## What we do improves livability.

Installing landscaped medians, limiting driveways on major roads, using roundabouts, managing the location and spacing of signals, and organizing land uses on a connected network all increase livability in a variety of ways.

#### **Medians**

#### **Signals**

### **Driveways**

#### Network





Medians provide space for landscaping, art, and other aesthetic treatments that improve the character of a roadway corridor or gateway to a community. Combining medians with roundabouts improves safety while offering more possibilities for art and aesthetic treatments.



Managing the spacing of signalized and unsignalized access can reduce the need to widen major roadways. Signal spacing improves signal coordination, greatly reducing emissions and fuel consumption, which spike when vehicles decelerate and accelerate.



Fewer access connections increase the area for landscaping and enhance the appearance of major corridors. Landscaping also provides a buffer between vehicular traffic and pedestrians on heavily travelled roads.



Access management can be achieved through land use strategies that organize land uses into activity centers on a connected street network. These same strategies promote a more livable and accessible built environment.

#### NCHRP Project 25-47

The National Cooperative Highway Research Program (NCHRP) is sponsored by the individual state departments of transportation of the American Association of State Highway and Transportation Officials. NCHRP is administered by the Transportation Research Board (TRB), part of the National Academies of Sciences, Engineering, and Medicine, under a cooperative agreement with the Federal Highway Administration (FHWA). Any opinions and conclusions expressed or implied in resulting research products are those of the individuals and organizations who performed the research and are not necessarily those of TRB; the National Academies of Sciences, Engineering, and Medicine; the FHWA; or NCHRP sponsors.

## What we do improves livability.

Making a corridor safer for non-motorized users benefits the environment and supports social priorities like Safe Routes to School, Vision Zero, and Complete Streets.

A 4-lane road with good access management and supporting network may delay or even prevent the need for a 6-lane road that decreases the livability of a community.

Managing signals and driveways helps reduce congestion, which reduces fuel consumption and emissions.

Medians and fewer driveways increase the area for landscaping and aesthetic treatments.



Where would you want to live or shop?

Here?



Or here?

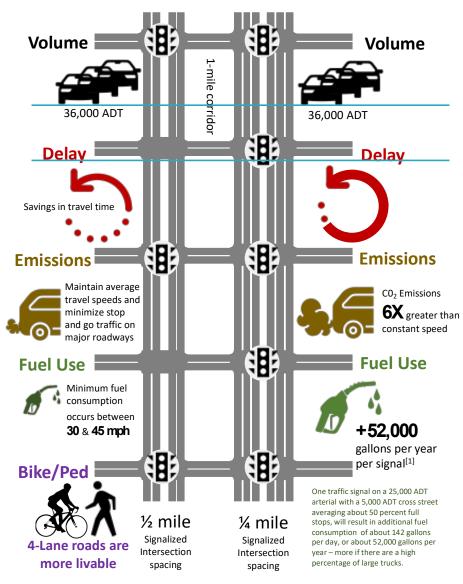
Photos by I. Malone

Managing and retrofitting access is a key part of revitalizing commercial corridors and making them more attractive for investment.

## Managing signal location and spacing

Frequent stops and starts increase fuel consumption and vehicular emissions. Long, uniform signal spacing on major roads helps keep traffic moving. Shorter signal spacing helps to calm traffic speeds and offers pedestrians more crossing opportunities in dense urban areas.

Too many signals on major roadways increase emissions, fuel consumption, crashes and delay.



# Access management aligns with the objectives for a sustainable transportation system, which:

- Allows the basic access needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between generations;
- Is affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development; and
- Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses nonrenewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise.

-European Ministers Council of Transport

## Placemaking on a network

Access management can be achieved through land use strategies that discourage strip development and promote activity centers organized on a street network. This creates a more accessible built environment that supports bicycle, pedestrian, and transit mobility.



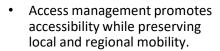
Context matters! Access management strategies vary by land use

context. Livability is enhanced regardless of context.

Source: Duany Plater-Zyberk & Company 2003

#### Pedestrian Access and Building Line

Buildings are more accessible to transit when they are closer to the curb. Parking can be placed in the rear of the property.



- Accessibility = land use proximity + network connectivity.
- **Mobility** = the ability to move around via multiple alternative paths and modes
- Access = the ability to enter and exit a site.

In rural and coastal areas, poorly planned access roads and driveways can damage landscapes and sensitive ecosystems. Working together on a network plan can preserve the natural beauty of these areas.

