



*Saint Louis*  
**Great Streets** INITIATIVE

LEARN • SHARE • PLAN • BUILD

HERE'S ANOTHER ONE FROM OUR CROSS-COUNTRY DRIVING TRIP... I BELIEVE THIS IS OKLAHOMA... NO WAIT - ARKANSAS!.. OR MAYBE GEORGIA... PERHAPS VIRGINIA?... OHIO?... ACTUALLY, THIS MIGHT BE FROM... BEFORE WE LEFT....





# Program conceived

as a reaction to roadway projects that ill serve their communities

and the narrowly defined process that ensured that end result

to fill a planning “gap”

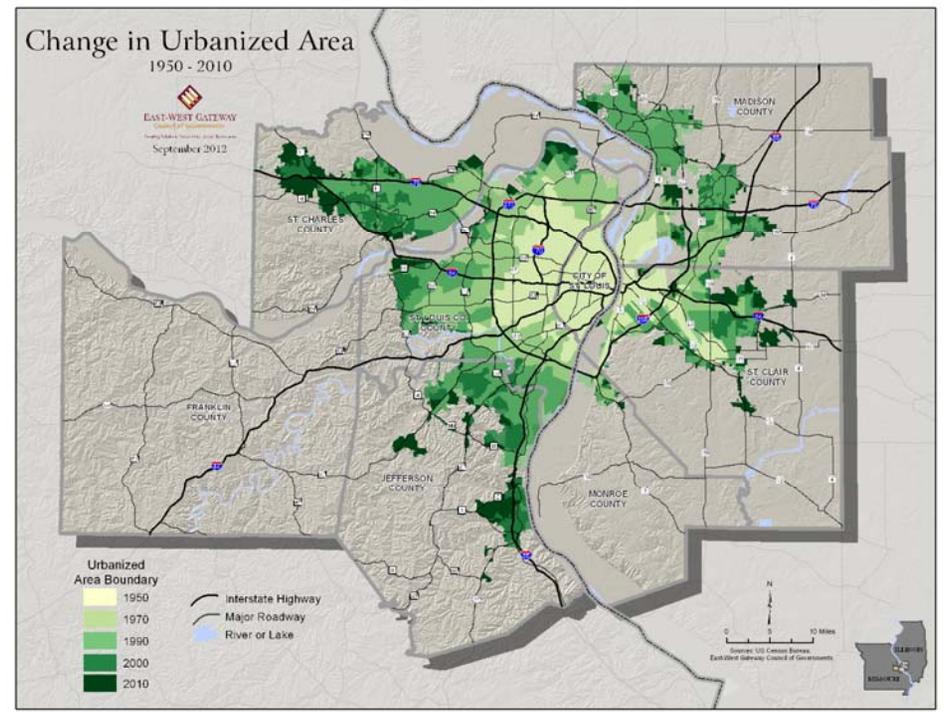
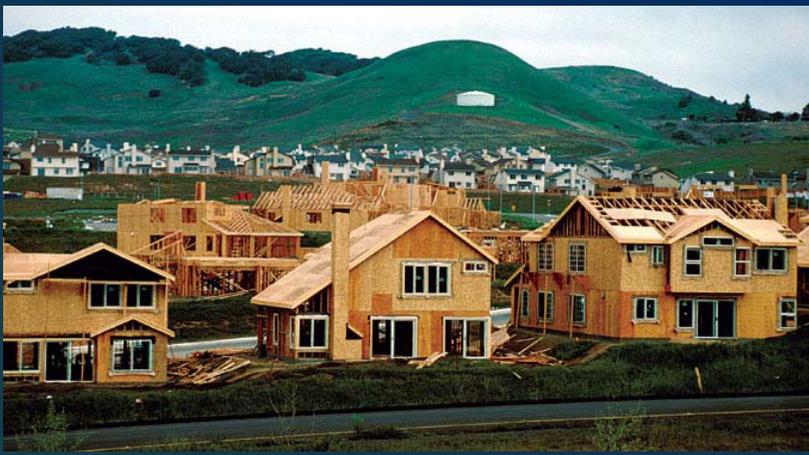
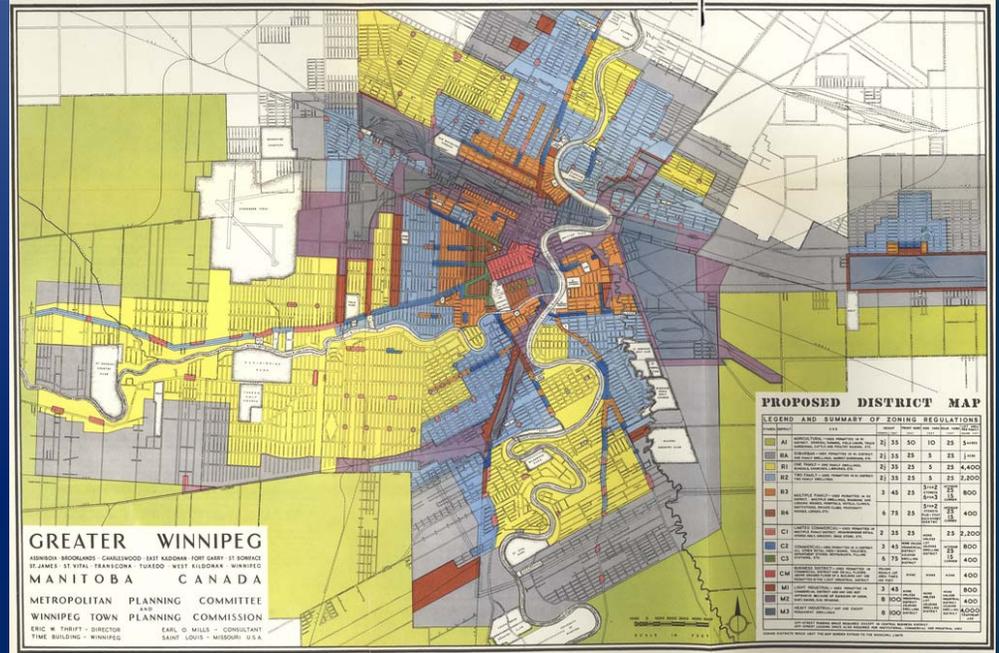
as a carrot, not a stick

Village of Euclid, Ohio v.  
Ambler Realty Co. 272 U.S.  
365 (1926)

Euclidean zoning laid over  
existing co-mingled land use

Social preference for / access  
to the auto

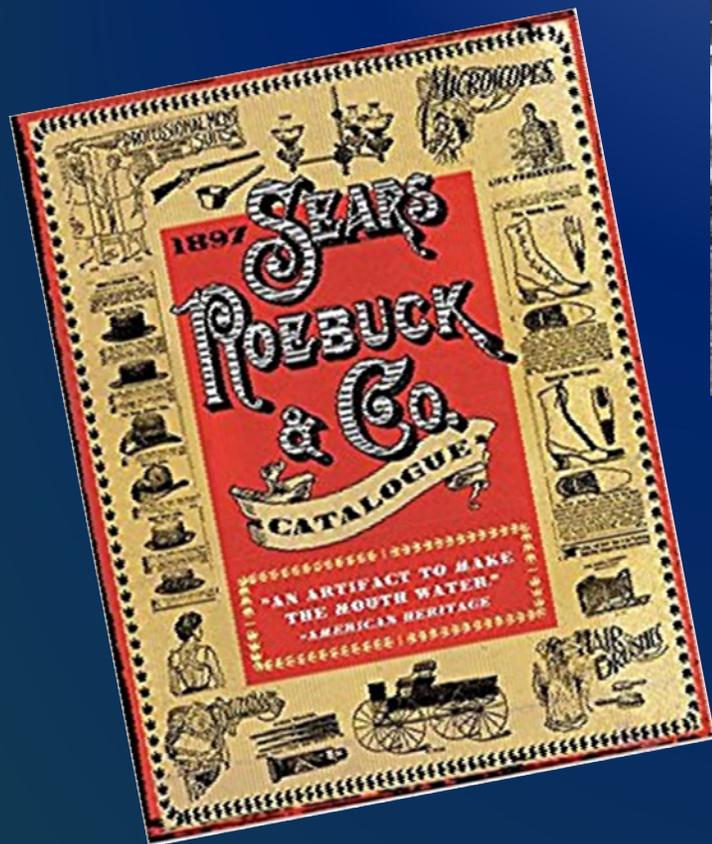
Housing construction  
outpaces population growth





