

Healthy Housing Toolkit

The Healthy Housing Toolkit, developed with DPZ Co-Design for Gorman & Company, builds on the work of the University of Miami Built Environment, Behavior & Health Research Group (right).



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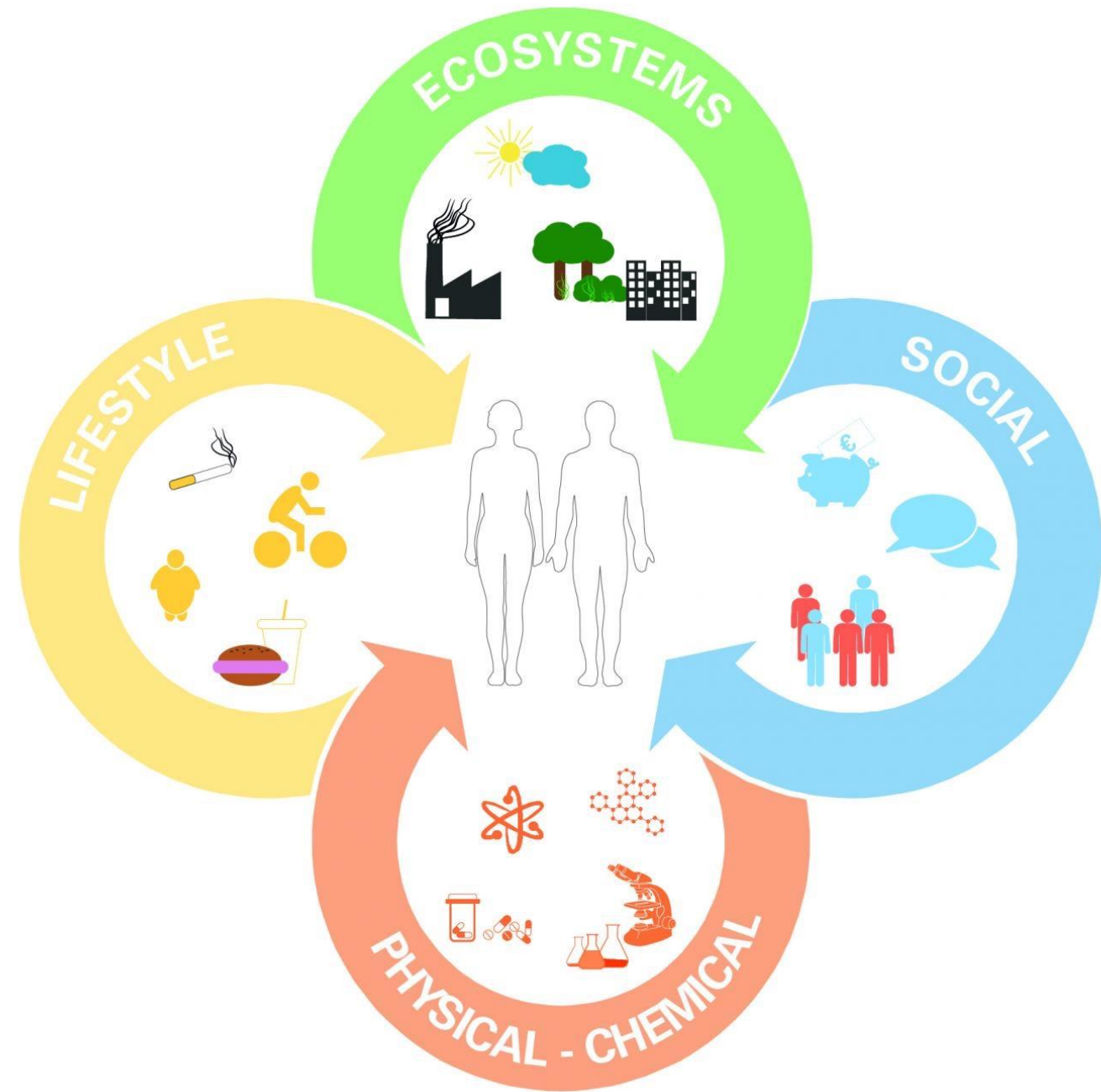
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U.S. Library of Congress

