

COMPLETE STREET DESIGN GREENVILLE, SOUTH CAROLINA

Clemson University
Landscape Architecture
Thesis Project
Chewei Kuo



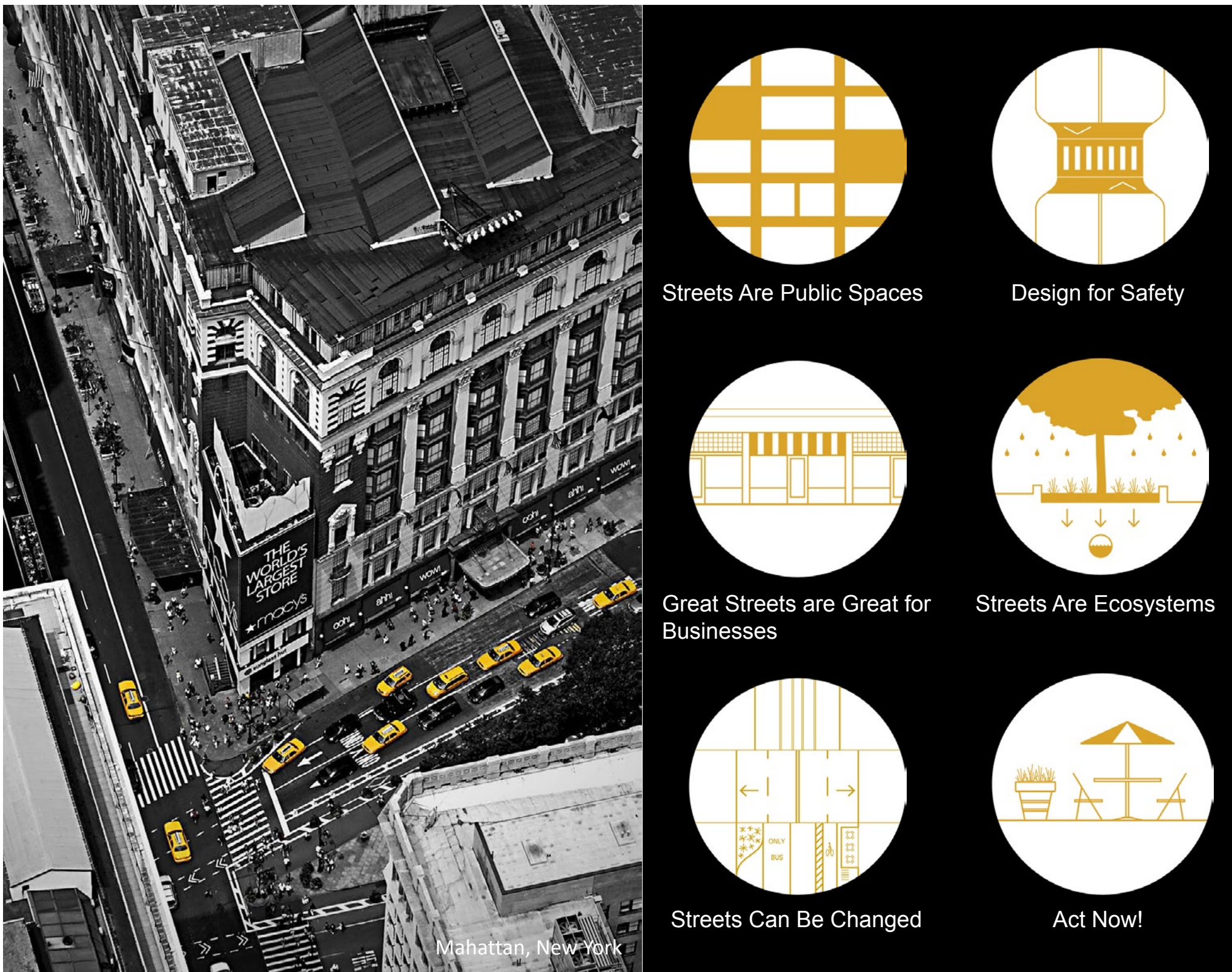
Main St, Greenville, SC

What is Complete Street Design ?

A Complete Street is one that allows pedestrians, bicyclists, transit riders, and motorists of all abilities to safely travel between destinations.

In addition to providing facilities for bicyclists, pedestrians, and transit users, Complete Streets encourage sound land use decisions and policies that foster environments that appeal to people traveling by foot and bicycle: minimal building setbacks, wayfinding signs, landscaped corridors, benches and other amenities.

[Complete Street Toolkit, South Carolina 2010]



Manhattan, New York



STREET DESIGN PRINCIPLES

Streets Are Public Spaces

In addition to providing space for travel, streets play a big role in the public life of cities and communities and should be designed as public spaces as well as channels for movement.

Design for Safety

In 2012 in the U.S., over 34,000 people were killed in traffic crashes, which were also the leading cause of death among children aged 5–14.

Great Streets are Great for Businesses

Well-designed streets generate higher revenues for businesses and higher values for homeowners.

Streets Are Ecosystems

From pervious pavements and bioswales that manage storm-water run-off to street trees that provide shade and are critical to the health of cities, ecology has the potential to act as a driver for long-term, sustainable design.