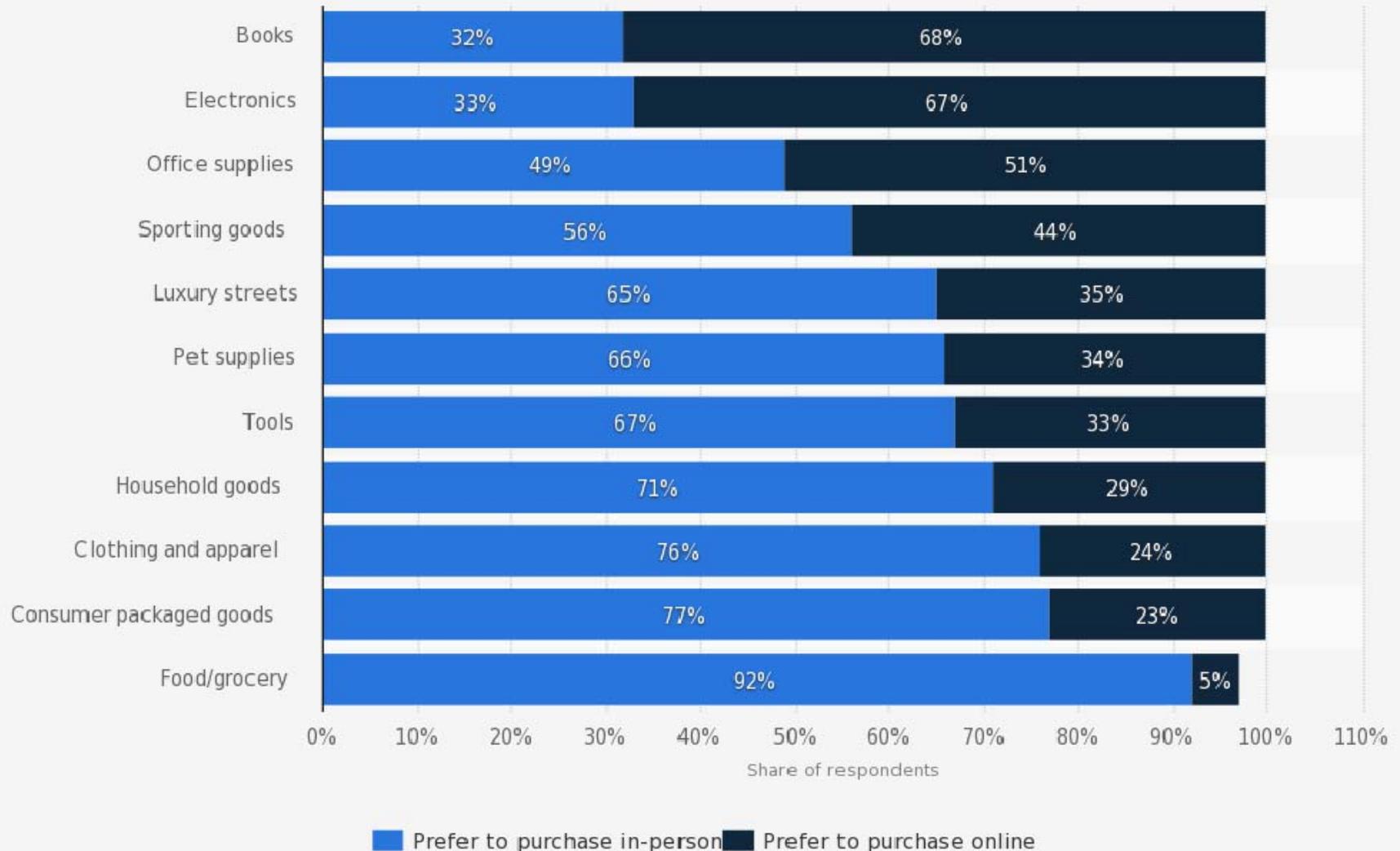
## Lack of retail market growth drives interest in incentives:

- Household incomes (for all but the top 20 percent) stagnant over past fifty years, adjusted for inflation
- Approx. \$3B of public subsidy within the region to support retail development in the past 30 years



amazon

## Online vs. in-store shopping preferences of consumers in the United States as of February 2016, by product category



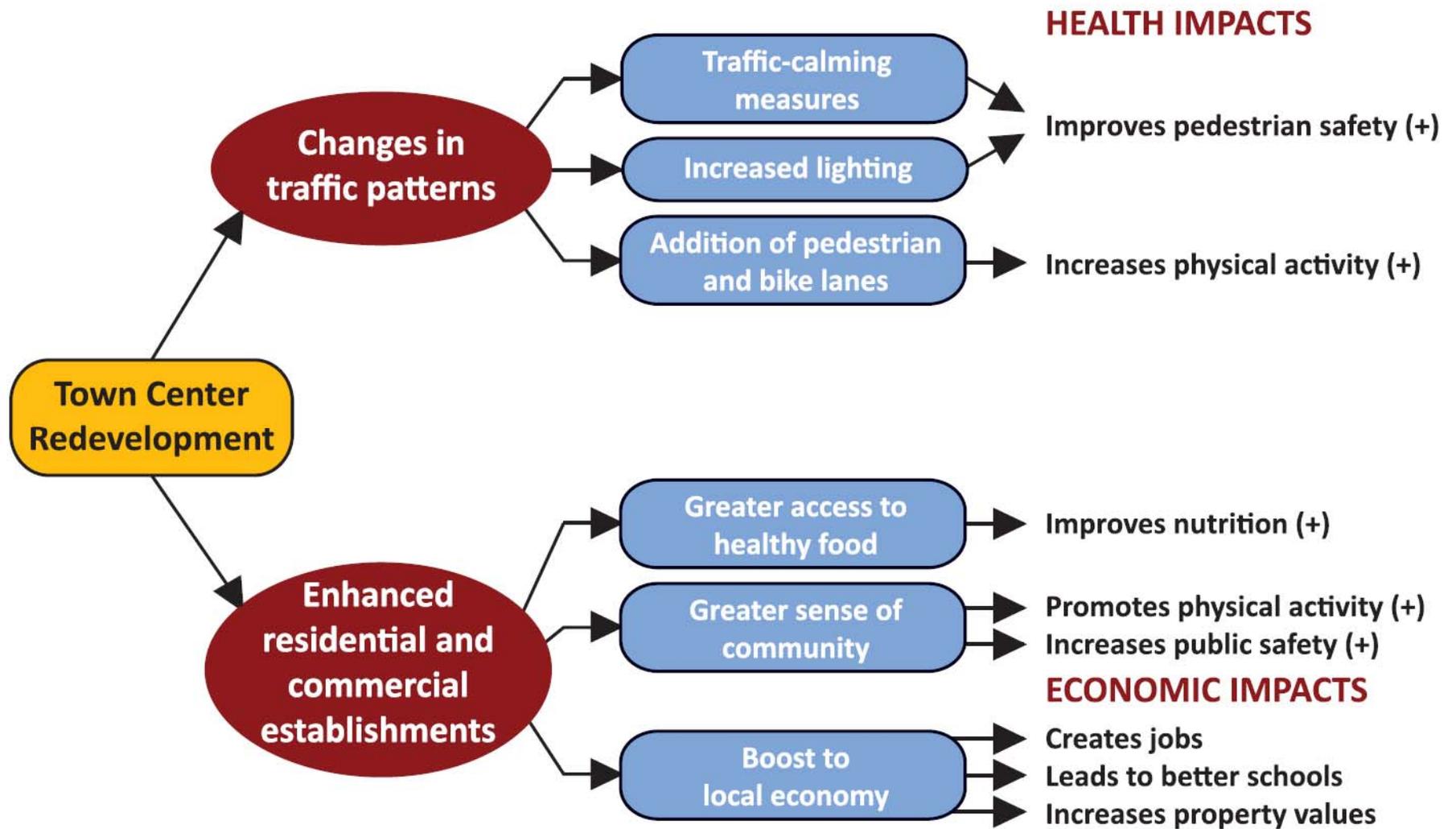
Source:  
© Statista 2016

Additional Information:  
United States; February 2016; 1,433 Respondents; 18 years and older



Fundamentally,  
streets are public  
space

They do more than  
move cars.