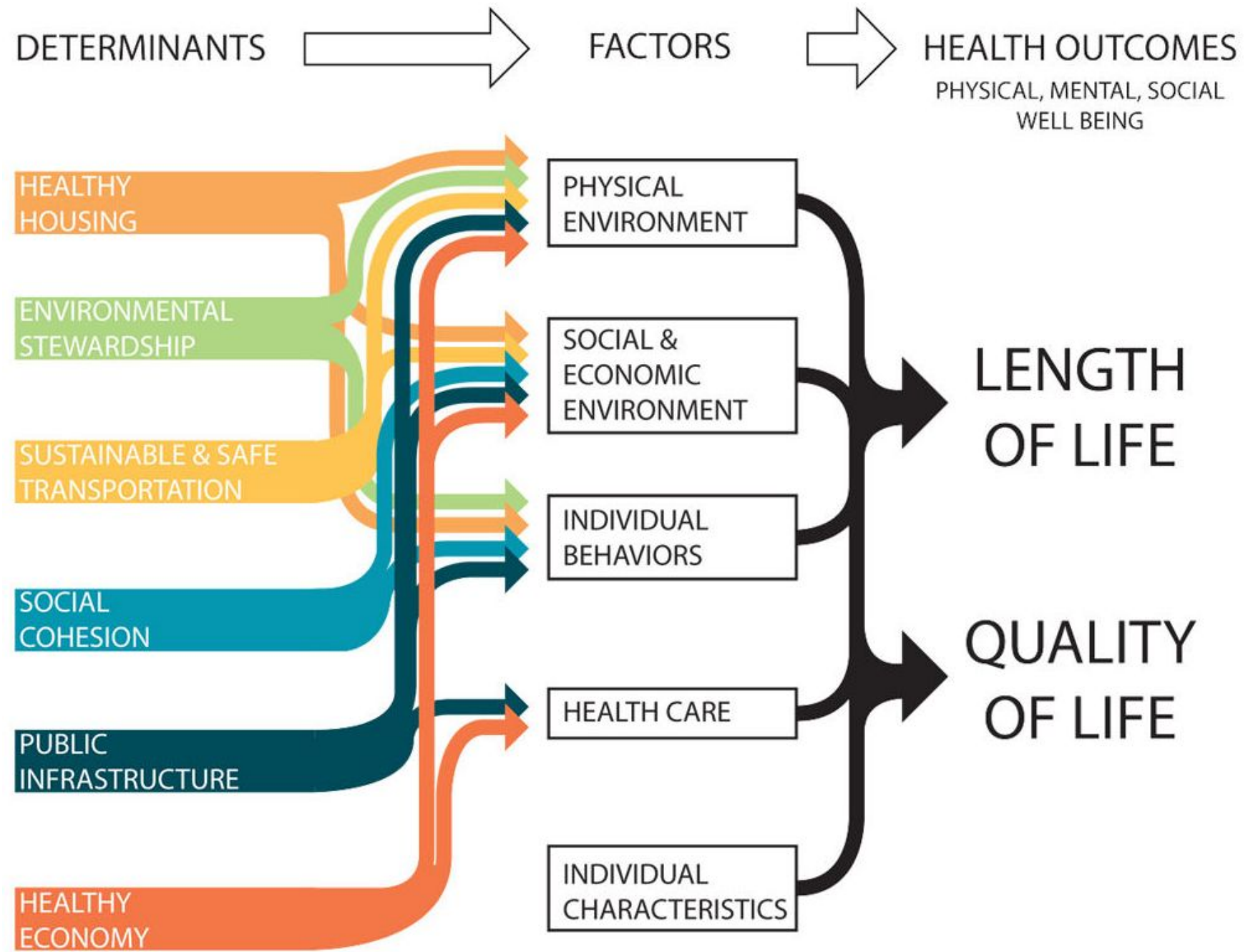
Foundation: The Exposome

Success in mapping the human genome has fostered the complementary concept of the exposome, the sum of all the exposures of an individual in a lifetime and how those exposures relate to health.