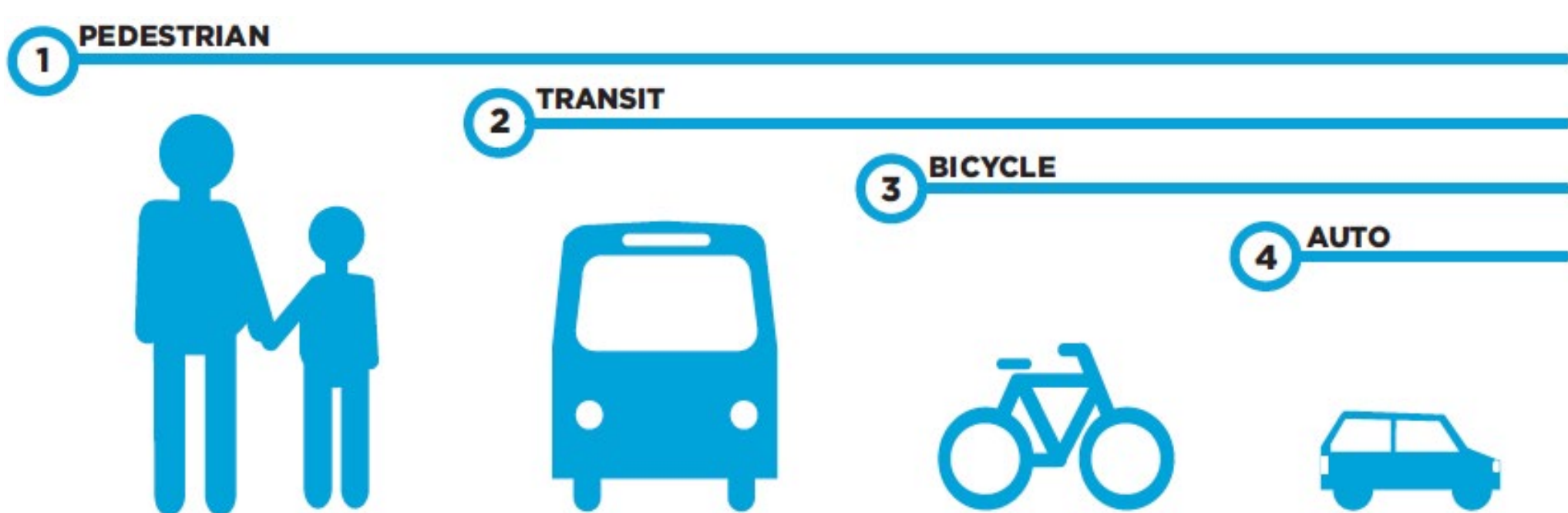
Streets Can Be Changed

Transportation engineers can work flexibly within the building envelope of a street. This includes moving curbs, changing alignments, daylighting corners, and redirecting traffic.

Act Now

Cities across the U.S. have begun using a phased approach to major redesigns, where interim materials are used in the short term and later replaced by permanent materials once funding is available and the public has tested the design thoroughly.

[NACTO Street Design Guide]



Pedestrian First Policy

To further implementation of complete streets in Chicago, transit will come second in this new order, followed by Bicycle then Automobiles (private motor vehicles). This inversion of the dominant, auto-based paradigm will allow the city's transportation network to grow safely, sustainably and equitably into the 21st Century.

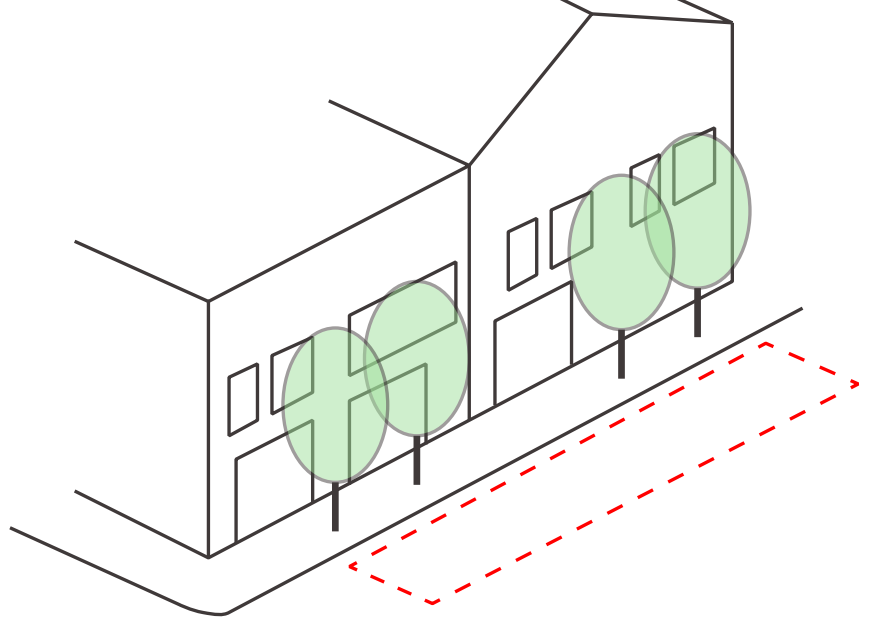
[Chicago Complete Streets Design Guidelines]