AARP

To design a street  
according to its probable  
use is a reasonable but  
uncommon practice.

Harland Bartholomew

City of St. Louis Plan (1917)





Put *People at the Center* of the Planning

*Expand the Way Communities Think* of Streets

Trigger *Economic and Social Benefits*

Create Interesting, Lively and *Attractive Places*

Serve *all Modes* of Transportation

Promote Meaningful *Community Participation*

Convene a *diverse team of planners*

*Work with Nature*

# The Initiative - Reconceive the street

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- ❑ Include properties, not curb to curb.
- ❑ Streets are public space.
  - ❑ They need to work well for everyone using them.
  - ❑ We have an obligation to carefully consider our public investments
- ❑ Planning Assistance Program
- ❑ Technically diverse planning teams
- ❑ Community direction and dialogue

Design for the public realm

# Firmitas, Utilitas, Venustas Vitruvius

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**P**ublic space should be lasting.

**I**t has to work. Identify and address all functional needs.

**P**ublic space must also be delightful and engaging to attract people and encourage interaction.

# Program Principles:

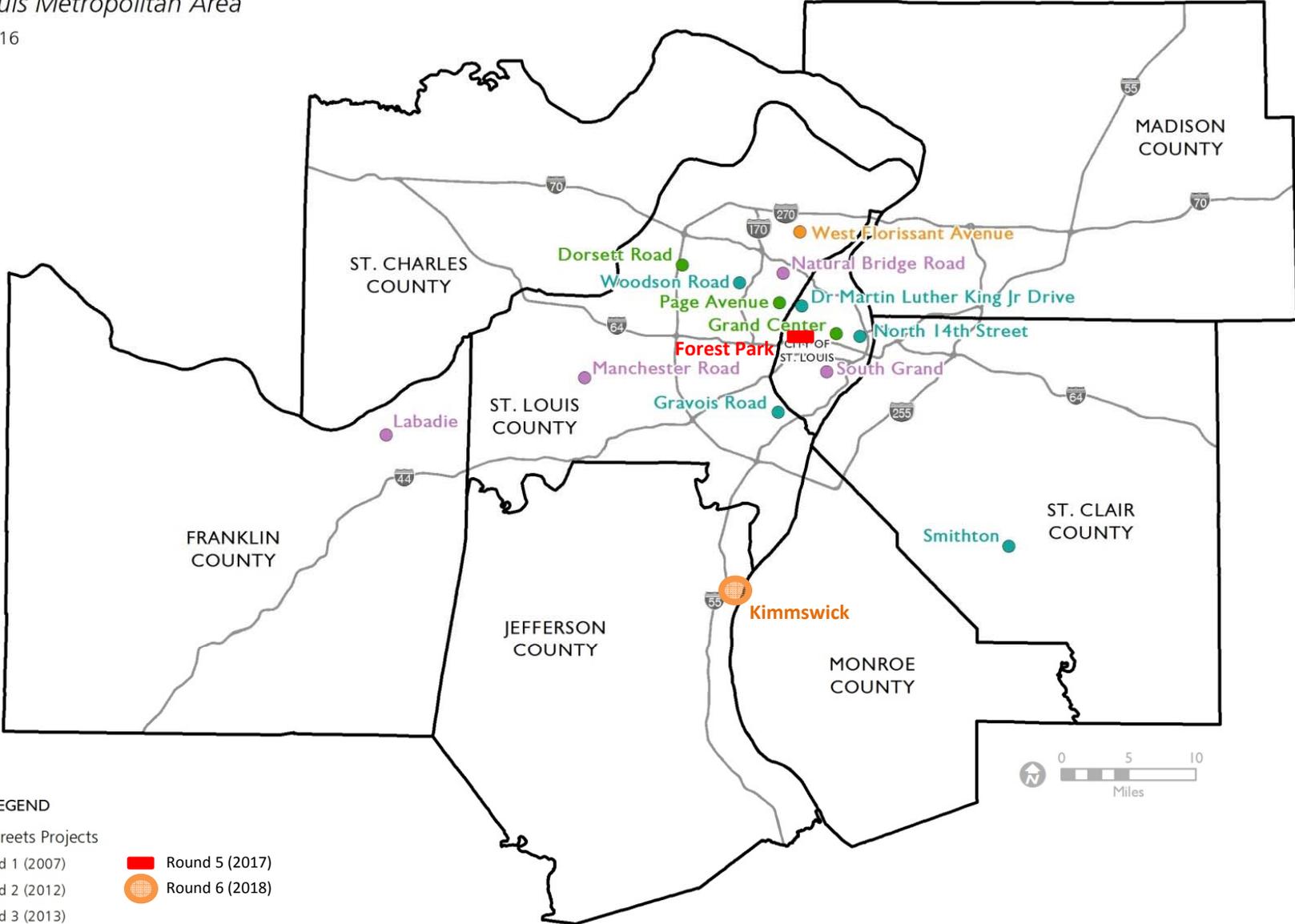
- ❑ **Are Great places**  
local identity & walkability
- ❑ **Integrate land & transportation planning**  
design to a vision
- ❑ **Accommodate all users and modes**  
trip type - “to, through, & within”  
accessible for everyone
- ❑ **Are economically vibrant**  
complementary uses
- ❑ **Are environmentally responsible**  
practical  
more than just storm water
- ❑ **Rely on current thinking**  
adapting what works best
- ❑ **Are measurable**  
performance measures  
guide the process  
relate to RTP & funding
- ❑ **Develop collaboratively**  
multi disciplinary team &  
iterative community input



# Great Streets Projects

St. Louis Metropolitan Area

April 2016



- LEGEND**
- Great Streets Projects
  - Round 1 (2007)
  - Round 2 (2012)
  - Round 3 (2013)
  - Round 4 (2016)
  - Round 5 (2017)
  - Round 6 (2018)
  - ▭ County Boundary
  - Interstate Highway



Source: East-West Gateway Council of Governments

# Vision drives the systems



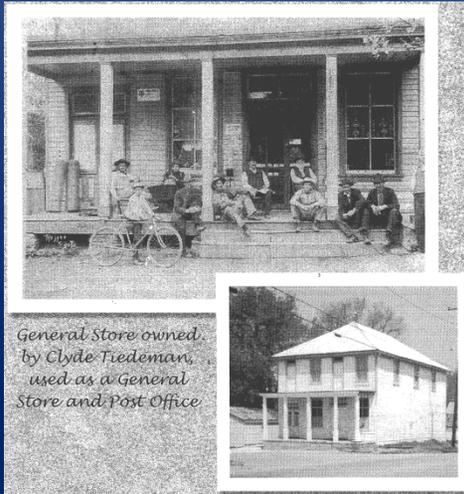
- ❑ Start with the community's vision for their place  
(informed by context and data)
- ❑ Develop all of the "systems" to achieve that vision
  - ❑ Land use strategy
  - ❑ Transportation network – system of all modes
  - ❑ Environment and utilities
  - ❑ Implementation & Governance
  - ❑ Community development
- ❑ Design to desired / expected (not current) levels
- ❑ Locate support functions back-of-house

