

# Accelerating Active Transportation Change in Northern Virginia

The Business Case for Active Transportation

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**Smart Growth America**  
Improving lives by improving communities

# Who is Smart Growth America?

**Smart Growth America** envisions a country where no matter where you live, or who you are, you can enjoy living in a place that is healthy, prosperous, and resilient. We empower communities through technical assistance, advocacy, and thought leadership to realize our vision of livable places, healthy people, and shared prosperity.



**Smart Growth America**  
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National Complete Streets Coalition



**Transportation  
for America**



State  
**Smart Transportation  
Initiative**

**FBCI**

Form-Based  
Codes Institute

**Local Leaders Council**

**LOCUS**



**GOVERNORS'  
INSTITUTE**  
on community design

# How do we gauge economic benefit?

- Transportation agencies generally define economic benefit only by the time savings of drivers on the corridor
- We tend to focus on the value of time for one set of roadway users – vehicular users
- This misses a whole lot of value that is not captured in travel time

Transportation can build or deplete the economic value of the properties it touches.

# Detroit 1959: Hastings Street



*Detroit Historical Society*

Detroit 1961: Hastings Street I-375



*Detroit Historical Society*

# Roadway performance vs. impact on surroundings



# Roadway performance vs. impact on surroundings



 **Traffic flow is top priority if saving travel time is the economic metric**  
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What about travel time value for those crossing the street?





Economic productivity and property values (both residential and commercial) go up in areas that are walkable and have slow traffic.



Photo: Charlotte NC DOT

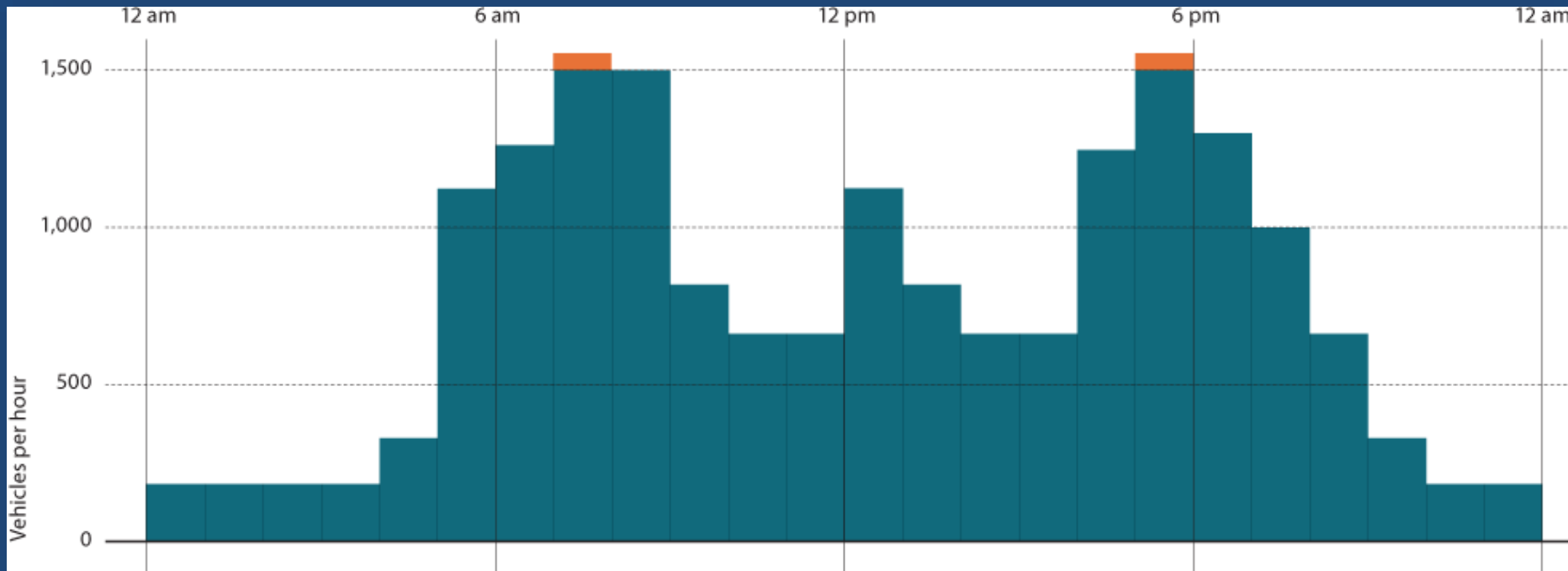
And conversely . . .