Manhattan, New York

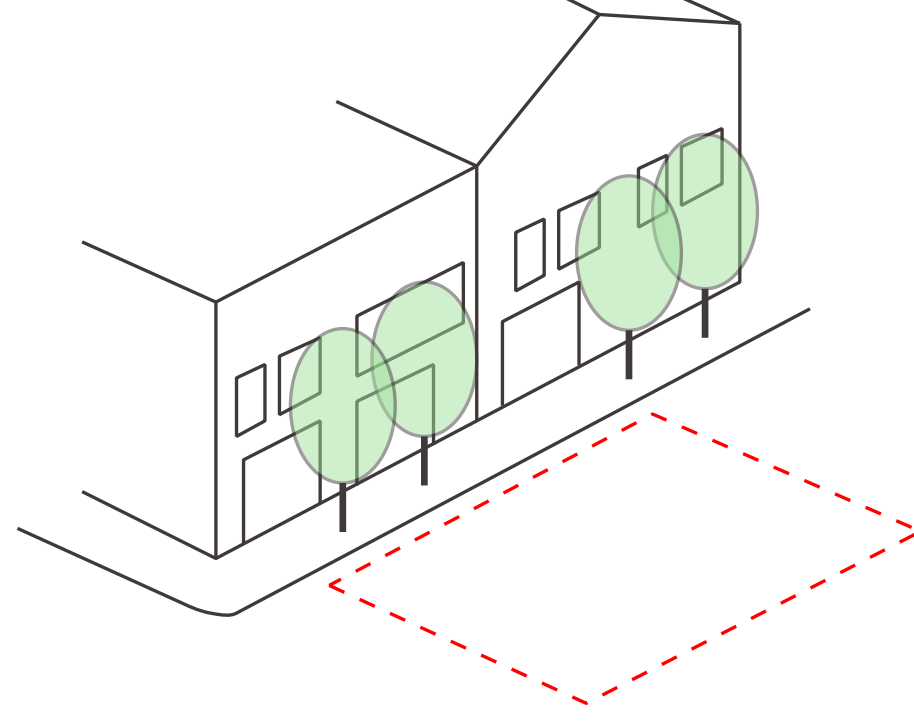
STRATEGIES

PARKING SPACE



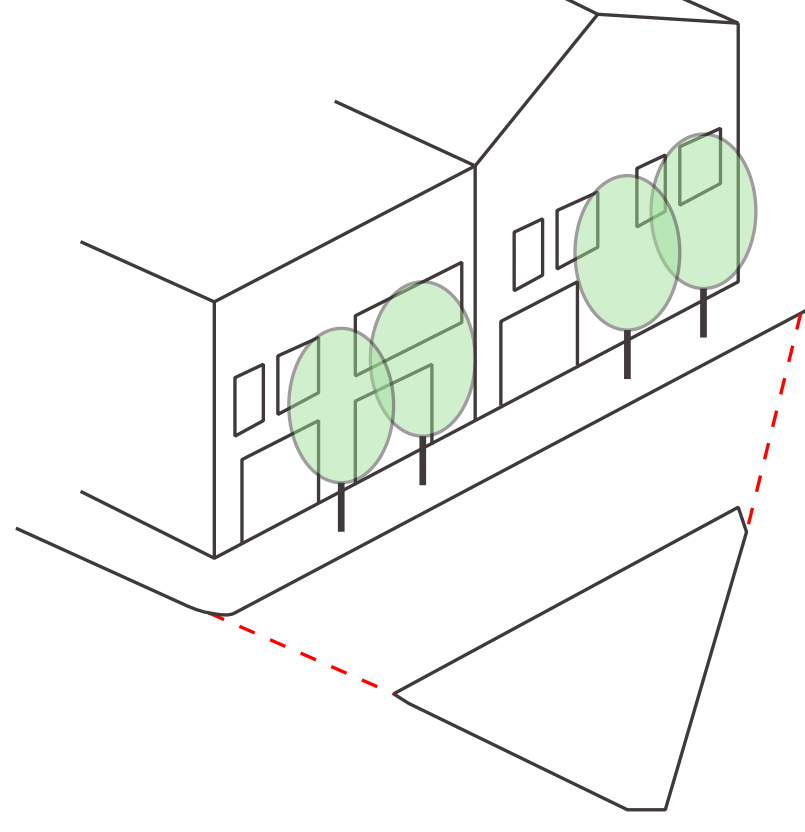
Parklet
Curb Bulb
Sidewalk Extension

STREET SPACE



Temporary Street Transformation
Street Park
Shared Street
Bike Lane and Path
Gateway
Raised Crosswalk / Intersection