# VISION

DEFINED BY THE COMMUNITY

TECHNICALLY INFORMED

# Context is ALWAYS unique:



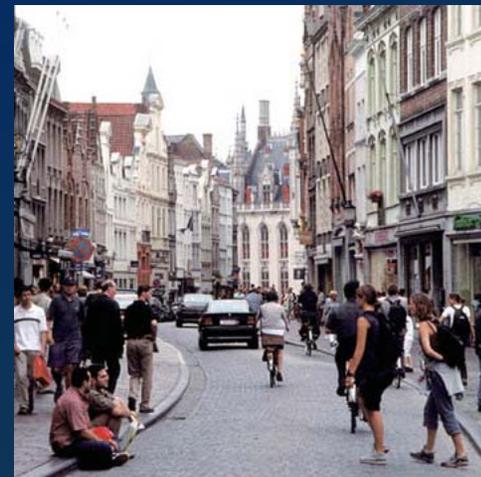
**Market** - Commercial activity, Demographic data, Institutions

**Users** - Residents, Employees, Visitors, Passers by

**Lay of the land** - Hydrology, Topography, Land use, Climate, Utilities

**History** - Land use, Events

**And . . .**



# Place making is about the users:

- ❑ Accommodate a wide **range of functions**
  - ❑ Utilitarian, casual, & structured activity
  - ❑ Avoid commercial monoculture
  - ❑ Provide a variety of usable spaces
- ❑ **Activate the space**
  - ❑ Give people a reason to come & linger (amenity, activity)
  - ❑ Accommodate different types of users
    - ❑ Age Groups
    - ❑ Purpose
- ❑ Relegate **support functions to back of house** (services, parking, etc.)

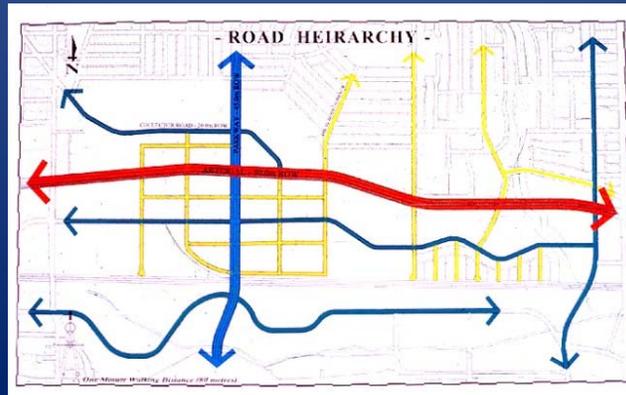


# TRANSPORTATION SYSTEM

*“There is more to life  
than increasing its  
speed”*

- Ghandi

# Variety of travelers:



- moving **TO** or from an area

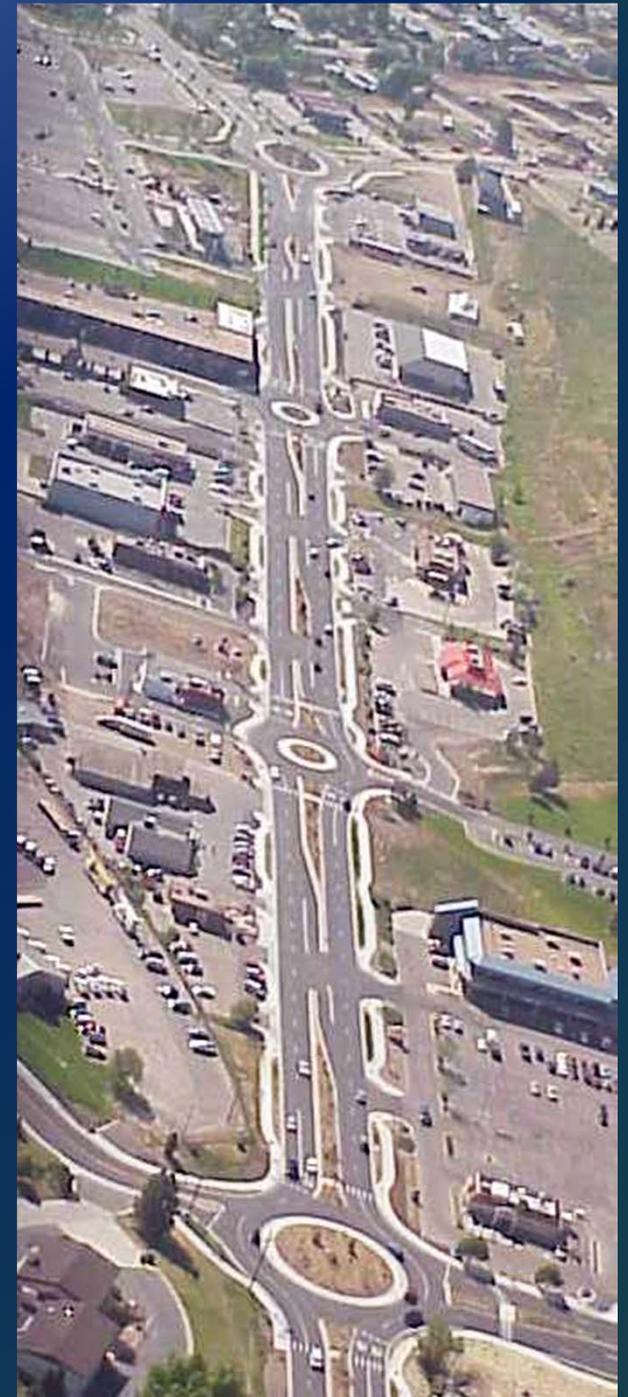
Provide appropriate access between the street and the adjacent land uses

- moving **THROUGH** a corridor

The street needs to function within the regional road network

- moving **WITHIN** a district

Provide effective options for people to move around within an area – intersection density, multi-use paths



# Balancing modal priority:



- ❑ There is *often a mismatch* between a roadway's configuration and its use
- ❑ Accommodate *all desired functions* along a roadway
- ❑ Accommodate *all appropriate modes* of travel
- ❑ Provide *good transitions between the modes*
  - ❑ Parking - location and **TYPICAL** amount
  - ❑ Transit stops – amenity and access
  - ❑ Bike parking
  - ❑ Delivery and shipment facilities





## Walkability:

- ❑ ***Every trip begins and ends with a walk***
- ❑ Minimize dangerous conflicts between cars and people
  - Crossings, access to parking/transit, etc.
- ❑ Pedestrian amenities are often basic necessities
  - Shade, shelter, rest, water, wayfinding, etc.

In New York, homes within 800 feet of park or green space afford a 2%-3% premium

In Indianapolis, homes within ½ mile of a greenway afford up to a 15% premium adding more than \$166.5M (2012)

Cleveland, OH residents switching to a bike / ped / transit commute average \$9576 annual savings. In Dallas, the savings average \$9506 per resident.

The city of Chicago estimates a \$2.3B annual city wide cost savings for non auto commuters

1% increase in walk score averages \$1300 home value premium

Neighborhoods with direct access to a range of transportation options enjoy increased property values and reduced housing + transportation costs per household.



