at least 30% of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish and frozen foods; and, 4) providing at least 500 square feet of retail space for fresh produce OR achieving a Healthy Availability Score of 15 or more on the Retail Food Availability Survey?
PI.8b	Density of fast food restaurants	Benchmark: If the project is in an area where fast food outlet density is greater than 2 times the citywide density, does the project disallow new fast food outlets? For public or private schools and public recreation area uses, does the project disallow new fast food outlets within 500 feet?



## PI: PUBLIC INFRASTRUCTURE

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
PI.8c	Proportion of households within 1 mile of a farmer's market	Benchmark: Is the project within one mile of a weekly farmer's market?
PI.8d	Proportion of households with 1/2 mile access to a community-supported agriculture (CSA) drop-off site	Benchmark: Does the project provide a community supported agriculture drop-off site?
PI.8e	Proportion of households with 1/4 mile access to a community garden	Benchmark: Does the project create and maintain a community garden on-site or provide safe access to off-site community garden resources within 1/4 mile?
PI.8f	Density of take-out alcohol outlets	Benchmark: If the project is in an area where alcohol outlet density is greater than 2 times the citywide density (greater than or equal to 36 outlets per square mile), does the project disallow new retail alcohol sales?



## HH: ADEQUATE AND HEALTHY HOUSING

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
HH.1	<b>Preserve and construct housing in proportion to demand with regards to size, affordability, and tenure</b>	
HH.1a	Proportion of housing production to housing need by income category	<p>Benchmark #1: Does the project set aside 20% of units for affordable housing to contribute to affordable housing need? OR</p> <p>Benchmark #2: LEED ND NPD Credit 4 - Diverse Communities: DIVERSITY OF HOUSING TYPES: Include a sufficient variety of housing sizes and types in the project such that the total variety of planned and existing housing within the project achieves greater than 0.5 according to the following Simpson Diversity Index calculation using the housing categories below. Projects of less than 125 acres may calculate the Simpson Diversity Index for the area within ¼ mile of the project's geographic center. The Simpson Diversity Index calculates the probability that any two dwelling units in a project randomly selected will be of a different unit type.</p>
HH.1b	Proportion of households paying greater than 50% of their income on their homes/ rent	Benchmark: Proportion of households in study region paying greater than 50% of their income on their homes.
HH.1c	Proportion of renter and owner occupied housing	Benchmark: For project-level evaluations, does the project provide rental housing? For plan-level evaluations, does the plan include a mix of rental and ownership housing within 15% of the current distribution of rental and ownership housing (currently 65% rent and 35% own). In other words, range between 50%-80% rental and 20%-50% owner?
HH.2	<b>Protect residents from involuntary displacement (Relocation and Phasing)</b>	
HH.2.a	Number of housing units and types prior and after development	<p>Benchmark #1: Does the project replace the demolished/lost housing stock at a 1:1 ratio? AND</p> <p>Benchmark #2: Are relocation costs and compensation provided to displaced residents?</p>



## HH: ADEQUATE AND HEALTHY HOUSING

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
HH.2b	Timing and locations of relocation of receiving housing	CSS specific; recommended for future study
HH.2c	Language-based counseling	CSS specific; recommended for future study
HH.2d	Proportion of "one-time" moves	CSS specific; recommended for future study
HH.2e	Priority of timing and choice for families with school-aged children to minimize school changes and mid-year moves	CSS specific; recommended for future study
HH.2f	Tracking and monitoring	CSS specific; recommended for future study
<b>HH.3</b>	<b>Decrease concentrated poverty</b>	
HH.3a	Multi-group diversity index	Benchmark: Does the project demonstrate improvement in the following as compared to existing conditions: Multi-group diversity index, median per-capita income, median household income, and proportion living below the poverty level?
HH.3b	Median per-capita income	
HH.3c	Median household income	
HH.3d	Proportion living below the poverty level	



