

# Sun Valley Healthy Living Initiative Evaluation Guide—

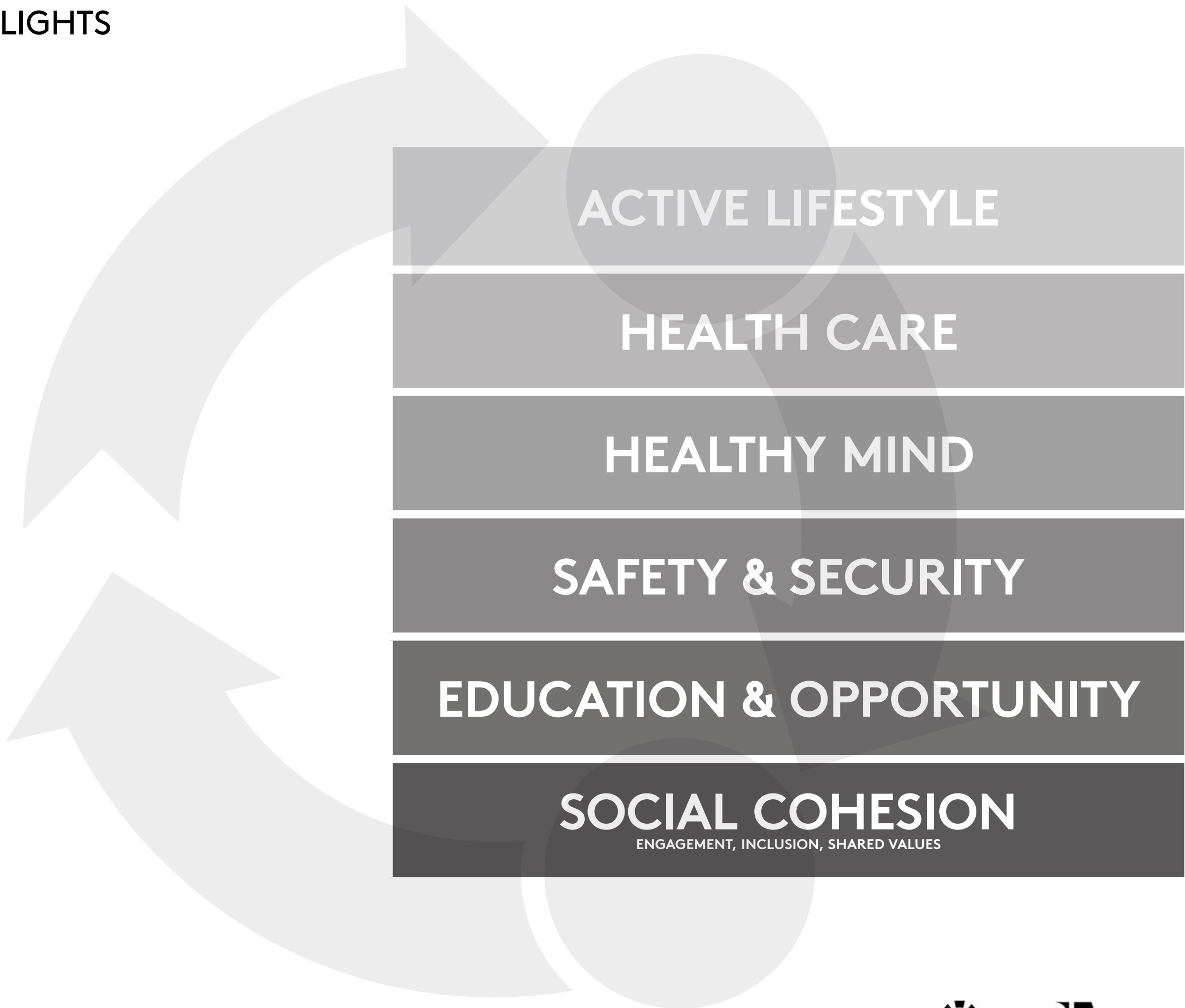
# EVALUATION GUIDE HIGHLIGHTS

This evaluation guide is to assist the Denver Housing Authority and their partners with monitoring and evaluation of health and wellness in Sun Valley throughout redevelopment and onward. Evaluation is an important, yet often underfunded, step, to track progress and inform ongoing development, design, and programming decisions. Evaluation data may also be of interest to stakeholders and other practitioners who have an interest in the connection between design, community development, programs, and health.

The evaluation metrics were vetted with the Technical Advisory Team, the Community Advisory Committee Health Working Group, and developed with these goals and criteria in mind:

- Focused on the Grow Healthy Priorities, several indicators for each
- Evaluation time frame is typically 2 year cycles to collect trend data for long term health outcomes
- Ease of data gathering
- Can be impacted through design and/or programming
- Anticipate progress / change

In addition to recommended evaluation metrics or indicators, this guide also includes a number of tools and resources for the evaluation team.