RESIDUAL SPACE

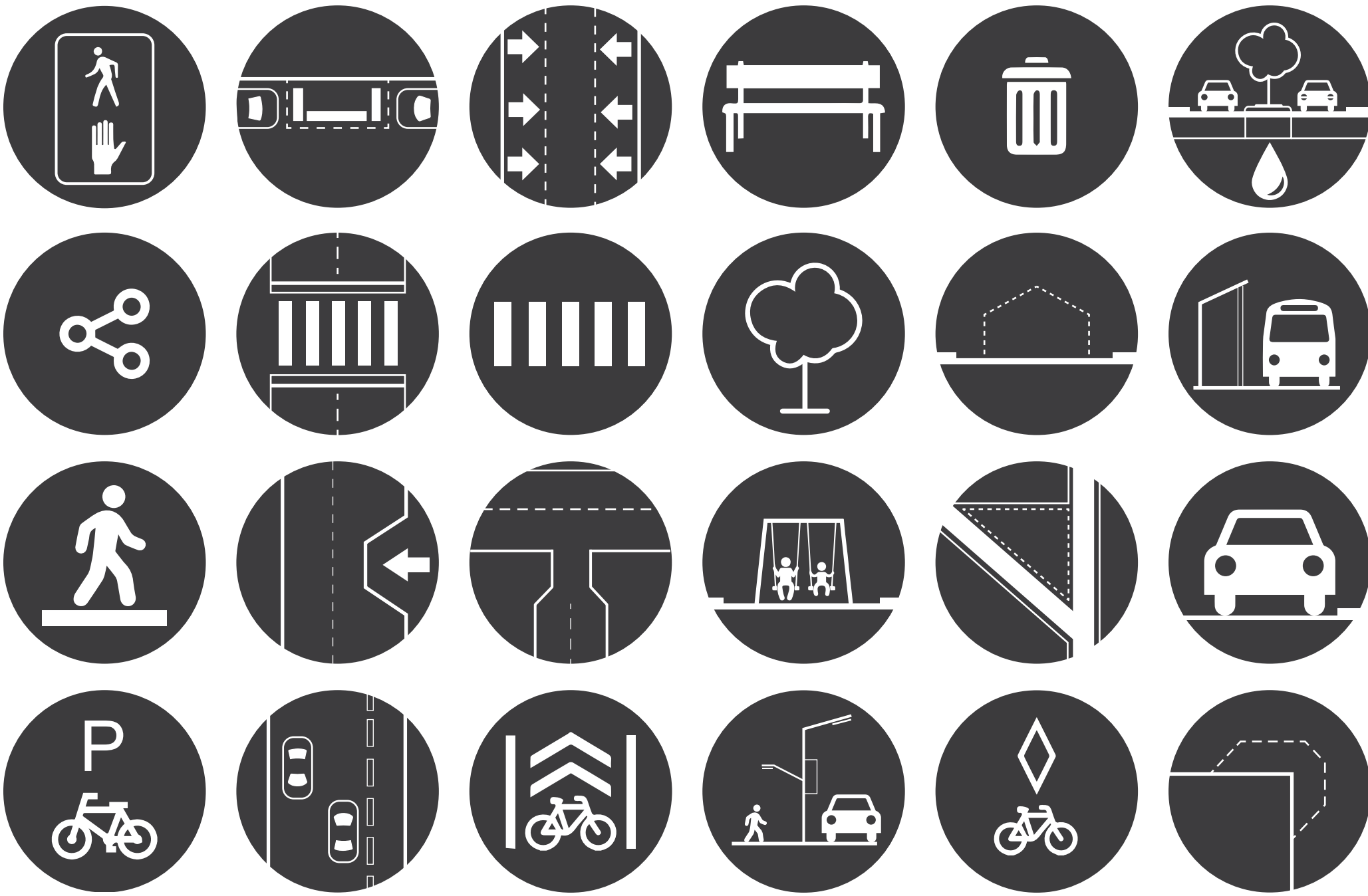


Pocket Park
Eco/Social Median
Triangle Plaza

As cities grow they will need to accommodate more people without sacrificing quality of life. The adaptations portrayed in this document are space-efficient and can support the social and economic growth of our urban centers by making them more livable, walkable and bikeable.

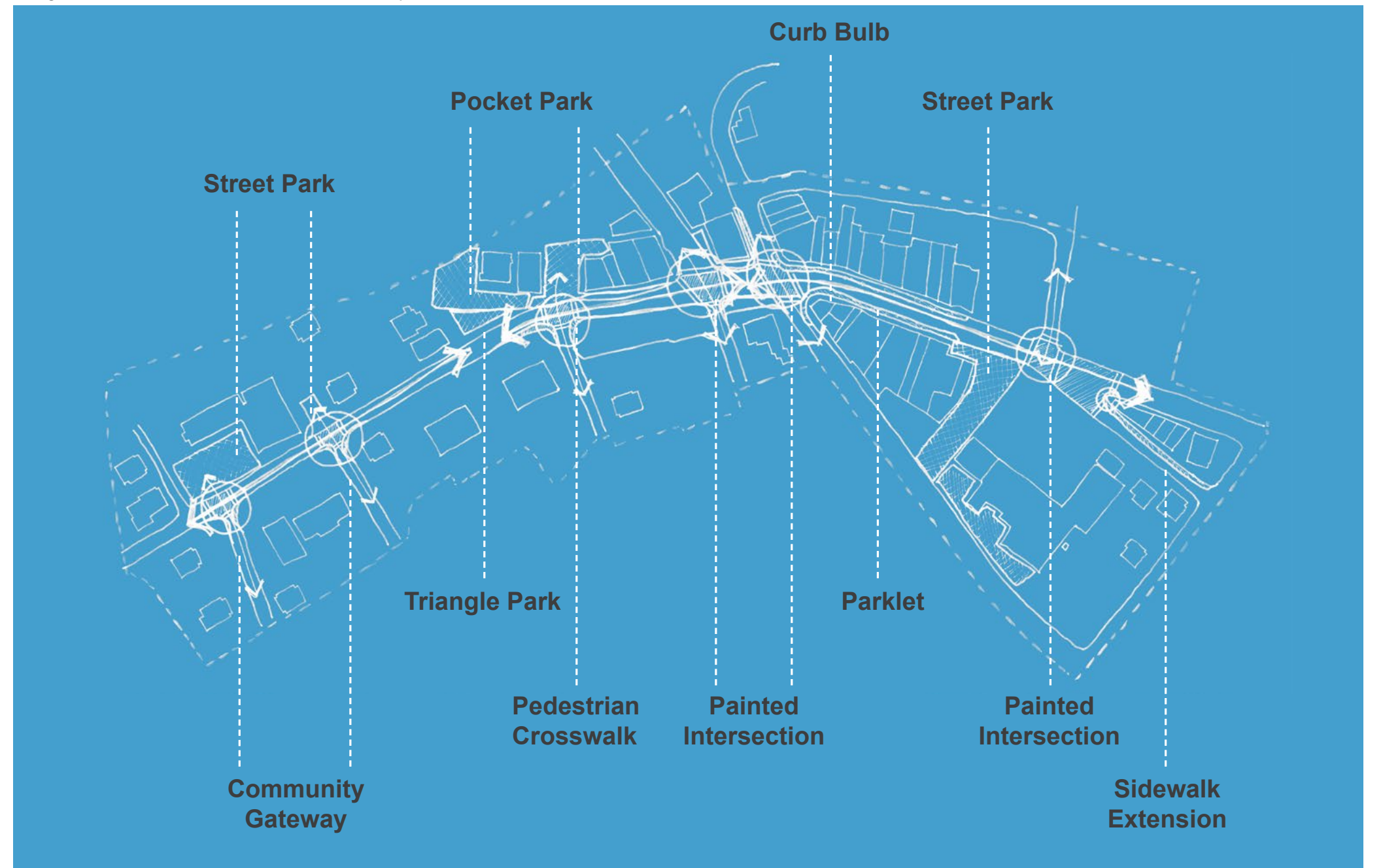
[ADAPTIVE STREETS]