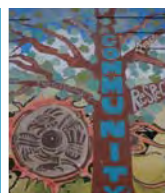
# HH: ADEQUATE AND HEALTHY HOUSING

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
HH.4	<b>Assure access to healthy quality housing</b>	
HH.4a	Number of per capita code violations for housing safety and habitability in the past year	<p>Benchmark #1: Does the project design include at least one effective building design measure in each of the following eight categories to prevent illness and injuries associated with housing conditions?</p> <ul style="list-style-type: none"> <li>- Dry: using water heater catch pans and drains; avoiding using mold-susceptible materials; installing basements and concrete slabs drainage; installing surface water drainage; installing roof flashing; installing continuous drainage planes; installing window and door flashing; avoiding heat loss due to unconditioned space; landscaping away from building; avoiding carpet in wet areas</li> <li>- Clean: installing walk-off mats; installing smooth and cleanable flooring; installing central vacuum system</li> <li>- Ventilated: installing bath and kitchen exhaust fans; installing outdoor air ventilation (ASHRAE 6.2); installing HVAC system sizing; avoiding air handlers/duct work in garage; air filtering; not using HVAC systems during construction; ventilating before occupancy (unless low VOC products are specified)</li> <li>- Safe: installing water heater temperatures; installing locked medicine storage cabinets; installing shower grab bars; installing smoke detectors; installing carbon monoxide alarms</li> <li>- Contaminant-free: using low VOC products; using urea formaldehyde free composite wood products; using low VOC carpet; installing garage isolation; using smooth cleanable low VOC floors; using combustion venting; using radon test and mitigation systems; maintaining a smoke-free policy; using lead safe work practices (applicable only to rehabilitation)</li> <li>- Pest-free: using rodent proof materials</li> <li>- Maintained: providing users' manuals for health features; providing homeowners' manuals for equipment and certification</li> <li>- Quiet: using acoustical construction CBC 1207, 1208 (Title 24, Part 2, Volume 1); increasing the distance between the noise source and the receiver; using noise barriers; orienting the residences away from the noise; orienting bedrooms away from noise; using solid walls CBC 1207, 1208 (Title 24, Part 2, Volume 1) OR</li> </ul> <p>Benchmark #2: Comply with the Green Communities Criteria Mandatory Credits under Section 7: Healthy Living Environment <a href="http://www.greencommunitiesonline.org/tools/criteria/index.asp">http://www.greencommunitiesonline.org/tools/criteria/index.asp</a></p>



<b>HE: HEALTHY ECONOMY</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>HE.1</b>	<b>Increase high-quality employment opportunities for local residents</b>	
HE.1a	Jobs paying wages greater than or equal to the self-sufficiency wage	Benchmark: Are the majority of jobs created by the project likely to provide entry level wages greater than or equal to the self-sufficiency standard (see link)?
HE.1b	Proportion of jobs accessible by transit, walking or bicycle	"Benchmark: Meet LEED-ND SLL Credit 5: Housing and Jobs proximity, (OPTION 2) Include a residential component equaling at least 30% of the project's total building square footage (exclusive of parking structures), and locate and/or design the project such that the geographic center (or boundary if the project exceeds 500 acres) is within a ½ mile walk distance of a number of existing full time equivalent jobs equal to or greater than the number of dwelling units in the project."
<b>HE.2</b>	<b>Increase jobs that provide healthy, safe and meaningful work and increase equity in income and wealth</b>	
HE.2a	Proportion of population covered by health insurance	Benchmark: Do 100% of the short and long term jobs provided by the project provide health insurance?
HE.2b	Jobs providing sick day benefits to employees	Benchmark: Do 100% of the jobs provided by the project provide sick day benefits?
HE.2c	Proportion of unemployed served annually by job training programs	"Benchmark: Does the project demonstrate improvement in the following socioeconomic status (SES) compared to existing conditions (using data from www.piton.org): - % in service jobs - % at poverty level - % who have had a job - % looking for a job - % average or median income"
HE.2d	Jobs providing retirement benefits to employees [IN PROGRESS]	Benchmark: Do 80% of the jobs provided by the project provide retirement benefits?