# MONITORING & EVALUATION REPORT CARD

# (1) TARGETS & RATIONALE

|  | INDICATOR  | SV TARGET       | TARGET REF.   | RATIONALE  |
|---|--|-----------------|---|--|
| <b>ACTIVE LIFESTYLE</b>   | % residents who did not participate in physical activity outside of work**   | 32.6%           | Physical Inactivity - Denver, CO Ranking                            | Inadequate physical activity is attributed to high risk of various chronic diseases through wide documentation. In addition, physical activity has been shown to reduce mental stress and anxiety. <i>San Francisco Dept. of Public Health, n.d.</i>   |
|   | % Denver Public Schools students 6-11 year olds who are overweight /obese    | -5% in 7 years  | Denver Childhood Obesity Monitoring Rpt 2012-2016                   | Overweight and obese children are likely to stay obese into adulthood and more likely to develop non-communicable diseases like diabetes and cardiovascular diseases at a younger age. <i>Sahoo K, Sahoo B, Choudhury AK, Sofi NY, Kumar R, Bhadoria AS. 2015.</i>   |
|   | % adults who are overweight /obese   | -5% in 7 years  | Healthy People 2020 NWS-9   | Obesity results in higher morbidity rates and reduced quality of life stemming from associated cardiovascular disease, type-2 diabetes, obesity related cancers, osteoarthritis and psychological disturbance. <i>Dixon J. 2010.</i>   |
|   | % adults consuming fewer than 1 serving of Fruit/Vegetable per day**         | 25%             | Denver Food Vision 2030 - pg. 44                                    | Access to healthy food choices is directly correlated to obesity and diabetes rates, which occur in higher rates among people living in low-income communities with worse food environments. <i>California Center for Public Health Advocacy. 2008.</i>  |
|   | Percentile for Outdoor Air Quality: Air Toxics Cancer Risk**                 | >70 percentile  |   | Increased exposure to PM2.5 is associated with detrimental cardiovascular outcomes, including higher blood pressure and heart disease <sup>58</sup> . Traffic related noise and air pollution is associated with cardiovascular and respiratory diseases, including asthma. <i>Laurens PF, Vissers JA, Jessurun M. 1999.</i>   |
|   | % days “Good” Outdoor Air Quality  | ?               | Healthy People 2020 - EH1   | Increased exposure to PM2.5 is associated with detrimental cardiovascular outcomes, including higher blood pressure and heart disease <sup>58</sup> . Traffic related noise and air pollution is associated with cardiovascular and respiratory diseases, including asthma. <i>Laurens PF, Vissers JA, Jessurun M. 1999.</i>   |
|   | Indoor Air Quality**   | ?               |   | Homes that have inadequate heating or ventilation, can lead to the growth of mold, and dust mites, leading to asthma and respiratory allergies. <i>Institute of Medicine. 2000.</i>  |
| <b>HEALTH CARE</b>  | % residents unable to work due to health problems**                          | 14%             | Healthy People 2020 DH-15   | Unemployment has been consistently linked to poor health, and has been associated with higher mortality rates, especially from heart disease and suicide. <i>Beland F, Birch S, Stoddart G. 2002.</i>  |
|   | % adults who had a routine checkup in the last year                          | 60%             |   | Greater use of proven clinical preventive services in the United States could avert the loss of more than two million life-years annually and significant cost savings. Preventive care can help identify and address chronic issues early. <i>Maciosek, M. V., et al. 2010.</i>   |
|   | Ratio of outpatient to emergency room visits (Children/Adults)**             | ??              |   | Older adults experience higher rates of adverse health outcomes after ER discharge; ER practice and models of care do not adequately respond to the complex care needs of frail older patients. <i>Aminzadeh, F., &amp; Dalziel, W. B. 2002.</i>   |
|   | % of residents reporting asthma in the last year (Children/Adults)**         | -5% in 7 years  |   | Greater perceived control of asthma was associated with better physical health status, quality of life, fewer days of restricted activity, and significantly lower risk of ER visits. <i>Calfee, C. S., Katz, P. P., Yelin, E. H., Iribarren, C., &amp; Eisner, M. D. 2006.</i>  |
| <b>HEALTHY MIND</b>   | % residents who have experienced stress in the last year**                   | 13%             | Healthy People 2020 DH-18   | Stress' damaging impacts on physical and mental health are substantial and is the primary way that health inequities are produced. Stressors proliferate over the life course and across generations, widening health gaps between advantaged and disadvantaged group members and are lessened by social ties. <i>Thoits, P. A. 2010.</i>  |
|   | % residents whose mental health is not good for more than 14 days            | 19.1%           | Frequent Mental Distress  | Poor mental health can result in various physical ailments and can exacerbate other socioeconomic risk factors.  |