# ECONOMIC SYSTEM

# Local Economy

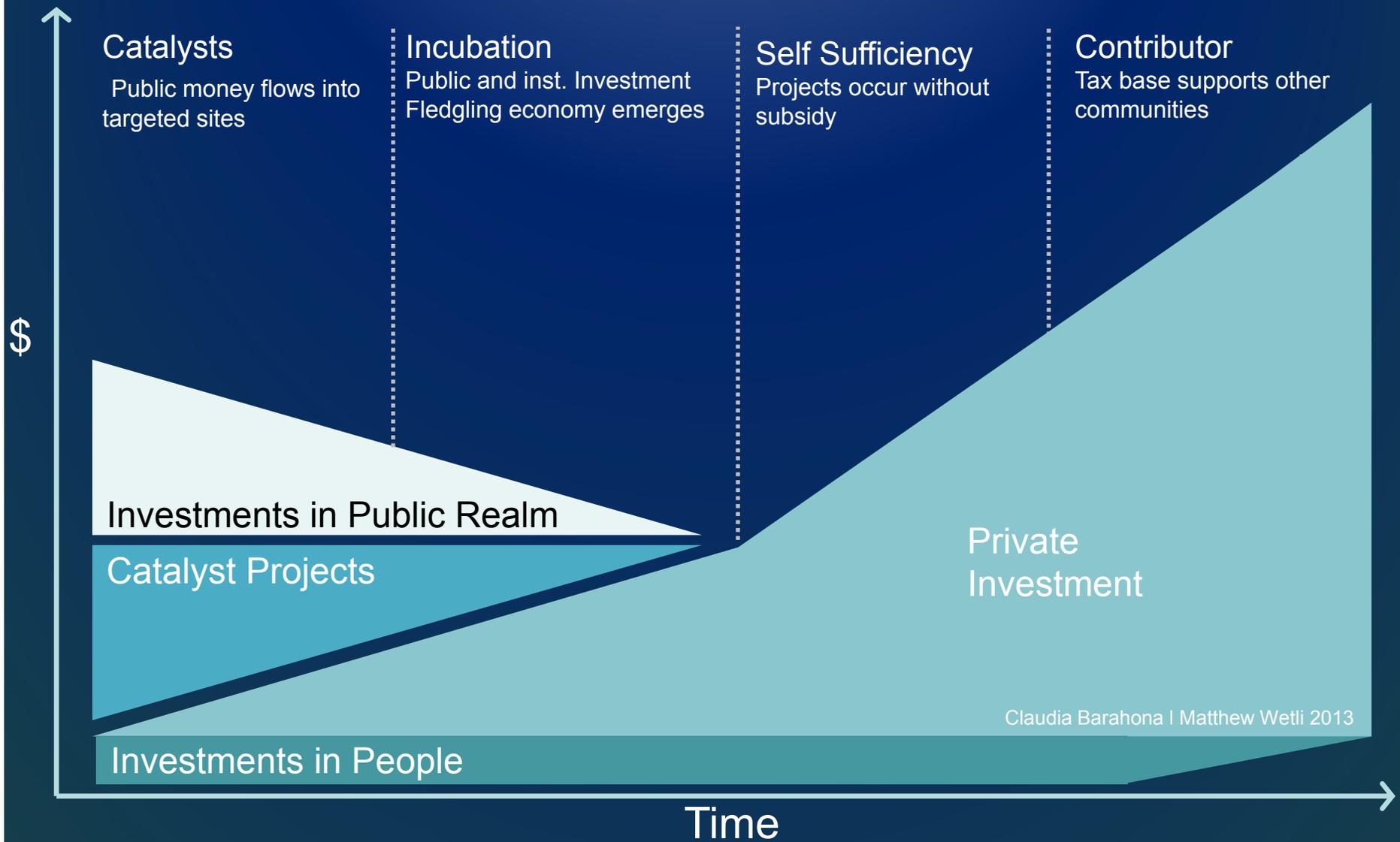
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Market data, local goals, and physical context help set a vision.

Making (and keeping) a thriving public place requires organization.

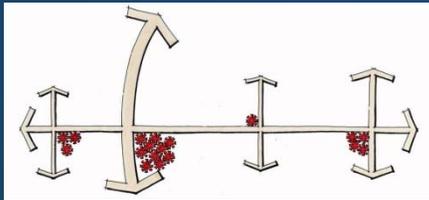
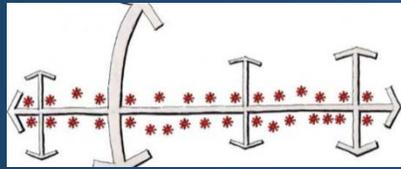
(\$ and management)

# Economic and Community Development Strategy



When a corridor has the functions, quality, and access that the community wants it can thrive.

- ↑ Tax revenues
- ↓ Vacancies
- ↑ Private investment
- ↑ Rental rates / property values
- ↑ Interest from a wider range of developers / proprietors



The success of open air town centers has shown that, with retail, where the place is inviting, people stay longer (12% longer) and spend more (9%). On average visitors spend almost \$30 on dining and leisure compared to \$5 at an enclosed mall.

Source: Alexander Babbage 2009



# ENVIRONMENTAL SYSTEM

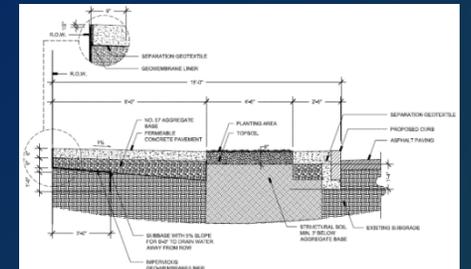
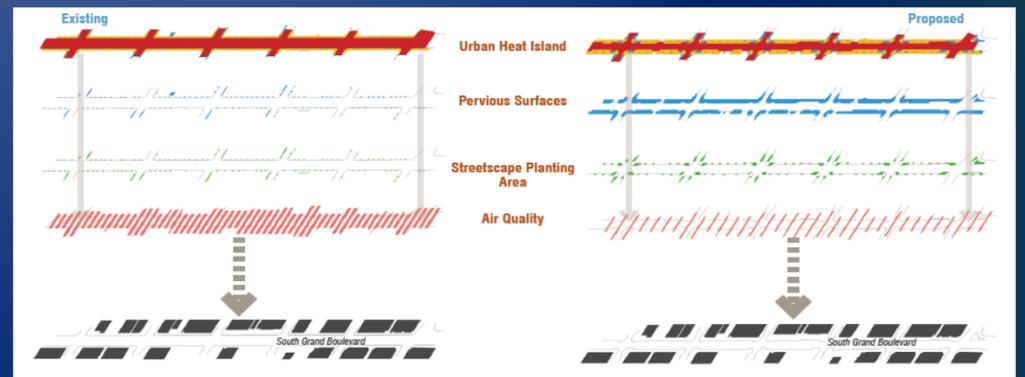
Working with nature  
saves time and  
obsolescence

It also reinforces local  
identity.

It's also healthier.

# Environmentally responsible design:

- Is based on *accepted science* (predictable outcomes)
- Addresses a *range of measurable elements*
  - Minimizing storm water runoff, sound pollution, solar gain, use of indigenous plant species, light pollution, air pollution
- Makes *practical sense*
  - Reduced demand on utility infrastructure (storm sewers, electrical grid, irrigation)
  - Has secondary benefits (measures to improve air quality also reduce congestion)
  - Extends life cycle of what gets built



# Health & Lifestyle Benefits

The EPA estimates that CSOs and separate sewer overflows (SSOs) cause at least 5,576 illnesses every year

The City of Philadelphia determined that a Green approach to addressing storm water infrastructure accounts for 1 to 2.4 premature fatalities avoided every year and over 700 cases of respiratory illness days avoided per year. Avoided healthcare costs were estimated to be \$130 million over 40 years.

Aging in place provides continuity of social networks and services

Walkable, well serviced communities have lower levels of chronic diseases and obesity

“...the generation and maintenance of social capital is . . . facilitated by living in a walkable community.”

Examining Walkability and Social Capital as Indicators of Quality of Life at the Municipal and Neighborhood Scales  
Rogers, Halstead, Gardner, & Carlson

Residents in walkable, mixed use communities spend less time commuting

# It's not just rain gardens:

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- ❑ Education – establish expectations, priorities, and tools
- ❑ Plantings – hardiness / maintenance intensity / local identity
- ❑ Storm Water – quantity and cleanliness of piped water
- ❑ Heat Island effect – thermal battery of materials used
- ❑ Light Pollution – aesthetics and practicality
- ❑ Quantity of Motorized Travel – amenity for bike / ped / transit
- ❑ Carbon Footprint – materials, energy use, & maintenance
- ❑ Waste Management – construction practices
- ❑ Wildlife – birds, small animals, flora
- ❑ Air Quality – reduced carbon emissions & improve absorption
- ❑ Sound – reduced ambient and peak noise levels