<b>HE: HEALTHY ECONOMY</b>		
<b>INDICATORS</b>	<b>PRIMARY OBJECTIVES</b>	<b>BENCHMARKS</b>
<b>HE.3</b>	<b>Promote economic development that protects and enhances natural resources and the environment</b>	
HE.3a	Businesses meeting or exceeding city green business standards	Benchmark: Does the project include support for or prioritize businesses with green business practices?
HE.3b	Proportion of locally owned businesses	Benchmark: Does the project support the retention and development of locally owned businesses by giving first priority to locally owned businesses or by creating permanent lease terms favorable to locally-owned businesses as a community benefit?
HE.3c	Proportion of new jobs that are qualified as "green collar" jobs and provide green job training, including youth employment training and pre-employment preparation [IN PROGRESS]	Benchmark: IN PROGRESS
<b>HE.4</b>	<b>Promote financial literacy</b>	
HE.4a	Credit repair and education	CSS specific; recommended for future study
HE.4b	Homeownership (first time homebuyer training)	CSS specific; recommended for future study
<b>HE.5</b>	<b>Promote entrepreneurship and locally owned businesses</b>	
HE.5a	Number of resident owned businesses	CSS specific; recommended for future study
HE.5b	Number of Section 3 contracts associated with the project	CSS specific; recommended for future study



## HE: HEALTHY ECONOMY

INDICATORS	PRIMARY OBJECTIVES	BENCHMARKS
HE.5c	Provide space and under favorable terms (e.g., % of sales rent) in the project for new and relocated locally-owned businesses	CSS specific; recommended for future study



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May 2010 Denver HDMT Final Report

**SOUTH LINCOLN REDEVELOPMENT**

## GLOSSARY OF TERMS AND ACRONYMS

**CPTED.** Crime Prevention Through Environmental Design, is an approach to deterring criminal behavior through environmental design. The three most common built environment strategies are natural surveillance, natural access control and natural territorial reinforcement.

**CSA.** Community Supported Agriculture consists of a community of individuals who pledge support to a farm operation, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or “share-holders” pledge in advance to cover the anticipated costs. In return, they receive shares in the farm’s bounty throughout the growing season. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

**CSS.** Community and Supportive Services, is required by the HUD HOPE VI program in conjunction with the physical redevelopment of a public housing project. Each HOPE VI grantee must submit and implement a CSS Plan, with the key principles of: services to help residents make progress toward self-sufficiency, services designed to address the needs of individual families, linkage to relocation with informed choice, community building in which residents work together to provide mutual support, achieve common ends, and build joint capacity, and management monitoring and evaluation.

**Development Target.** Criteria that can be used to assess whether development plans and projects help achieve objectives.

**ECE.** Early Childhood Education regards education in one of the most vulnerable stages in life, from birth to age eight. In July 2009, HUD announced that they are encouraging public housing authorities (PHA) to incorporate early childhood education components into the HOPE VI planning process.

**Green Communities.** A certification developed collaboratively by Enterprise and a number of leading

national organizations and experts for the purpose of providing a clear, cost-effective framework for affordable housing. The Green Communities criteria are aligned with the LEED (Leadership in Energy and Environmental Design) Green Building Rating System®, and are linked to potential funding and grants through the Enterprise Foundation.

**GHG.** Greenhouse Gas; gases that trap heat in the earth’s atmosphere. The principal greenhouse gases due to human activity include Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), and Fluorinated Gases. GHG emissions are commonly quantified in million metric tons carbon dioxide equivalent (MMTCO<sub>2</sub>e).

**HDMT.** The Healthy Development Measurement Tool (HDMT) is a comprehensive evaluation metric that supports the inclusion and consideration of health needs in urban land use plans and projects. The HDMT is comprised of a “community health indicator system” to evaluate community health objectives and baseline neighborhood conditions, a “healthy development checklist” that is used to evaluate land use plans and projects, and a “menu of policy and design strategies”.

**HIA.** Health impact assessment (HIA) is commonly defined as “a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population”

**HOPE VI.** HOPE VI is a major HUD plan meant to revitalize the worst public housing projects into mixed-income developments. The program began in 1992, with formal recognition in law in 1998. As of 2005, the program had distributed \$5.8 billion through 446 federal block grants to cities for the developments, with the highest individual grant being \$50 million.