|   | % Canopy Cover   | 20%             | Denverright: Game Plan for a Healthy City                           | Parks and natural open space areas promote physical activity and social interaction. Areas with natural vegetation also have direct effects on physical and mental health. <i>Vries S, de Verheij RA, Groenewegen PP, Spreeuwenberg P. 2003.</i>   |
| <b>SAFETY &amp; SECURITY</b>  | % adults who report feeling safe at night in neighborhood**                  | 85%             |   | Residents' feelings about safety can be a disincentive to engage in physical activity outdoors and to engage in social interaction, and a source of chronic stress. <i>Foster S, Giles-Corti B. 2008.</i>  |
|   | Total Crime Rate per 1000 residents**  | -20% in 7 years |   | Concerns about crime strongly influence walking rates and outdoor physical activity participation. Witnessing crime also increases stress, emotional, and behavioral problems. <i>Kerr J, Rosenberg D, Sallis JF, et al. 2006.</i>   |
|   | # of Pedestrian and Bike collisions in neighborhood**                        | 0               | Denver Vision Zero Action Plan                                      | This is an indicator of the safety risk of the street network for road users, including pedestrians, cyclists, drivers and passengers. Traffic collisions involving motor vehicles are one of the leading causes of preventable injury in the nation. <i>Ewing R, Dumbaugh E. 2009.</i>  |
| <b>EDUCATION &amp; OPPORTUNITY</b>  | % households that have access to the Internet                                | 96%             | CO - Increase access to reliable, cost-effective broadband internet | Broadband access can play an important role in helping patients manage chronic diseases by providing online connections to providers, health coaches, or patient support groups; and can play a role in reducing substance abuse relapses. <i>Bresnick, J. 2017.</i>   |
|   | % wage earning individuals who report earning a living wage (≥\$12.95/hr.)** | +5%?            |   | The relationship between income and health is mediated through nutrition, employment conditions, parenting resources, leisure and recreation, housing adequacy, and neighborhood environmental quality, community violence, and stress. <i>Morris JN, Dankin AJ, Wonderling D, Wilkinson P, Dowler EA. 2000.</i>   |
|   | Unemployment Rate  | ?               | Unemployment - Denver Ranking                                       | Unemployment has been consistently linked to poor health, and has been associated with higher mortality rates, especially from heart disease and suicide. <i>Beland F, Birch S, Stoddart G. 2002.</i>  |
|   | % adults 25+ with less than HS education**                                   | 33%             |   | Educational achievement predicts positive health outcomes directly as well as the effects of education on lifetime earnings. <i>Backlund E, Sorlie PD, Johnson NJ. 1999.</i>   |
|   | % children who participate in after-school or extra-curricular activities    | 90.6%           |   | Breadth of participation, or number of activity contexts, was associated with positive academic, psychological, and behavioral outcomes. <i>Fredricks, J. A., &amp; Eccles, J. S. 2006.</i>  |
| <b>SOCIAL COHESION</b>  | % report people in the neighborhood generally care about each other          | 55%             |   | Social networks and social integration are beneficial to health, including buffering from negative impacts of stress and providing better access to health services and programs. <i>Cohen S, Underwood LG, Gottlieb BH, eds. 2000.</i>  |
|   | % who report experiencing discrimination while in the neighborhood           | -5% in 7 years  |   | Perceived discrimination has significant negative effect on both physical and mental health including higher rates of hypertension and breast cancer, depression, anxiety, and higher risk for obesity, high blood pressure, and substance abuse. It produces significantly heightened stress responses, and is linked to participation in non-healthy and non-participation in healthy behaviors. <i>Pascoe, E. A., &amp; Smart Richman, L. 2009.</i> |
|   | % who know neighbors who can help in case of emergency**                     | 66.7%           |   | More tightly knit, place-based communities have higher survival rates, and their ability to rebuild after a disaster is greater than those without strong community ties.  |
|   | % have talked with familiar or unfamiliar strangers in public open spaces    | 75%             |   | Social mixing can improve health, increase empathy, provide economic opportunity, and support community resilience in case of emergency. <i>Rissom, J, Dockstader, C. et al. (2016)</i>  |
|   | % feel strongly or somewhat positive about public open spaces**              | 66.7%           |   | Parks and natural open space areas promote physical activity and social interaction. Areas with natural vegetation also have direct effects on physical and mental health. <i>Vries S, de Verheij RA, Groenewegen PP, Spreeuwenberg P. 2003.</i>   |