DESIGN TOOLS



CONCEPTUAL DESIGN

PENDLETON ST AT WEST VILLAGE
HISTORIC COMMERCIAL STREET IN MILL DISTRICT AND ART VILLAGE
2 LANE STREET
2013 AVERAGE DAILY TRAFFIC COUNT: 7200

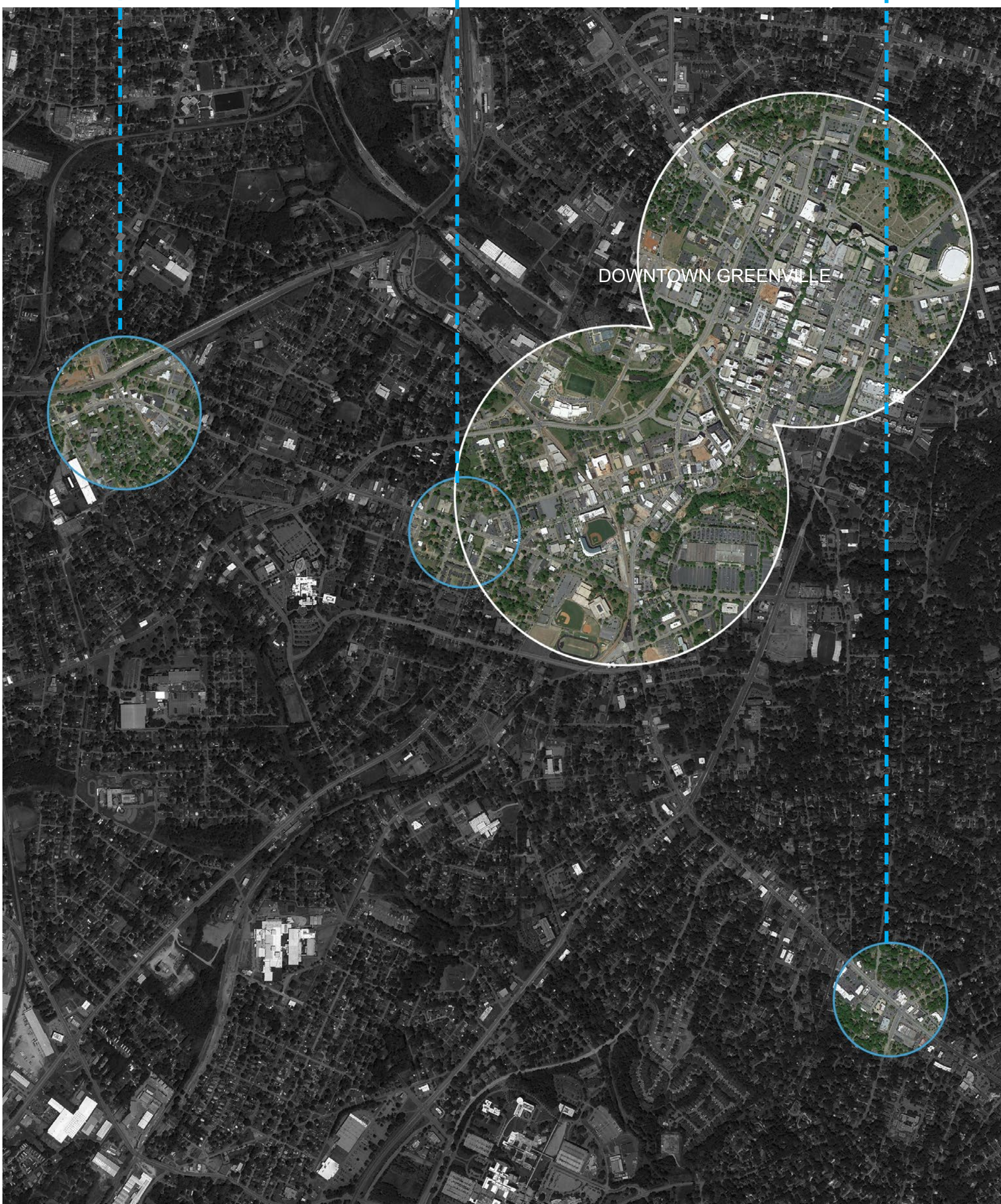


SITES

PENDLETON ST AT WEST VILLAGE