Housing : Health

Healthy housing impacts on health outcomes:



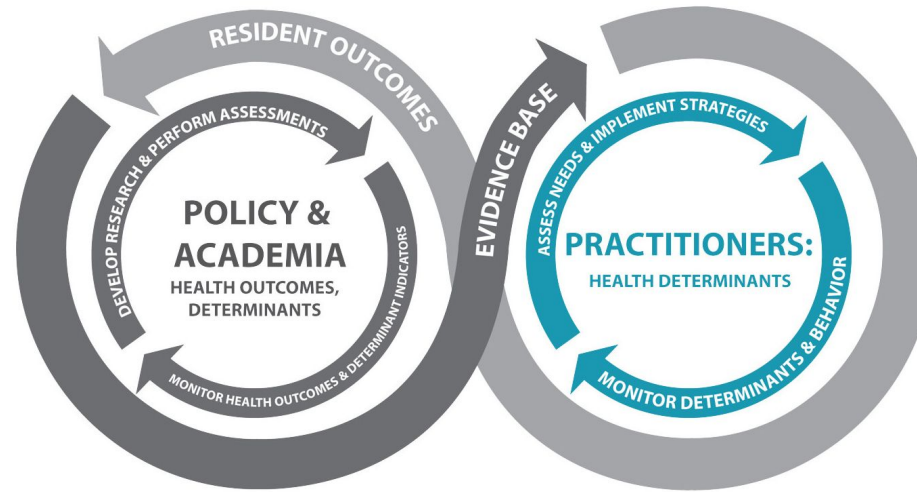
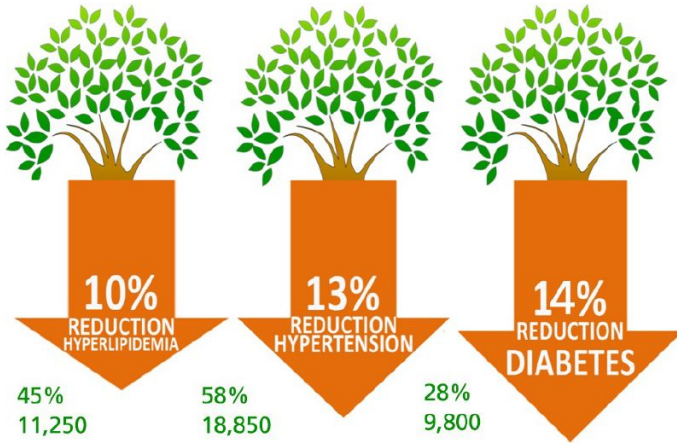
Policy : Strategy

Adaptation of San Francisco Department of Public Health's Healthy Development Management Tool (HDMT) for Denver Housing Authority's Mariposa – South Lincoln Redevelopment Master Plan
MITHŪN, Inc.

HDMT Healthy City Elements	Community Priority Issues	Plan Response
 <p>Healthy Housing</p>	<p>▶ HH.4: Healthy, Quality Housing Median income is \$38,000 compared to \$55,000 citywide</p>	<p>800-900 High Performance Units</p>
 <p>Sustainable Transportation</p>	<p>▶ ST.2: Affordable, Accessible Public Transportation Options 67% of residents say transportation is an obstacle to employment</p>	<p>Coordinated Shuttles and Bike Infrastructure</p>
 <p>Social Cohesion</p>	<p>▶ SC.2: Promote Personal Safety Neighborhood crime is 15.2 per 1,000 compared to 5.7 per 1,000 citywide</p>	<p>Active Streets and Open Spaces</p>
 <p>Environment</p>	<p>▶ ES.3: Affordable, High-Quality Food Access Only 13% have recommended servings of high fiber fruit</p>	<p>New Community Gardens</p>
 <p>Healthy Economy</p>	<p>▶ HE.2: Increase Jobs and Equity in Income and Wealth 75% of residents are unemployed</p>	<p>Job Training Spaces and Partners</p>
 <p>Public Infrastructure</p>	<p>▶ PI.5: Park, Open Space and Recreation Access 55% of residents are obese or overweight 77% of residents have high blood pressure</p>	<p>Variety of Open Spaces and Access / Linkages to Spaces</p>