# MONITORING & EVALUATION REPORT CARD

## (2) TIMEFRAME & DATA SOURCE

|  INDICATOR | SCOPE  | EVALUATION TIME FRAME | DATA SOURCE           |  |
|---|--|-----------------------|-----------------------|--|
| <b>ACTIVE LIFESTYLE</b>   | % residents who did not participate in physical activity outside of work**   | Census Tract          | Long Term; 2-yr trend | 500 Cities, 2015   |
|   | % Denver Public Schools students 6-11 year olds who are overweight /obese    | Census Tract          | Long Term; 2-yr trend | CHORDS, 2018   |
|   | % adults who are overweight /obese   | Census Tract          | Long Term; 2-yr trend | CHORDS, 2015   |
|   | % adults consuming fewer than 1 serving of Fruit/Vegetable per day**         | Census Tract          | Long Term; 2-yr trend | BRFSS, 2013/2015; Community Level Est.   |
|   | Percentile for Outdoor Air Quality: Air Toxics Cancer Risk**                 | Census Tract          | Long Term; 2-yr trend | EPA EJ Screen Mapper <a href="https://ejscreen.epa.gov/mapper/">https://ejscreen.epa.gov/mapper/</a> |
|   | % days "Good" Outdoor Air Quality  | monitoring            | Long Term; 2-yr trend | EPA partnership  |
|   | Indoor Air Quality**   | monitoring            | Short Term: 1-yr      | EPA partnership  |
| <b>HEALTH CARE</b>  | % residents unable to work due to health problems**                          | SV res pop            | Long Term; 2-yr trend | DHA Resident Survey, primary collection  |
|   | % adults who had a routine checkup in the last year                          | Census Tract          | Long Term; 2-yr trend | 500 Cities, 2015   |
|   | Ratio of outpatient to emergency room visits (Children/Adults)**             | Census Tract          | Long Term; 2-yr trend | Denver Health, 2017  |
|   | % of residents reporting asthma in the last year (Children/Adults)**         | SV res pop            | Long Term; 2-yr trend | DHA Resident Survey, primary collection  |
| <b>HEALTHY MIND</b>   | % residents who have experienced stress in the last year**                   | SV res pop            | Long Term; 2-yr trend | DHA Resident Survey, primary collection  |
|   | % residents whose mental health is not good for more than 14 days            | Census Tract          | Long Term; 2-yr trend | 500 Cities, 2014   |
|   | % Canopy Cover   | Census Tract          | Long Term; 1-yr trend | Denver Urban Forest Assessment, 2013   |
| <b>SAFETY &amp; SECURITY</b>  | % adults who report feeling safe at night in neighborhood**                  | SV res pop            | Medium Term; 1-yr     | DHA Resident Survey, primary collection  |
|   | Total Crime Rate per 1000 residents**  | Census Tract          | Long Term; 1-yr trend | Denver Police Department   |
|   | # of Pedestrian and Bike collisions in neighborhood**                        | Census Tract          | Medium Term; 1-yr     | City of Denver Dashboard   |
| <b>EDUCATION &amp; OPPORTUNITY</b>  | % households that have access to the Internet                                | SV res pop            | Medium Term; 1-yr     | DHA Resident Survey, primary collection  |
|   | % wage earning individuals who report earning a living wage (>=\$12.95/hr)** | SV res pop            | Long Term; 1-yr trend | DHA Resident Survey, primary collection  |
|   | Unemployment Rate  | Census Tract          | Long Term; 2-yr trend | ACS, 2011-2015   |
|   | % adults 25+ with less than HS education**                                   | Census Tract          | Long Term; 2-yr trend | Piton, 2015  |
|   | % children who participate in after-school or extra-curricular activities    | SV res pop            | Long Term; 2-yr trend | DHA Resident Survey, primary collection  |
| <b>SOCIAL COHESION</b>  | % report people in the neighborhood generally care about each other          | SV res pop            | Medium Term; 1-yr     | DHA Resident Survey, primary collection  |
|   | % who report experiencing discrimination while in the neighborhood           | SV res pop            | Medium Term; 1-yr     | DHA Cultural Health Survey, 2018   |
|   | % who know neighbors who can help in case of emergency**                     | SV res pop            | Medium Term; 1-yr     | DHA Resident Survey, primary collection  |
|   | % have talked with familiar or unfamiliar strangers in public open spaces    | see notes             | Medium Term; 1-yr     | Public Life Survey, primary data collection  |
|   | % feel strongly or somewhat positive about public open spaces**              | see notes             | Medium Term; 1-yr     | Public Life Survey, primary data collection  |

\*2017 question was safe at night at home

\*\*Essential Healthy Living Initiative indicators

# MONITORING & EVALUATION GUIDANCE

Evaluation is an important piece of the Healthy Living Initiative to track progress, understand effectiveness of projects and programs, and identify persistent and / or emerging health issues. DHA has committed to evaluation throughout the construction and redevelopment process and beyond. Information gained from evaluation may be used by DHA and partners to inform programs and projects; and will be shared with the residents and community on an annual basis. The key indicators in the HLI Report Card include primary data, data partnerships, and secondary data.