AUGUSTA ST AT FARIS RD INTERSECTION

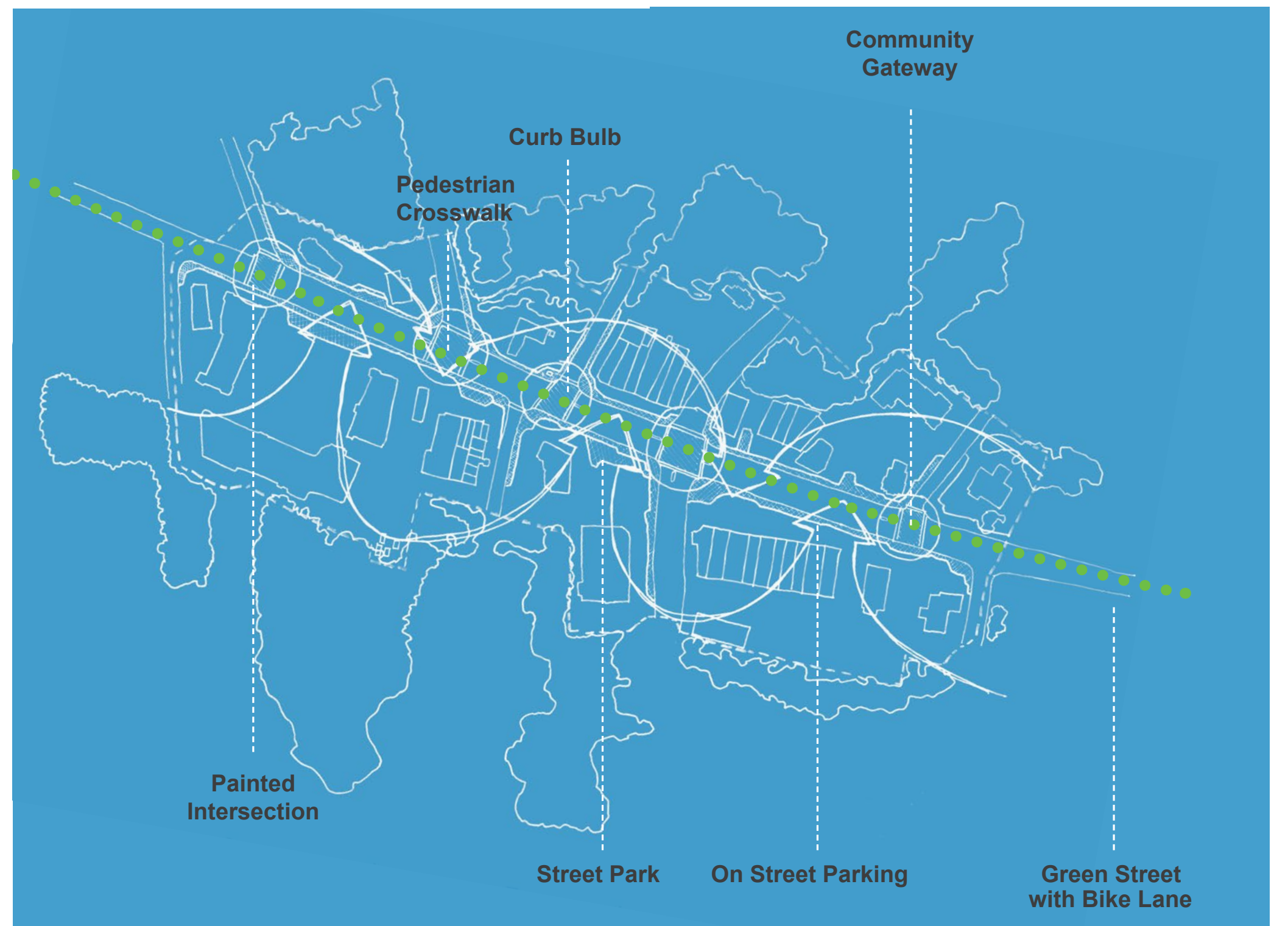
PENDLETON ST AT WEST END



PENDLETON ST AT WEST END
PLACE BETWEEN HIGH VOLUME TRAFFIC HIGHWAY AND WEST END DISTRICT
4 LANE STREET
2013 AVERAGE DAILY TRAFFIC COUNT: 8500