**LEED-ND.** The LEED for Neighborhood Development Rating System integrates the principles of smart growth, urbanism and green building into the first national system for neighborhood design, developed in collaboration among USGBC, Congress for the New Urbanism, and the Natural

Resources Defense Council.

**Neighborhood Completeness Factor.** The Neighborhood Completeness Factor is referenced in the HDMT and measures the proximity of residents to daily goods and services in their neighborhoods. Included are 11 key public and 12 key retail services necessary to meet the daily needs of neighborhood residents and to promote increased social interaction, walking, and biking. Neighborhood public services include: childcare/daycare, community garden, hospital and public health clinic, library, open spaces, neighborhood or regional parks of 1/2 acre or more, performance/cultural space, post office, public art, recreational facility, and public school. Neighborhood serving retail includes: auto repair, banks/credit unions, beauty salon/barber shop, bike repair, dry cleaner, eating establishments, gym/fitness center, hardware store, laundromat, pharmacy, retail food market (including supermarket, produce store, and other retail food stores), entertainment (i.e. video store or movie theater).

**PEQI.** Pedestrian Environmental Quality Index. The Pedestrian Environmental Quality Index (PEQI) is an observational survey which quantifies street and intersection environmental factors empirically known to affect people's travel behaviors. PEQI includes five main pedestrian categories which embody important physical environmental factors: traffic, sidewalks, land use, intersections, and safety.

**Section 3.** The Section 3 program requires that recipients of certain HUD financial assistance, to the greatest extent possible, provide job training, employment, and contract opportunities for low- or very-low income residents in connection with projects and activities in their neighborhoods.

**Self-sufficiency standard.** The Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The family types for which

a Standard is calculated range from one adult with no children, to one adult with one infant, one adult with one preschooler, and so forth, up to two-adult families with three teenagers.

**SES.** Socio-economic status. SES is usually measured by determining education, income, occupation or a combination of these factors (Winkleby, 1992).

**Simpson Diversity Index.** is a mathematical measure that characterizes diversity in a community. It is used in LEED-ND to determine diversity of housing types.

**Social cohesion.** is a term used in social policy, sociology and political science to describe the bonds or "glue" that bring people together in society, particularly in the context of cultural diversity.

**SSI.** Sustainable Sites Initiative is voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices, created by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center and the United States Botanic Garden.

**Tenure.** In housing, tenure refers to the financial arrangements under which someone has the right to live in a house or apartment. The most frequent forms are tenancy, in which rent is paid to a landlord, and owner occupancy.

**TDM.** Transportation Demand Management is the application of strategies and policies to reduce automobile travel demand.

**VMT.** Vehicle Miles Traveled, a measure that is commonly used to describe automobile use on a daily or annual basis. It incorporates both the number of vehicle trips and the length of those trips. Factors affecting the number of vehicle trips made each day include age, income, population and household size, workers per household, auto ownership, and access to transit. VMT is typically modeled, rather than directly observed.



## APPENDIX

- South Lincoln HIA Food availability survey and summary
- South Lincoln HIA Food pricing survey and summary

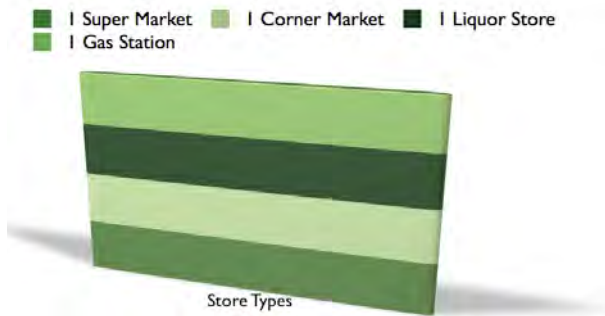


# SOUTH LINCOLN HIA FOOD AVAILABILITY SURVEY AND SUMMARY

As part of the masterplanning and HIA effort, two food surveys were conducted in the La Alma/ South Lincoln neighborhood. The first was done to determine food choices and availability at a variety of retail locations in the neighborhood. The second was done to examine food pricing and routes to stores within the neighborhood. During community meetings, residents have indicated the most common grocery stores they shop are the Walmart Super Center (Walmart), Albertsons Sav-On (Albertsons), and King Soopers Grocery Store (King Soopers). King Soopers is the closest grocery store 0.7 miles away from the site. Some community members believe that prices are lower at Walmart and Albertsons; therefore they take public transportations (light rail and/ or bus) or taxis to shop at these stores. Because the walk to the King's Soopers is perceived as dangerous, and some residents have disabilities that preclude them from walking, they take a taxi, or drive a car if possible (65% don't have a motor vehicle).