## HLI ESSENTIAL INDICATORS

As part of DHA's institutional commitment to the Healthy Living Initiative, health indicators can be tracked across multiple communities or properties to assess performance and opportunities for improvement. After completing a crosswalk to identify synergies between the Mariposa HLI and Sun Valley HLI, several indicators have been identified as Essential that should be monitored across DHA communities to streamline efforts. These are highlighted on the Monitoring & Evaluation Report Card.

## PRIMARY DATA COLLECTION

**Resident Survey** - Annual survey to track wellbeing of resident households that is conducted in person; a source for 7 of the key indicators in the Evaluation Report Card. As each phase of development and new buildings are opened, an initial survey of residents should be conducted to establish a baseline for future evaluation purposes and to help identify previously unknown needs that could be addressed through Campaigns. Key factors to meaningful data tracking are to maintain a unique identifier per household to enable longitudinal data collection; and to include essential questions highlighted on the survey in the appendix. In the future, consider conducting surveys with a translator and validating survey questions. If possible, the surveys should be coordinated with other points of contact with residents, such as annual inspections, other surveys (such as post occupancy evaluation or energy behaviors), or community health ambassador visits. Resident Survey data is self-reported, and representativeness is contingent upon response rate.

**Public Life Survey** - The current Sun Valley community exhibits strong social cohesion based on several measures, and there is documented community concern about

displacement through redevelopment. This tool measures social mixing and inclusivity within public spaces, including observational data as well as intercept interviews, and will provide important insights through the course of redevelopment. It uses Gehl Institute's Public Life Toolkit Method; see appendix for survey forms and methodology. A web-based survey app is under development and may be available later in 2019. The baseline Public Life Survey was conducted in the South Platte Riverfront Playground, front/back yards of Sun Valley Homes, Rude Recreation Center, and the RTD platform in 2017. Ongoing surveys should be conducted in existing and new public open spaces.

## DATA PARTNERSHIPS

### Denver Public Health: CHORDS data and data analysis.

DPH was an important collaborator in the Sun Valley Baseline Health Needs Assessment, serving as a technical advisor, gathering data, and performing analysis on several indicators. DPH was able to request CHORDS data to gain a better understanding of priority health needs and top emergency diagnoses. DPH also conducted an equity analysis of several health indicators by disaggregating data by race, age, and immigration status; and identifying any inequities of statistical significance. Moving forward, DPH should be viewed as an important partner and potential resource for ongoing evaluation.

**EPA: Air Quality Monitoring.** In early 2019, DHA launched an Air Quality Monitoring partnership with EPA and Aeroqual including the installation of two on-site monitors. EPA will assist with gathering outdoor and indoor air quality data to monitor particulate matter, carbon monoxide, and ozone. Data can be used to study the temporary impacts of construction, the long term impacts of redevelopment compared to the baseline (including additional tree canopy, street grid and congestion reduction), and to identify areas of concern and/or seasons / months of concern. Data could be used for public health messaging to advise on outdoor activity levels for various populations. Based on the National Ambient Air Quality Standards (40 CFR Part 50), air quality goals should include: Carbon monoxide < 9 ppm. PM<sub>2.5</sub> < 15 µg/m<sup>3</sup>. PM<sub>10</sub> < 50 µg/m<sup>3</sup>. Ozone < 51 ppb.

## SECONDARY DATA SOURCES

The HLI draws from a variety of data sources. Spatial data sources vary in geographic scope, and data can also vary in

quality depending on collection methods, level of accuracy, and other factors. Therefore, various indicators cannot always be used in direct comparison. Statistics from sample surveys are always subject to sampling and non-sampling error. Where spatial data has been used, it was collected at the lowest geography possible. The Sun Valley statistical area (08031000800) is referenced in many of the data used for indicators. This statistical area is a City of Denver planning area, also utilized by the Piton Foundation; or Census Tract 8. Secondary Data Collection should be accessed on an annual basis; refer to the report card for data sources and to confirm frequency of monitoring.

**The 500 Cities project** is a joint venture between the Centers for Disease Control and the Robert Wood Johnson. For the 500 largest cities in the US, the project provides small area estimates of 28 unhealthy behaviors, prevention behaviors and health outcomes at the census tract and city levels for 2015. Estimates are modelled using Behavioral Risk Factor Surveillance survey data and are best suited for needs assessments and planning public health interventions.

**The Colorado Health Observation Regional Data Service (CHORDS)** is a regional, collaborative registry of health data which collects, standardizes, de-identifies and returns estimates of a wide range of population health indicators including tobacco use, hypertension control and body mass index (BMI). Data are available from 2015 forward, include both adults and children and currently covers 50% of the Denver population. Data can be used for needs assessments, planning public health interventions, monitoring progress and measuring outcomes.