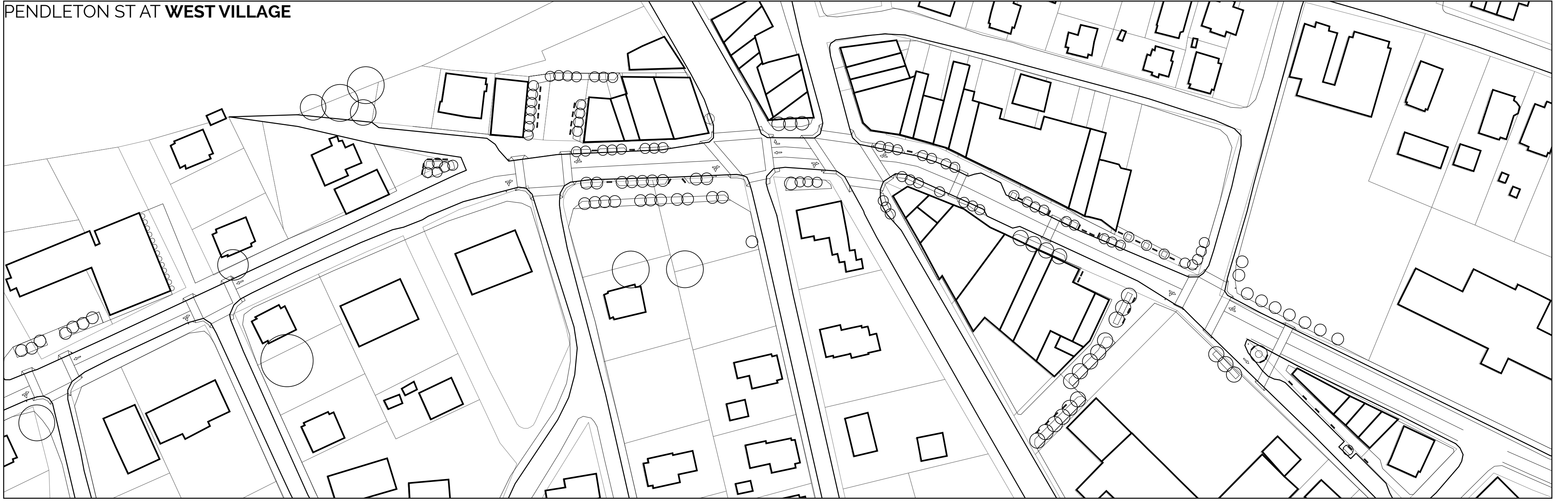


AUGUSTA ST AT FARIS RD
HIGH VOLUME COMMERCIAL STREET SURROUNDED BY RESIDENTIAL AREA
4 LANE STREET
2013 AVERAGE DAILY TRAFFIC COUNT: 19700