There are also two corner stores in the vicinity of South Lincoln, the American Way Market, Rio Grande, a gas station store, and a 7-11 within a half of a mile. The presence of fast food restaurants was not significant in the vicinity of South Lincoln Homes, so this was not identified as a health issue to be addressed for this neighborhood.

The below data is from the first food survey, which was focused on retail food availability and choices (conducted by Laura Curry). The four stores were selected based on proximity to South Lincoln Homes, and included one supermarket (King Soopers), one corner market, one liquor store, and one gas station. The goal was to determine what food choices are available to residents.



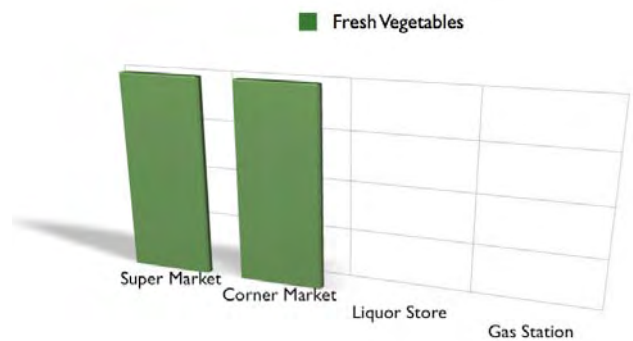
There is only one supermarket in proximity to South Lincoln



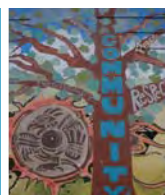
All four stores advertised unhealthy foods

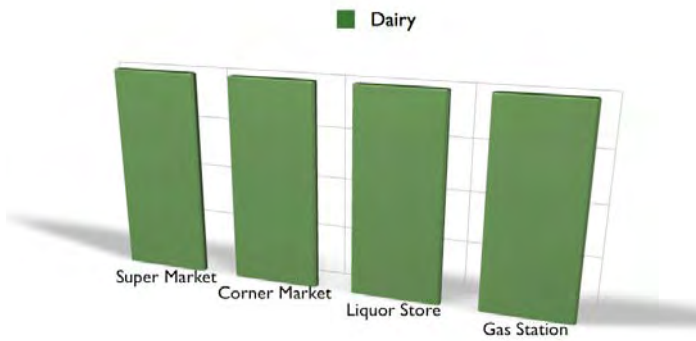


The supermarket is the only retail source of fresh fruits.

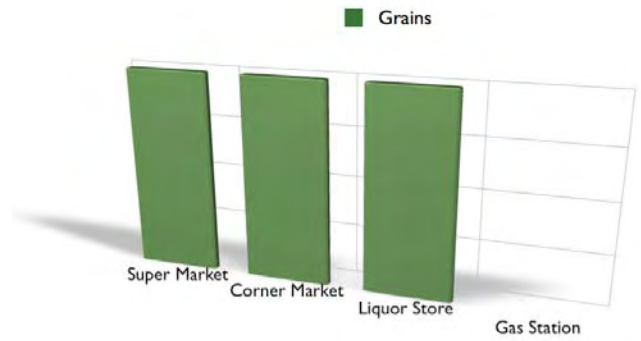


Fresh vegetables are available at the supermarket and corner market.