**The Behavioral Risk Factor Surveillance System (BRFSS)** is the nation's largest continuously conducted health-related telephone surveys at the state level for adults about risk behaviors, chronic health conditions, and use of preventive services. CDPHE's Community Level Estimates are output from statistical models incorporating individual Colorado Behavioral Risk Factor Surveillance System (BRFSS) survey responses in addition to socio-demographic and contextual information from the U.S. Census (American Community Survey) to model the probability of having a health condition or risk behavior at the census tract geography.

**American Community Survey (ACS)** was used when complete census data was not available for an indicator. In several cases, ACS data projections were used in lieu of

actual data summaries. ACS data are typically estimates. For % of adults 25+ with less than a high school education, the Piton Foundation gathered data from the ACS 2011-2015, 5-Year Estimates Table B15002.

**The Healthy Kids Colorado Survey (HKCS)** is aligned with the Centers for Disease Control and Prevention's (CDC's) Youth Risk Behavior Survey (YRBS) that has been conducted on a two-year cycle since 1991. Professional researchers randomly select students, schools and classrooms to represent students in grades 6-12, or middle and high school. The data is county level only. 57

**Crime Rate Data** is collected by Denver Police Department which is good quality, and the 5 year ACS (2011-2015) population estimates are used to calculate rates. Traffic crash data is collected by the City of Denver and provided on the Vision Zero Dashboard at <https://www.denvergov.org/content/denvergov/en/vision-zero/reports.html>.