Research : Application

An increase in mean block-level NDVI from -1 SD to +1 SD above the mean was associated with reductions of:



Brown, SC., et al., Relationship of neighborhood greenness to heart disease in 249,405 U.S. Medicare beneficiaries, *Journal of the American Heart Association*; Vol.8(6), 2019; Study funded by U.S. Dept. of Housing and Urban Development, "Health Impacts of the Built-Environment among Miami Medicare/Medicaid Beneficiaries," PIs, SC Brown & E.Plater-Zyberk
 Graphic: University of Miami Built Environment Behavior and Health Research Group; *The Mariposa Healthy Living Initiative, Healthy Living Toolkit: A Comprehensive Guide*, <http://mithun.com/project/mariposa-healthy-living-initiative>; Miami-Dade Parks Recreation & Open Spaces, Million Trees Miami Initiative

Healthy Housing Toolkit Design & Policy

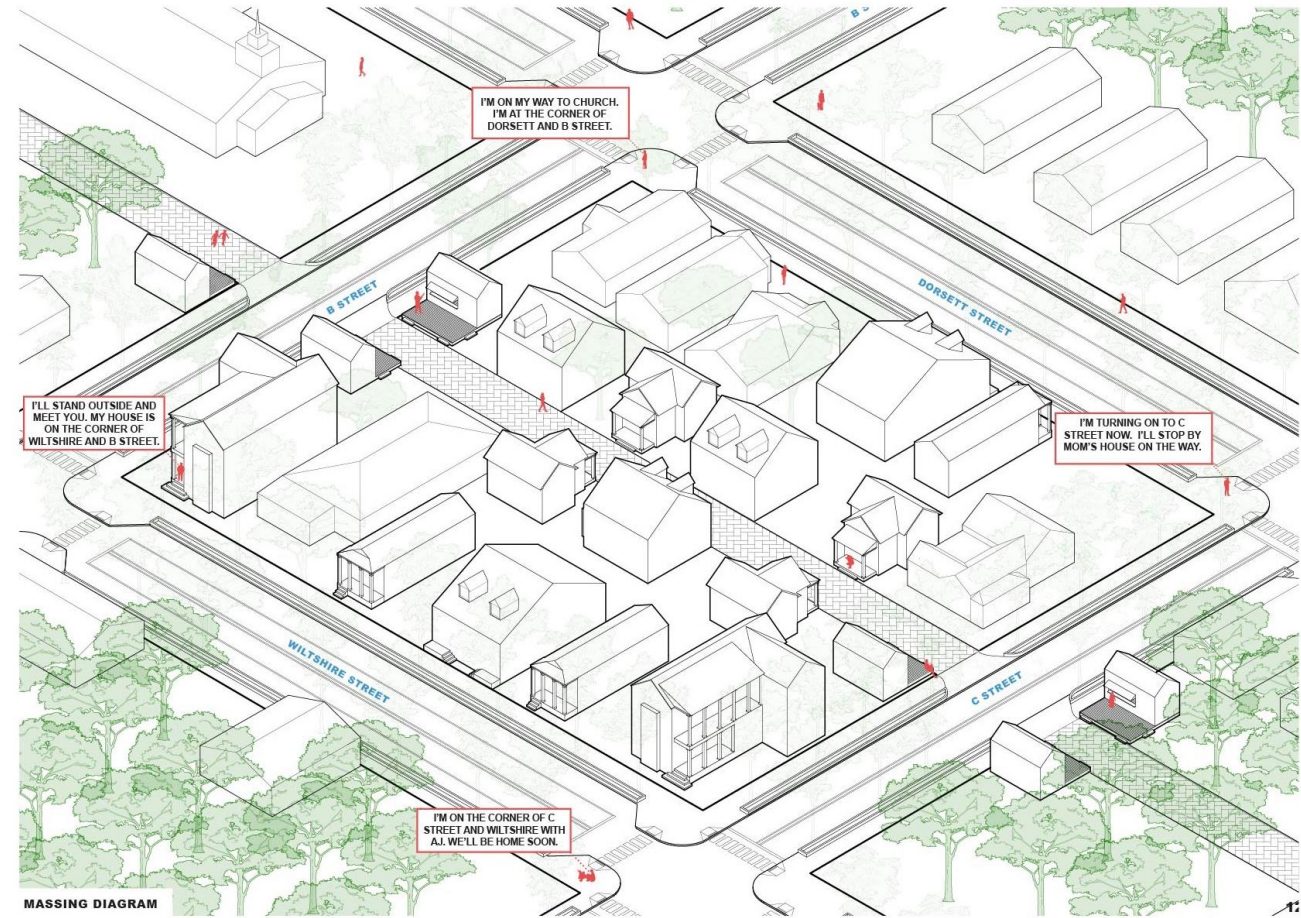
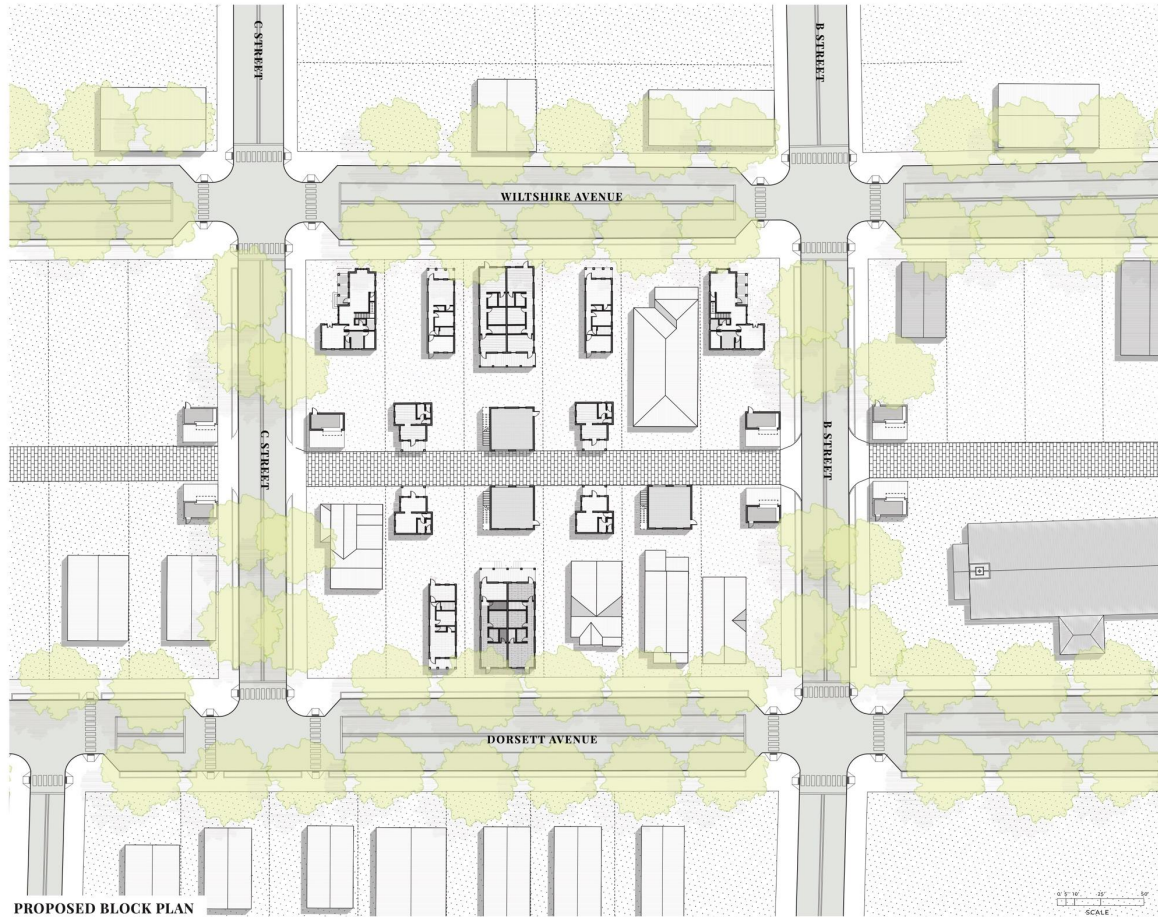
TOOLS	N-HOOD	SITE	SPu BLDG	UNIT
	Neighborhood	Site	Shared Spaces	Private Space
Destinations: Provide maximum opportunities for a mix of uses and destinations that include access to food, healthcare, education, retail, and quality-of-life locations such as churches/mosques/synagogues, parks, greens and other community gathering spots.	Policy & Design	Policy & Design	Design	