PRELIMINARY DESIGN

PENDLETON ST AT WEST VILLAGE



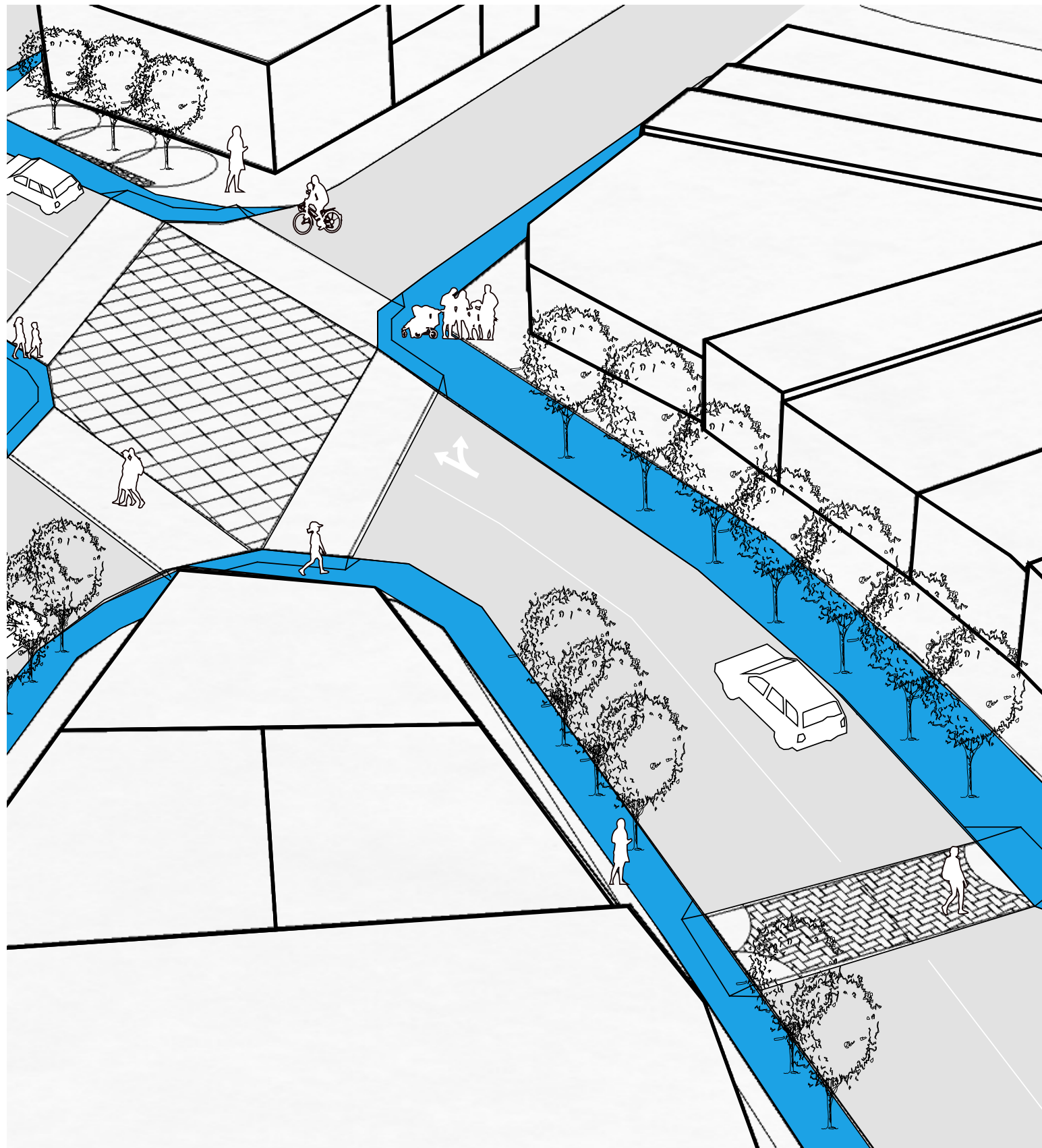
PENDLETON ST AT WEST END



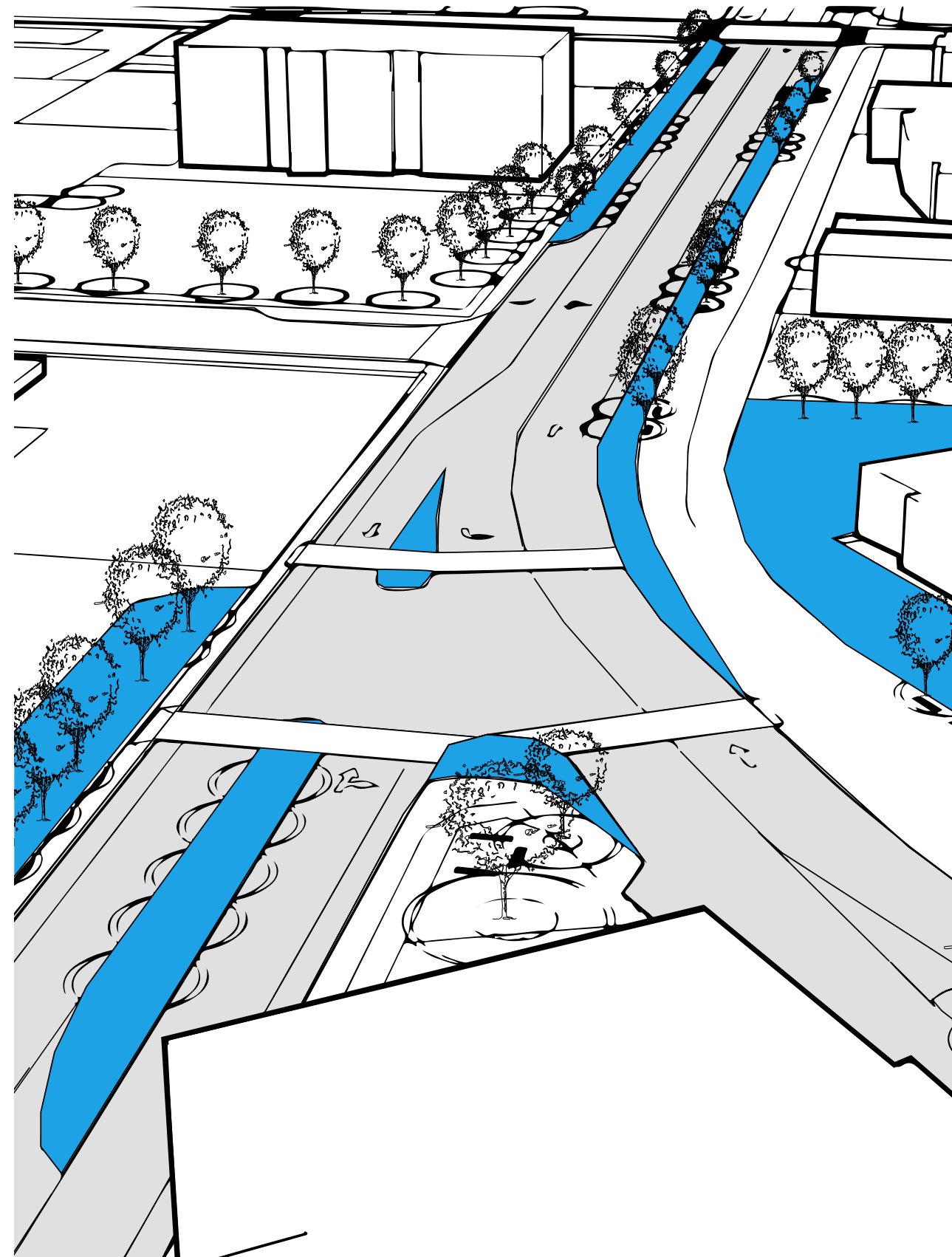
AUGUSTA ST AT FARIS RD



PENDLETON ST AT WEST VILLAGE



PENDLETON ST AT WEST END



AUGUSTA ST AT FARIS RD