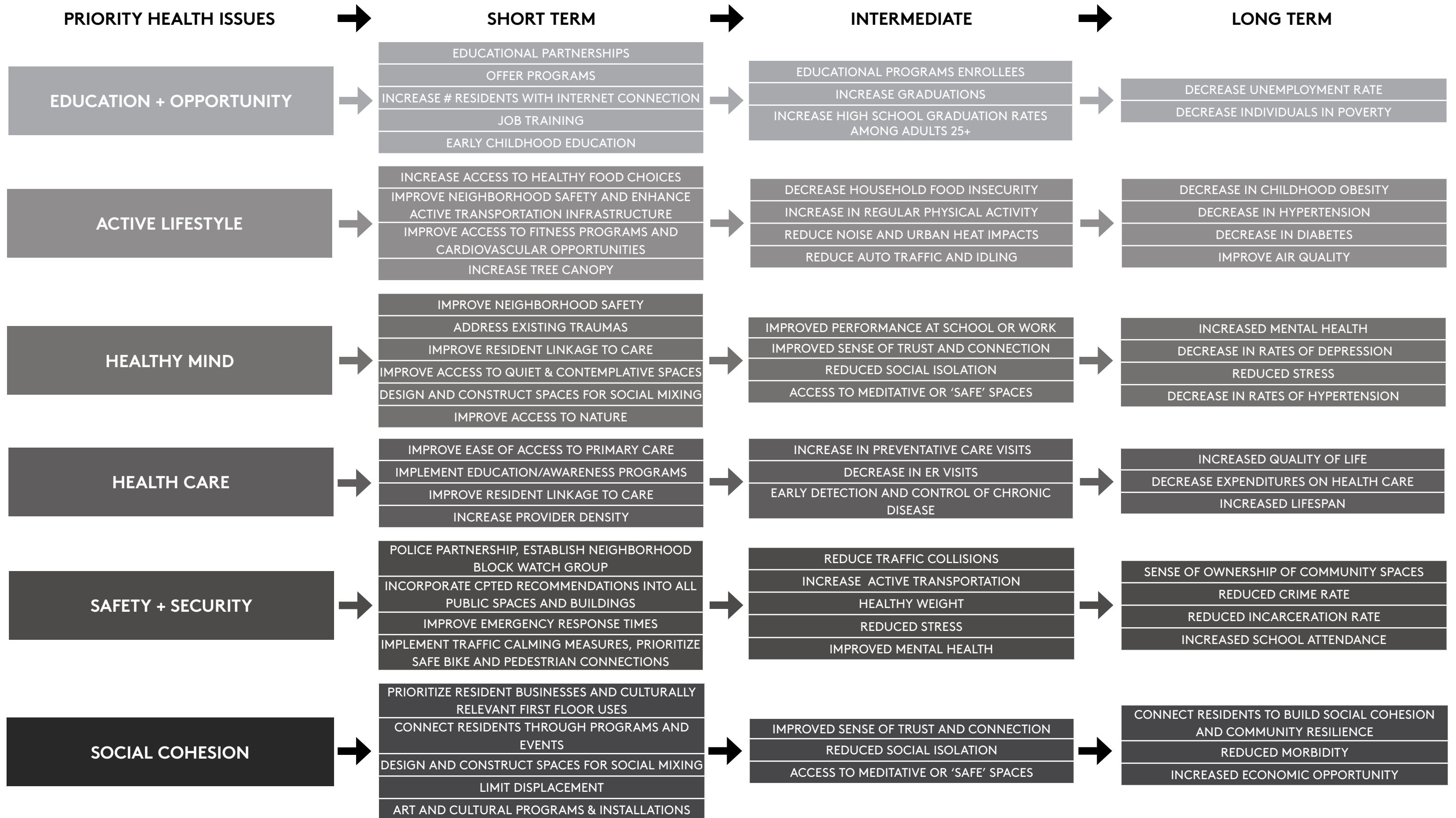
## CONSENT AND COMMUNICATION

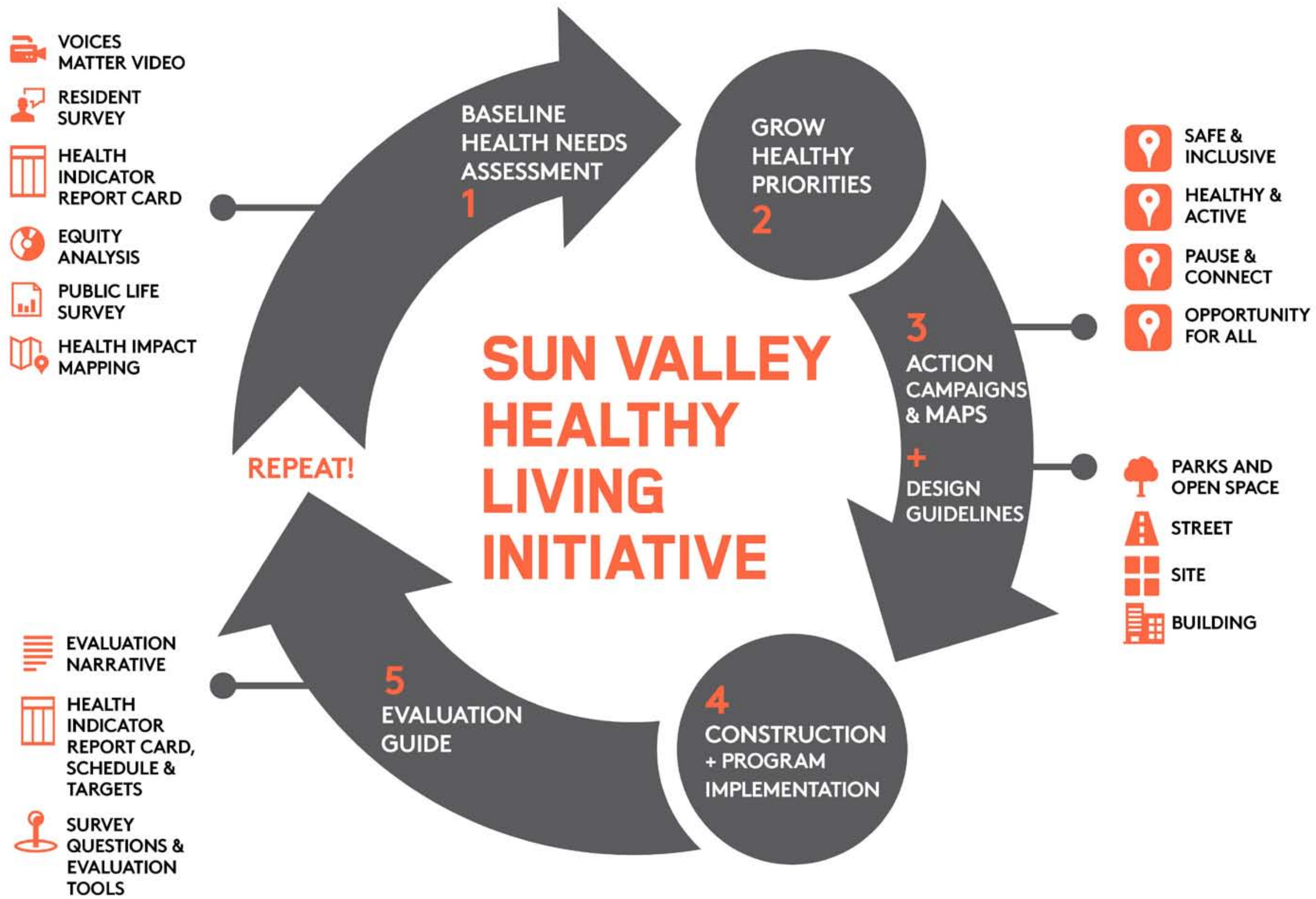
DHA should review privacy issues to determine whether an informed consent process is needed, related to sharing information, and work with partners to assess whether Institutional Review Board (IRB) approval is necessary, if biological measures are being collected.

A data management system is critical to successfully learn from and use the data. DHA should consider how data management might integrate with existing reporting mechanisms within its various departments. Alternately, DHA could work with a third party to manage the data on an ongoing basis. DHA should aim to have a data management system in place by the end of 2019, that can be accessible to HLI leads and DHA decision-makers.