BE RIGOROUS

# **Adapting best practices to local context**

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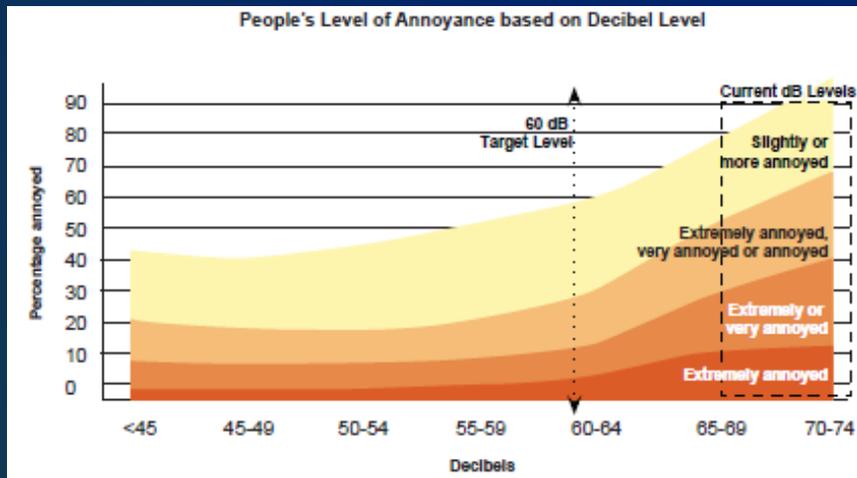
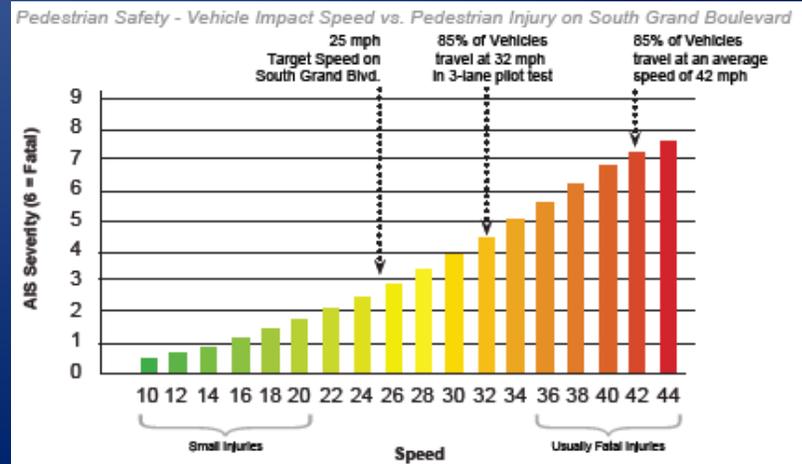
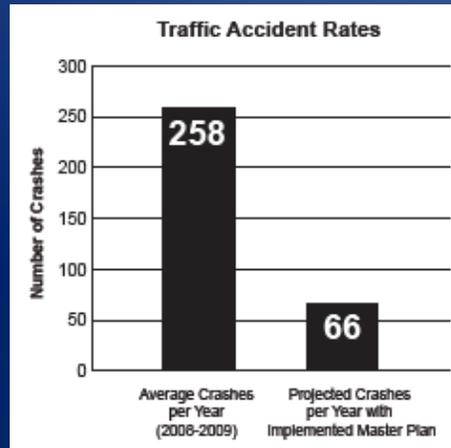
Learn from others, and see what is desirable and practical locally.

# Metrics environmental – economic – community priority – safety - etc

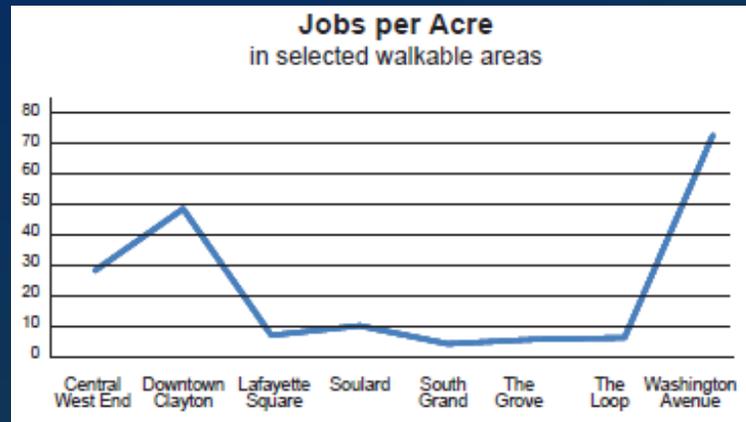
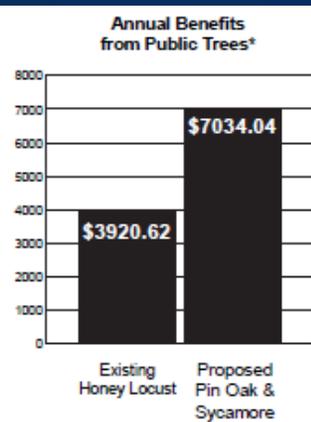
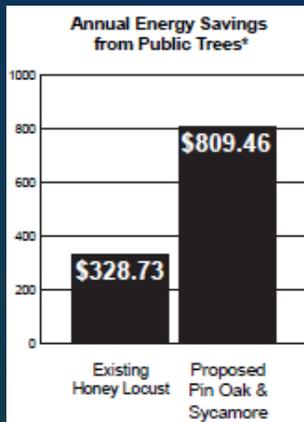
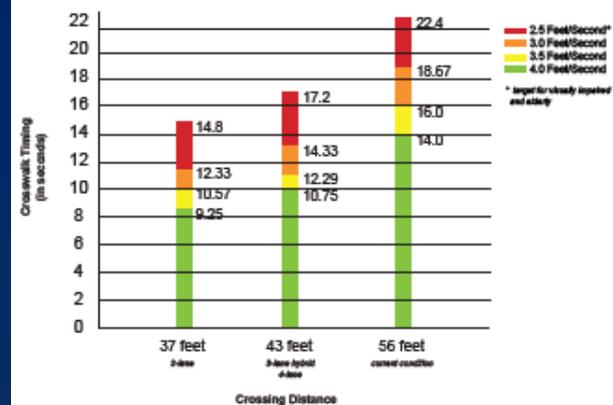


**GOALS → OBJECTIVES → STRATEGIES → MEASURES**





Pedestrian Safety - Crosswalk Timing



# Combining local knowledge

(residents, owners, proprietors, leadership, etc.)

# with technical expertise

(multi disciplinary team):



## Iterative Feedback Loops

## Great Streets Emphasize:

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- ❑ **The Process**
  - ❑ Multi-disciplinary consultant team
  - ❑ Extensive local knowledge (community engagement)
  - ❑ Best Practices – Raising expectations for next time . . .
- ❑ **The Product**
  - ❑ The Plan Document
  - ❑ Prepared and Motivated Core Stakeholders
  - ❑ Next Steps and Strategies for Implementation
  - ❑ Elevated Expectations and Capacity

# Implementation means different things for different projects

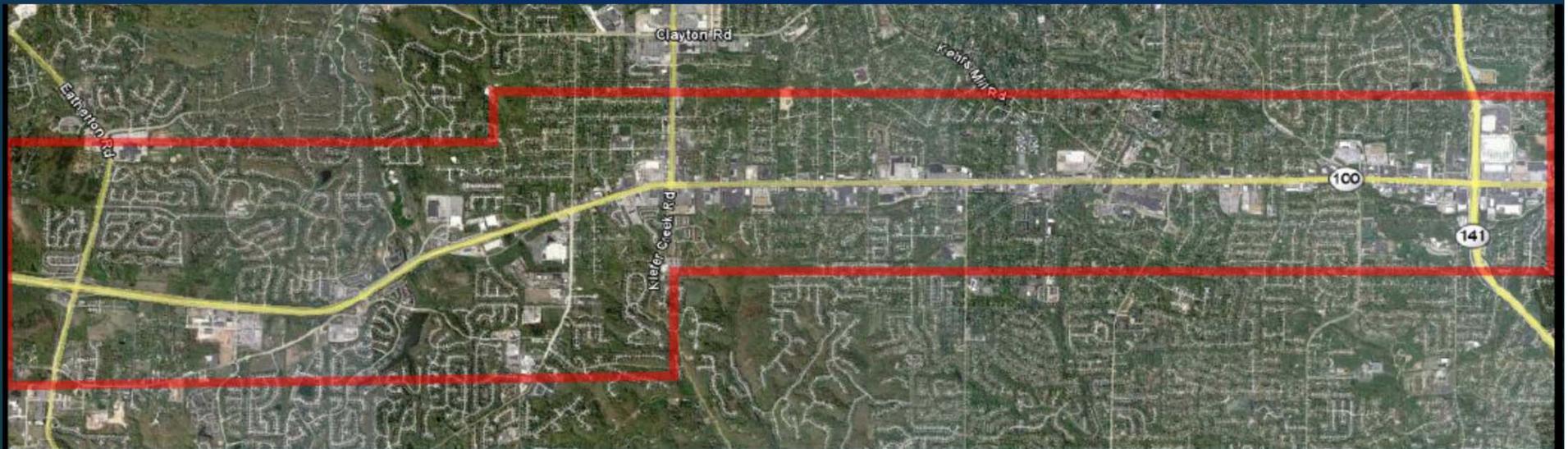
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- ❑ Examples include:
  - ❑ Definition of next steps – scope / budget / task owner
  - ❑ Cooperative political arrangements
  - ❑ Establishment of special districts
  - ❑ Adoption of new plan / ordinance
  - ❑ Final design, funding, and construction