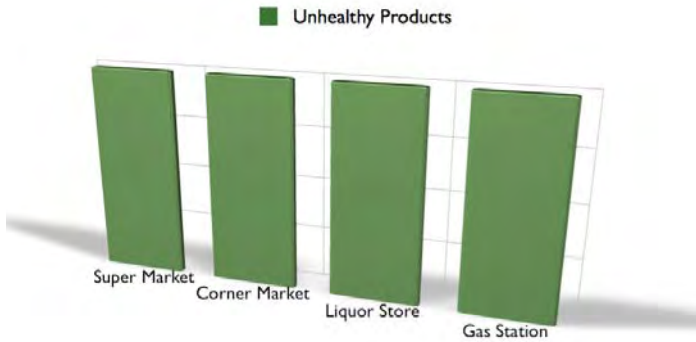




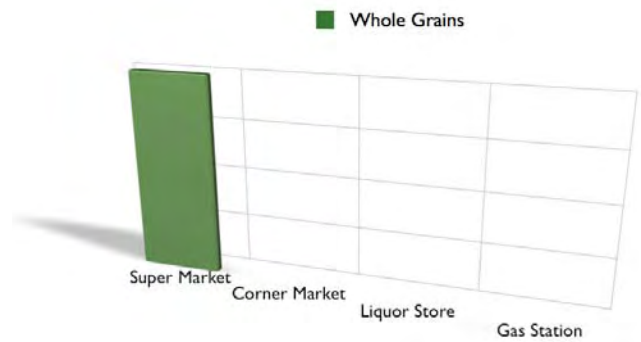
Dairy products are available at all store types.



Grains can be found in most retail stores.



All retail store types are a source for unhealthy products such as candy, soda, chips, alcohol, and tobacco.



The supermarket is the only source of whole grains.



## SOUTH LINCOLN HIA FOOD PRICING SURVEY AND SUMMARY

In addition to the retail food availability survey, a food audit was conducted of three local grocery stores and corner stores in the vicinity of the South Lincoln neighborhood (data collected by graduate student, Shun-Ping Chau). This portion of the report and below data is focused on the grocery stores. This food audit also addresses the routes to stores, discrepancies between the stores, and recommendations.

The food audit survey was done on prices of common foods which incorporated elements from the Store Inventory Tool from the D.C. Healthy Corner Store Program, and HDMT food audit. It also considered the built environment en-route to the stores and food disparities within the grocery stores (survey data, Appendix B).

For the walking audit portion, the starting point was set at the intersection between 10th Avenue and Navajo Street, a location considered as the center of the South Lincoln community.

- Walmart: A trip begins with walking one block to the 10th and Osage light rail station, a short train ride to Auraria Station (less than five minutes), and a bus ride of approximately eleven minutes. A round trip is approximately an hour and cost \$4.00, or \$2.00 for seniors (65+), students, and people with a disability. There is no need to cross any streets from the bus station to Walmart. On the return trip, one must cross a major street (Wadsworth Blvd.) which has pedestrian crossing lights. There is shelter at the bus stops in the form of a partially enclosed kiosk.
- Albertsons: It takes a two-minute train ride from the 10th and Osage light rail station to Alameda station, followed by at least a five-minute walk to cross a large parking lot to arrive at Albertsons. A round trip takes approximately fifteen to twenty minutes and costs the same as Walmart.
- King Soopers: There is no scheduled public transportation to the King Soopers. Regional Transportation District (RTD) offers some limited services for disabled persons at the normal fare of \$4.00 one-way. Some community members mentioned that RTD would provide rides for at least 10 people but this has been difficult for the residents to organize.
- A walk to King Soopers involves crossing multiple

streets, some without crosswalks and/or pedestrian lights. Most of the streets have curb cuts but about half the sidewalk is paved with flagstones, resulting in a rather uneven surface. Lighting is adequate only in certain areas. Some of the street lights do not work; and some are covered by overgrown trees.

The food audit determined that, overall, Walmart has the lowest prices.