Mobility: Establish the primacy of people-first mobility, ensuring ample, safe sidewalks and crosswalks as well as multi-modal opportunities and amenities for access through accommodations for wheelchairs, service animals, bikes, cars and transit.	Policy & Design	Policy & Design	Design	
Gathering: Provide opportunities and support for multi-purpose indoor and outdoor gathering spaces with smoke-free zones that include locations for farmers markets, and festivals, as well as mobile food and clinic landings, and every-day spaces supported with exterior furnishings, such seats and benches, that enable quiet reflection and people-watching, and interior furnishings that enable community gatherings, extending to enabling family gatherings in the design of the dwellings.	Policy & Design	Policy & Design	Design	
Safety: Ensure eyes-on-the-street with transparent, habitable space on ground-floor street fronts, overlooking all sidewalks, night illumination (<3000k), and maximum visual and physical accessibility to all public spaces and greens.	Policy & Design	Policy & Design	Design	
Greenness: Provide multi-scale and purpose greenery through street trees, trails and paths, parks for all ages that serve multi-uses, including community gardens, dog parks, fitness zones and walks, as well as views of green, including trees, landscape spaces and green rooftops, from habitable spaces.	Policy & Design	Design	Design	Design
Transparency: Provide maximum external and internal transparency for shared paths and spaces, such as transparent access to stairs, as well as prominent entry features, lobby landmarks and other identifiers and encouragements in the physical and virtual world to enable beneficial interaction and independent mobility for all ages and abilities.	Policy & Design	Design	Design	Design
Comfort: Provide an ambience of welcome and comfort through a human-centered experience, that expresses the heart of the community and the care that is extended throughout, ranging from a sheltered exterior arrival with seating for waiting and watching, through a well-lit and hospitable lobby and shared spaces, extending to protection from exterior night lighting in bedrooms, as well as interior, site and neighborhood noise.		Design	Design	Design
Daylight: Ensure maximum penetrability of daylight in all habitable spaces through direct access to windows, as well as indirect access through transoms, skylights, light wells and other opportunities for borrowed daylight.			Design	Design
Air: Maximize clean air exposure through smoke-free buildings, entry mats to reduce introduction of outdoor particles, operable windows that enable cross-ventilation, air filters and HVAC systems that minimize mold, and interior finishes with minimal or no volatile organic compounds.			Design	Design

Application



Bluewater, Tavernier Key, Florida, 2.7 acres/ 36 homes

Application



Lake Wales NW, Tiffani Banks
MetroLab Network Student Cup Finalist, 2020