# Manchester Road

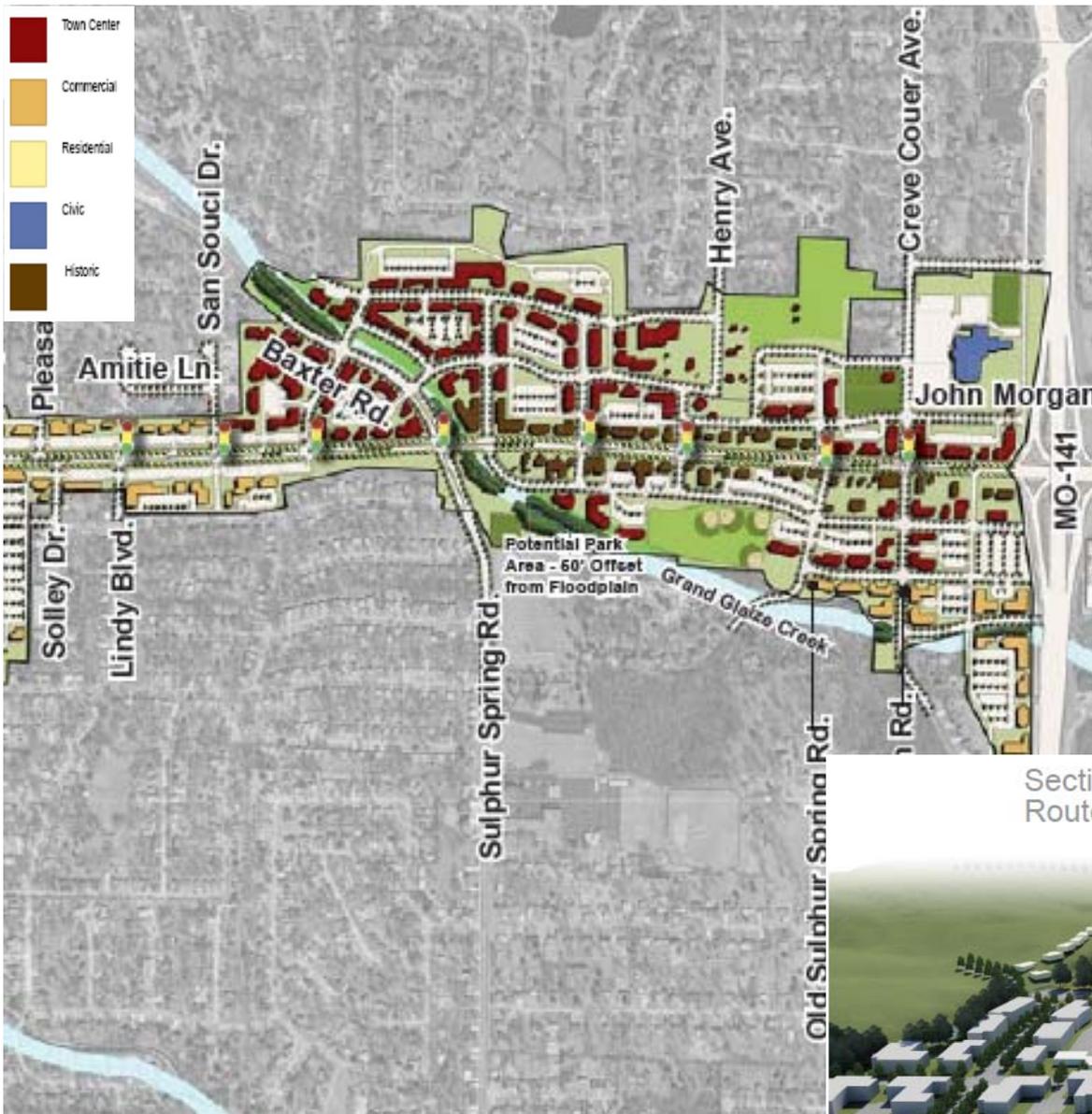


Wildwood • **Ellisville** • Ballwin • **Winchester** • Manchester

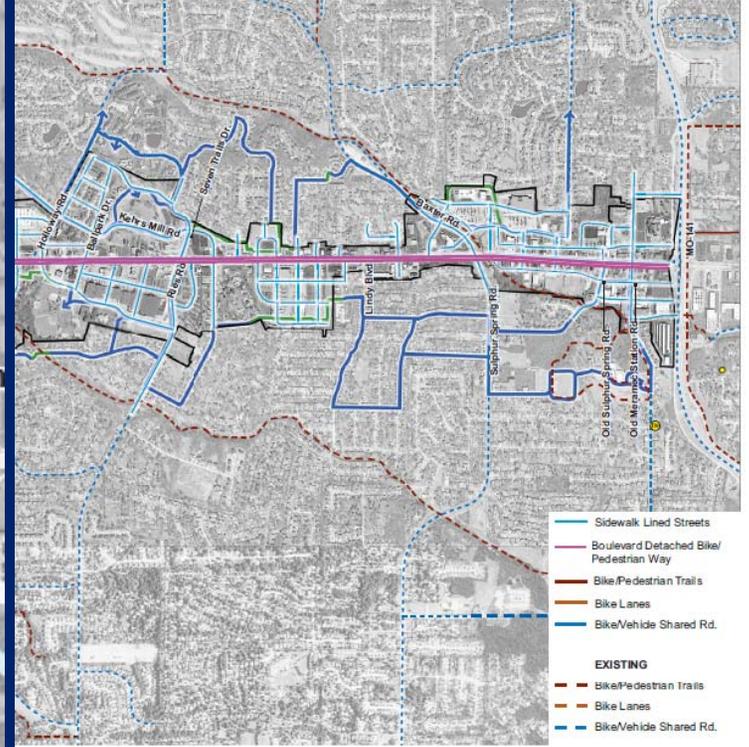








Pedestrian and Bicycle Mobility Plan - Eastern Segment



Section 1: Looking west along Manchester Road from Route 141 to Baxter Road.