- For fruits and 100% fruit juices, Walmart has the lowest prices for 10 out of 12 items, King Soopers has the lowest price for 1 item, and ties with Walmart for 1 item.
- For vegetables, Walmart has the lowest prices for 8 out of 15 items, King Soopers has the lowest prices for 4 items, and Albertsons has the lowest price for 3 items.
- For dairy products and eggs, Walmart has the lowest prices for 7 out of 11 items, Albertsons has the lowest prices for 3 items, and King Soopers has the lowest prices for 1 item.
- For cereals, grains, bread, and legumes, Walmart has the lowest prices for 14 out of 21 items, King Soopers has the lowest prices for 5 items, and Albertsons 2 items.
- For meat and fish, Walmart has the lowest prices for 5 out of 11 items, Albertsons has the lowest prices for 3 items, and King Soopers has the lowest prices for 3 items.
- For snacks, Walmart has the lowest prices for 7 out of 13 items, King Soopers has the lowest prices for 4 items, and Albertsons has the lowest prices for 3 items.

### Price Disparity

An interesting and unexpected observation during the survey was the difference in prices within the same store, among certain similar and identical products as a result of the products' location and grouping. At Walmart, a 15-ounce can of sardines in tomato sauce costs \$1.48 among other canned meats and fish, but costs \$1.56 at the "Mexican foods" aisle.

This occurrence is most noticeable at King Soopers and a more detailed survey was conducted (See Appendix B) where many items were 3-5 times more expensive in the "Mexican section". For example, canned black beans is \$2.19/15 oz. (Goya) compared to \$0.84/15 oz. (Kroger);



or sugar at \$5.19 (Zuika) for 4 lbs. compared to \$1.98 generic version in the non-Mexican section. Sharing this type of information is important for residents to make good decisions about how their money on food is spent.

PRODUCT	PRICE AT "MEXICAN AISLE"	BRAND IN "MEXICAN AISLE"	PRICE ELSEWHERE IN THE STORE	BRAND ELSEWHERE
sweetened condensed milk	\$1.99/14 oz.	Nestle	\$1.89/14 oz.	Kroger (store brand)
wheat cereal for babies > 12 mos.	\$5.99/17.6 oz	Nestle	\$1.81/8 oz.	Gerber
dried black beans	\$1.79/lb.	La Preferida	\$1.79/lb.	Kroger
dried black-eye peas	\$2.69/lb	La Preferida	\$1.49/lb.	Kroger
canned black beans	\$2.19/15 oz.	Goya	\$0.84/15 oz.	Kroger
	\$1.19/15 oz.	La Preferida	\$1.25/15 oz.	Organics*
canned pinto beans	\$2.39/15 oz.	Goya	\$0.84/15 oz.	Kroger
	\$1.09/15 oz.	La Preferida	\$1.25/15 oz.	Organics*
canned tuna in water	\$2.69/6 oz.	Dolores	\$1.50/5 oz.	Kroger
canned tuna in vegetable oil	\$2.69/6 oz.	Dolores	\$0.73/5 oz.	Kroger
canned sardines in tomato sauce	\$2.49/15 oz.	Calmex	\$1.99/15 oz.	Bumble Bee
vegetable oil	\$3.69/33.81 oz.	"1.2.3"	\$2.72/48 oz.	Kroger
pasta/noodles	\$0.59/7 oz.	La Moderna	\$0.78/lb.	generic
sugar	\$5.19/4 lbs.	Zuika	\$1.98/4 lbs.	generic
	\$2.39/2 lbs.	Zuika	\$2.29/ 24 oz.	Kroger*
baking powder	\$2.79/10 oz	Royal	\$1.89/10 oz.	Kroger

\*Organic products

For certain products, such as tuna or sardines, there may be some difference in taste since Dolores brand tuna, Calmex brand sardines, and La Preferida pasta are produced in Mexico. The dried and canned beans, however, regardless of the brand, are all US products.

The packaging and advertisement on some products are different between the mainstream brands and the Nestle sweetened condensed milk for the Spanish-speaking market. In the “Mexican” aisle, some sweetened condensed milk is sold in squeeze bottles for \$3.99 per 15.8 oz., almost twice as expensive as regular canned sweetened condensed milk. During this survey, it was observed that one family purchased this particular product. In addition, the sweetened condensed milk products in the “Mexican” aisle all have a line advertising them as “a good source of calcium” in both Spanish and English. While each serving provides 10% of the RDA, there are also 22g of sugar per serving. While this kind of advertising is within FDA guidelines, it is not seen on regular products for the English-speaking market.