# The role of delay/LOS

## Peak hour vs. overall capacity



# Where does economic value come from?

- Agglomeration
- The synergy of proximity
- \$ value of safety improvement; etc.

*Economic productivity and property values go up  
in areas that are walkable and have slow traffic*

# ROI

## “Agglomeration”

*There is a synergistic effect when activities are co-located.*

*The total is more than the sum of the parts.*

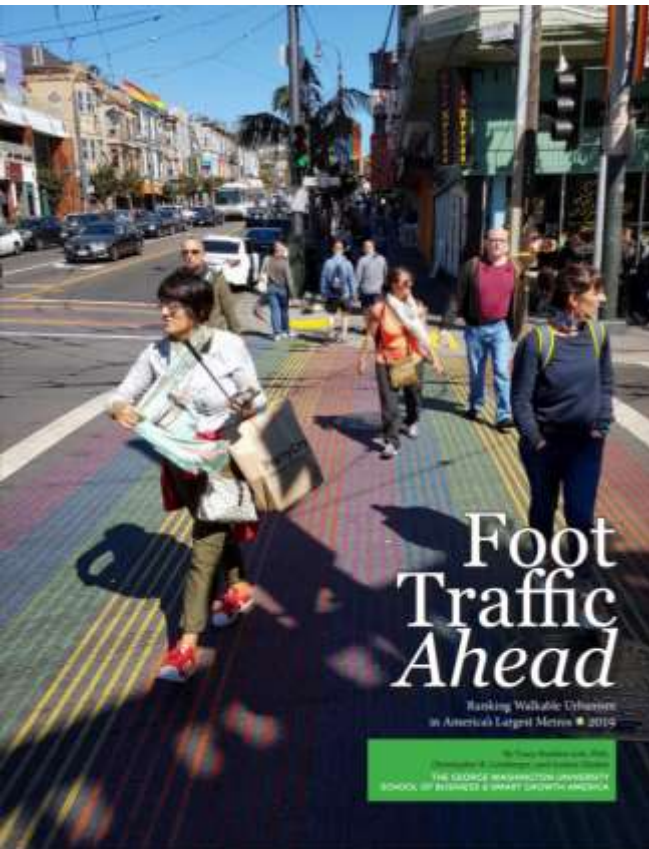
Montpelier, VT



**It is the reason humans have been making villages, towns, and cities for the last 10,000 years.**

# The Economy Coalesces in Walkable Urban Places

*This research maps the geographic locations and market demand for “regionally significant” walkable urban places, referred to as “WalkUPs”, in the 30 largest U.S. metropolitan areas.*



*2019 study examines the top 30 US metropolitan areas*

*Key findings:*

- All show rental rate premiums for walkable urban office, retail and rental multi-family.
- “drivable sub-urban real estate products have been losing market share to walkable urban real estate products during this economic cycle.”
- *Much new walkable development is occurring in suburbs.*

# Walkable places are growing in value almost everywhere

By Joe Cortright | 16.1.2020



*Over the past decade, across the nation, the most walkable homes have appreciated the most*

*In two-thirds of large metro areas, walkable neighborhoods have higher home values than car-dependent ones*

*Walkable neighborhoods appreciated faster than car-dependent ones in 44 of 51 large metro areas in the past seven years.*