The HLI leads should coordinate with DHA leadership, and report to the DHA Board and Local Resident Councils (LRC) on a biannual or annual basis. Annually, the progress should also be reported broadly to residents, neighborhood, and visitors to the community - online, on a community kiosk, through art in public gathering spaces. The Healthy Living Initiative information should be available to residents and others through a potential Community Health Navigator, by hard copy, as well as electronically.

# GROW HEALTHY LOGIC MODELS - THEORY OF CHANGE





# REFERENCES & CITATIONS

- Aminzadeh, F., & Dalziel, W. B. (2002). Older adults in the emergency department: a systematic review of patterns of use, adverse outcomes, and effectiveness of interventions. *Annals of emergency medicine*, 39(3), 238-247.
- Backlund, E., Sorlie, P. D., & Johnson, N. J. (1999). A comparison of the relationships of education and income with mortality: the National Longitudinal Mortality Study. *Social science & medicine*, 49(10), 1373-1384.
- Beland, F., Birch, S., & Stoddart, G. (2002). Unemployment and health: contextual-level influences on the production of health in populations. *Social science & medicine*, 55(11), 2033-2052.
- Bresnick, J. (2017). AMIA: Consider Broadband Access a Social Determinant of Health. *Health IT Analytics*. <https://healthitanalytics.com/news/amia-consider-broadband-access-a-social-determinate-of-health>
- Calfee, C. S., Katz, P. P., Yelin, E. H., Iribarren, C., & Eisner, M. D. (2006). The influence of perceived control of asthma on health outcomes. *Chest*, 130(5), 1312-1318.
- Cohen, S., Underwood, L. G., & Gottlieb, B. H. (Eds.). (2000). *Social support measurement and intervention: A guide for health and social scientists*. Oxford University Press.
- Dixon, J. B. (2010). The effect of obesity on health outcomes. *Molecular and cellular endocrinology*, 316(2), 104-108.
- Ewing, R., & Dumbaugh, E. (2009). The built environment and traffic safety: a review of empirical evidence. *Journal of Planning Literature*, 23(4), 347-367.
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4), 698-713. <http://dx.doi.org/10.1037/0012-1649.42.4.698>
- Foster, S., & Giles-Corti, B. (2008). The built environment, neighborhood crime and constrained physical activity: an exploration of inconsistent findings. *Preventive medicine*, 47(3), 241-251.
- Institute of Medicine. (2009) *Clearing the Air: Asthma and Indoor Air Exposures*. National Academy Press. Washington D.C.
- Kerr, J., Rosenberg, D., Sallis, J. F., Saelens, B. E., Frank, L. D., & Conway, T. L. (2006). Active commuting to school: associations with environment and parental concerns. *Medicine & Science in Sports & Exercise*, 38(4), 787-793.
- Lourens PF, Vissers JA, Jessurun M. (1999) Annual mileage, driving violations, and accident involvement in relation to drivers' sex, age, and level of education. *Accident Analysis & Prevention*. 31(5):593-7.
- Maciosek, M. V., Coffield, A. B., Flottemesch, T. J., Edwards, N. M., & Solberg, L. I. (2010). Greater use of preventive services in US health care could save lives at little or no cost. *Health Affairs*, 29(9), 1656-1660.
- Morris, J. N., Donkin, A. J. M., Wonderling, D., Wilkinson, P., & Dowler, E. A. (2000). A minimum income for healthy living. *Journal of Epidemiology & Community Health*, 54(12), 885-889.
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: a meta-analytic review. *Psychological bulletin*, 135(4), 531-54.
- Risom, J., Merker, B., Muessig, A. Scharnhorst, E., Dockstader, C., Jones, T., Laguerta, E. (2016) *The Public Life Diversity Tool Kit*. [https://issuu.com/gehlinstitute/docs/20160128\\_toolkit\\_2.0](https://issuu.com/gehlinstitute/docs/20160128_toolkit_2.0).
- The Healthy Development Measurement Tool, Urban Health and Sustainability Indicators*, San Francisco Department of Public Health, <http://www.thehdm.org/indicators/view/43>
- Thoits, P. A. (2010). Stress and Health: Major Findings and Policy Implications. *Journal of Health and Social Behavior*, 51(1\_ suppl), S41-S53. <https://doi.org/10.1177/0022146510383499>
- Regents of the University of California, PolicyLink, and the California Center for Public Health Advocacy. *Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes*. April 2008. <http://www.policylink.org/documents/DesignedforDisease.pdf>.
- Sahoo, K., Sahoo, B., Choudhury, A. K., Sofi, N. Y., Kumar, R., & Bhadoria, A. S. (2015). Childhood obesity: causes and consequences. *Journal of family medicine and primary care*, 4(2), 187-92.
- Vries S, de Verheij RA, Groenewegen PP, Spreeuwenberg P. Natural environments - healthy environments? An exploratory analysis of the relationship between green space and health. *Environment and Planning*. 2003;35:1717-1731.