

Livability: 8 to 80

Pedestrians are “the canary in the coal mine of urban livability.” (Jeff Speck. *Walkable City*. 2014.) When the horizontal and vertical components of an inviting walk are assembled in the right way, pedestrians and street life thrive. An instructive way to think about livability and the pedestrian environment is the “8 to 80” test. “Does the pedestrian environment provide a safe, useful, and inviting pedestrian experience for an 8-year-old or an 80-year old?” Or put into other terms, “Would you let your children or your grandparents walk there?”

Streets that are designed to offer livable environments for children and seniors, will provide livable environments for everyone else.

This means creating connected sidewalk networks, providing curb ramps with gentle slopes, giving enough time for slow-moving pedestrians to cross at signals, buffering sidewalks from traffic, and planting street trees that provide shade. Essentially 8 to 80 design means taking an even more comprehensive approach to the things that are necessary for walkability.

Walkability is especially important for children and seniors. Children and seniors are among the populations who depend the most upon public transit, pedestrian networks, and/or friends and family to get around. For them the 8 to 80 design standard offers freedom and independence.

The Pedestrian Environment: Vertical

The vertical components of a pedestrian environment are the things like street trees and building fronts that help to define the public realm by providing a sense of enclosure. This important characteristic is what transforms streets into outdoor living rooms where public life is shared and enjoyed by all.

Street Trees

Trees are special to Charlotteans. Charlotte has an impressive and enduring legacy of supporting its stunning tree canopy, and over the years it has become known by many as the “City of Trees.” In 1980 Charlotte was recognized as a “Tree City USA” by the Arbor Day Foundation for its commitment to urban forestry. In addition to improving quality of life and supporting our urban ecosystem, trees are indispensable to pedestrian comfort and safety. Not surprisingly, Charlotte residents indicated that street trees are the single most important part of an inviting walking experience.

A recent study in Grand Rapids, MI estimates the average value of trees in that city at \$105/year for each street tree.³ Another study notes that “for a planting cost of \$250-\$600 (includes first 3 years maintenance) a single street tree returns over \$90,000 of direct benefits (not including aesthetic, social, and natural) in the lifetime of the tree.”⁴

Non-profit organizations like AARP, Sustain Charlotte, Charlotte Center City Partners, 8 80 Cities, and the Knight Foundation have been key partners in making Charlotte a more livable place by improving walkability.

The most inviting neighborhoods to walk are those with sidewalks, short blocks, and street trees.



Many of those benefits accrue in things like lower road maintenance costs, lower stormwater management costs, and higher property values. We perceive that value when we compare a street like Queens Road West – with a planted median and a beautiful, mature tree canopy – to streets without adequate tree cover. (See images below.)

More than just an aesthetic and economic benefit, street trees are also a safety enhancement. They have been shown to reduce speeding⁴ and, when located within a wide planting strip, they provide a physical barrier between pedestrians and moving cars. Trees even shorten perceived wait time at transit stops.⁵

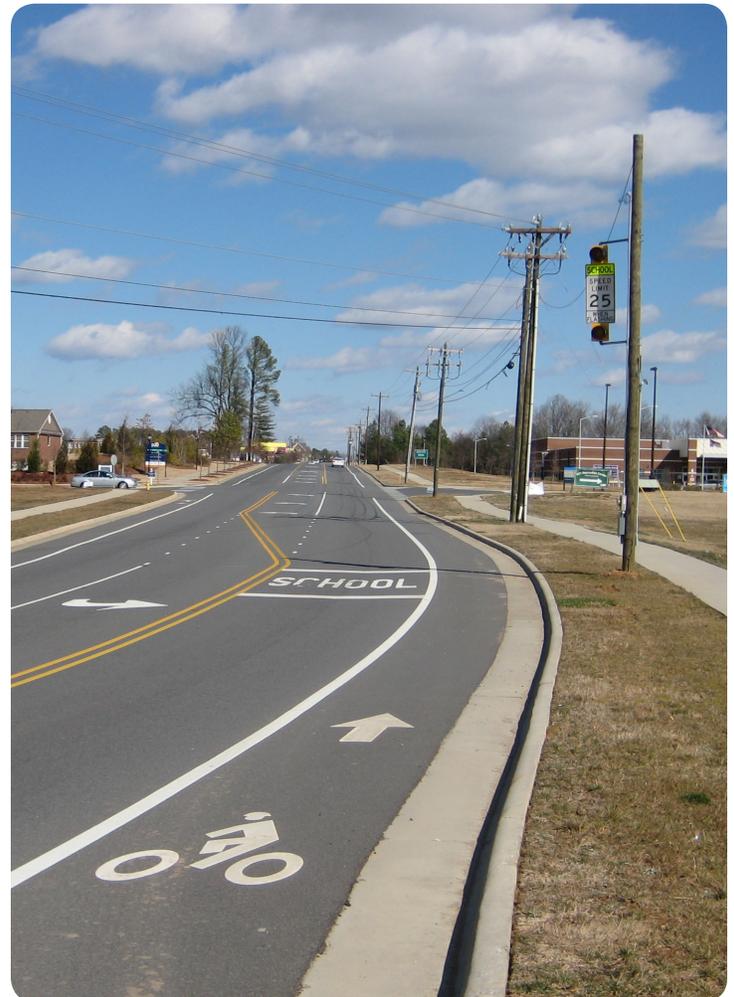
In 2008 an aerial analysis revealed a 33% loss of Charlotte’s tree canopy since 1985. Lost air quality benefits from that change are

valued at over \$8M annually, and increased costs to manage stormwater resulting from that change are estimated at over \$500M annually.⁶ In 2011, recognizing the need to preserve the tree canopy as “Charlotte’s most recognized natural treasure,” City Council adopted a goal of achieving 50% tree canopy coverage by 2050. Organizations such as TreesCharlotte and Charlotte Public Tree Fund have been instrumental in make progress toward that goal.

Action Items

In order to support inviting streetscapes and capitalize on the significant benefits of street trees, the city will:

- ▶ Continue to plant street trees as a part of capital projects wherever possible.



The value of street trees is obvious when you compare a signature street like Queens Road West (left) to a street without any tree cover.