## "Pulse Node" at Clarkson and Manchester

*Existing Condition Today (looking south from Clarkson Road):*



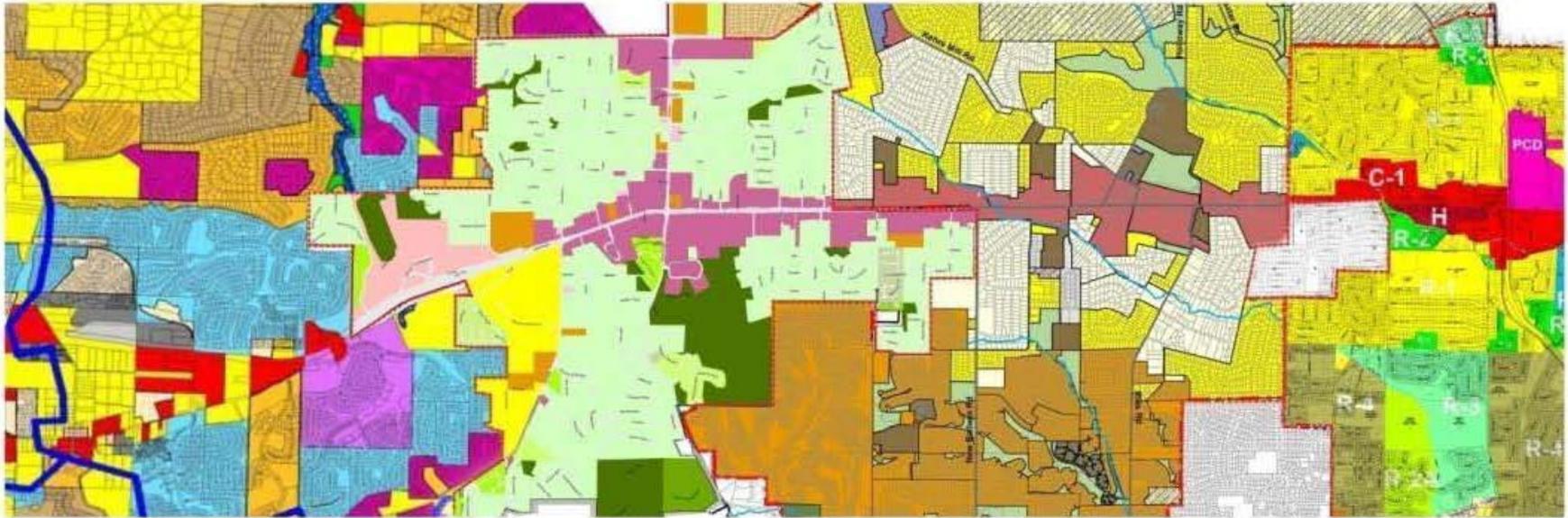
*Massive parking lots and auto-oriented development dominate the existing intersection of Manchester and Clarkson, particularly on the south side of the node.*

*Future Conceptual Plan (same vantage point as above):*



*Leveraging the highly traveled intersection as a "business generator", the concept here shows a half multi-way boulevard conversion on the south side of Manchester Road to allow patrons to easily access the hot new businesses via the access and parking lane separated from the through traffic by a median and street trees. Future development would be primarily commercial/retail around the node itself, with mixed residential and office on the edges.*





Zoning within the City of Walswood  
January 2006

- WID Planned Industrial District
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City of Eliville - Zoning Map  
October 2008

- ZONING**
- R-1 Single Family Residential
  - R-2 Planned Residential
  - R-3 Planned Residential District
  - R-4 Planned Residential District
  - R-5 Single-Family Residential
  - R-6 Single-Family Residential
  - R-7 Single-Family Residential
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  - R-10 Single-Family Residential
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  - R-100 Single-Family Residential

City of Ballwin Comprehensive Community Plan  
Existing Zoning Map  
October 2007

- R-1 Single-Family Residence
- R-2 Single-Family Residence
- R-3 Single-Family Residence
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- R-83 Single-Family Residence
- R-84 Single-Family Residence
- R-85 Single-Family Residence
- R-86 Single-Family Residence
- R-87 Single-Family Residence
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- R-96 Single-Family Residence
- R-97 Single-Family Residence
- R-98 Single-Family Residence
- R-99 Single-Family Residence
- R-100 Single-Family Residence

City of Winchester Zoning District Map  
December 1995

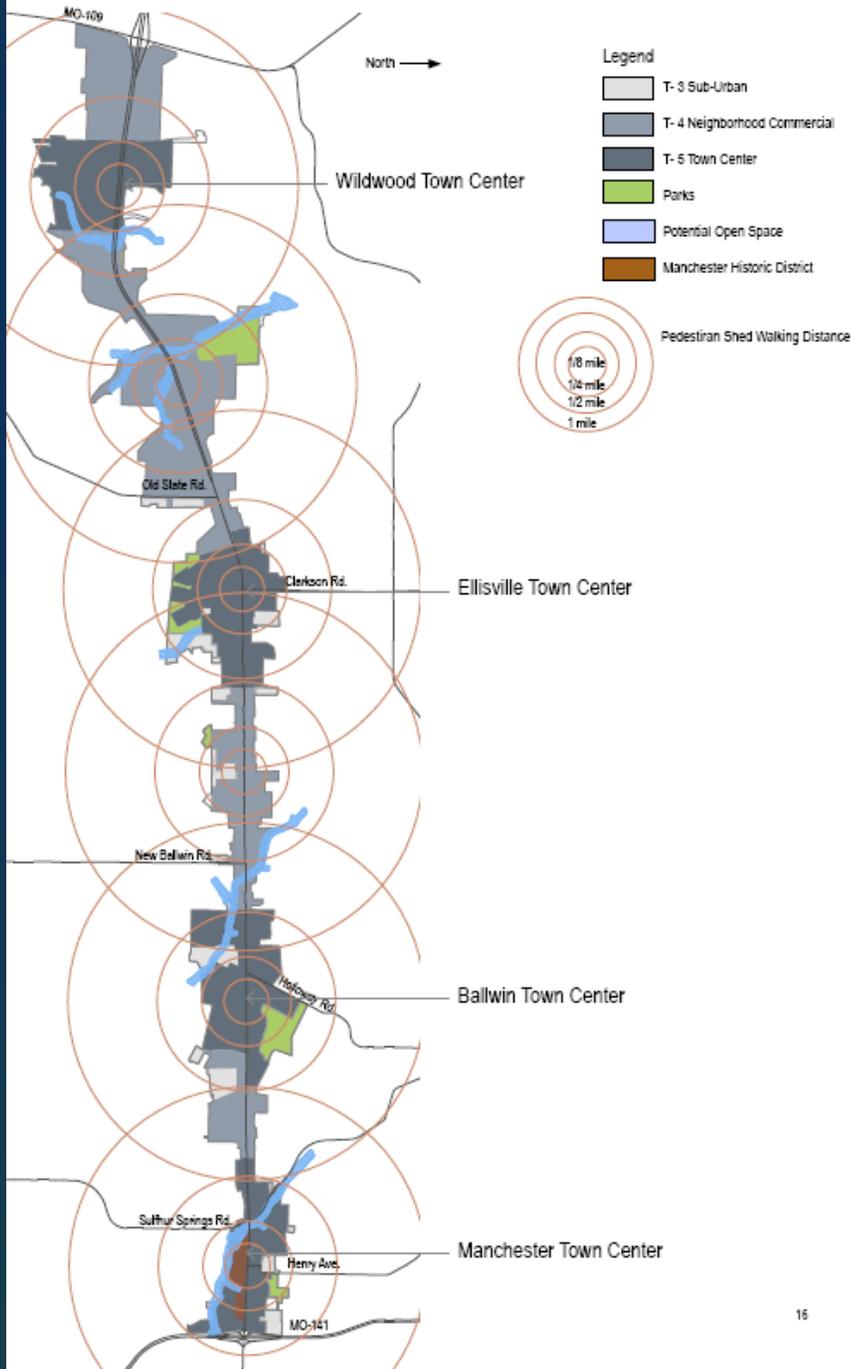
- R- Single Family Residence
- C- Commercial

City of Manchester Zoning District Map  
April 2006

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- DR-100

# Existing Zoning

**MANCHESTER CORRIDOR TRANSECTS** Manchester Road Form-Based Code



**MANCHESTER ROAD REDEVELOPMENT DISTRICT**  
St. Louis County, Missouri  
**Form-Based Code**  
June 2010

**TABLE B. BUILDING CONFIGURATION**

**SMARTCODE**  
Manchester

**TABLE B. Building Configuration.** This table shows the Configurations for different building heights for each Transit Zone. It must be modified to show actual calibrated heights for local conditions. Access Lines and Easement Lines shall occur on higher buildings as shown. It is maximum height as specified in Table 16.



**TABLE D. BUILDING DISPOSITION**

**TABLE D. Building Disposition.** This table shows the disposition of the building types in the various zones. It is intended to guide the building disposition for each Transit Zone.



# Questions

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