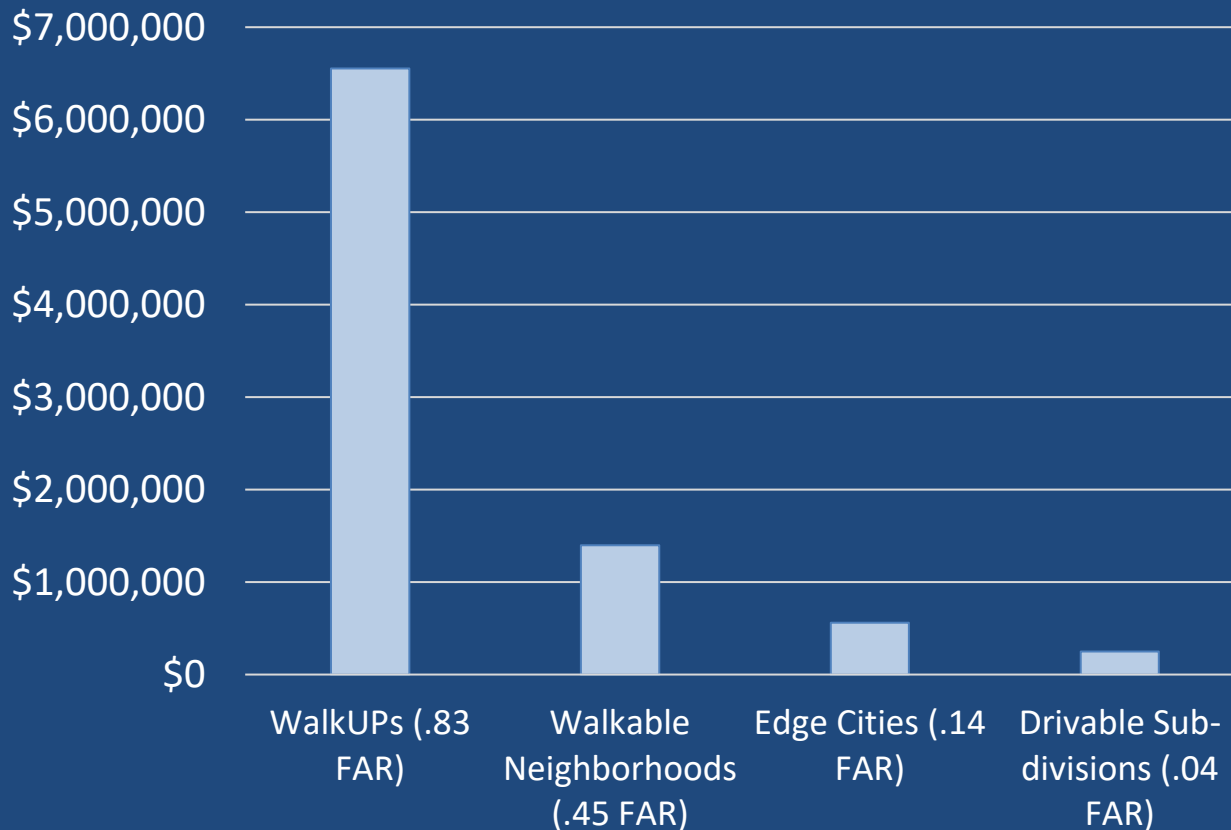
“The trend is clearly for walkable areas to gain value relative to car-dependent ones. Of the 51 metro areas for which we have data, **44 experienced an increase in average values in walkable areas relative to car-dependent ones** over the period 2012 to 2019.

“The premium that buyers pay for walkable homes is increasing in size, and is becoming more and more common in metropolitan areas across the United States. **The walkability premium is a clear market signal of the significant and growing value Americans attach to walkability.**”



# Walkable Urban Places

## Assessed Values per Acre in Metro Boston by Neighborhood Category



## Key Metrics by Land Use

### REGIONAL LAND

Share of Regional Land by Land Use Type:



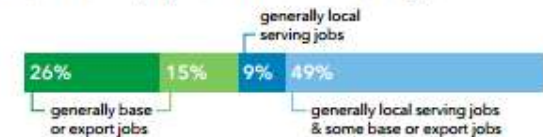
### POPULATION

Share Residing in Each Land Use Type:



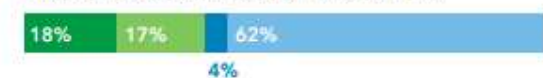
### EMPLOYMENT

Share of Employment in Each Land Use Type:



### ASSESSED VALUE

Share of Region's Total Assessed Value & Property Tax Revenue by Each Land Use Type



### OFFICE INVENTORY

Share of Region's Office Inventory Housed in Each Land Use Type:

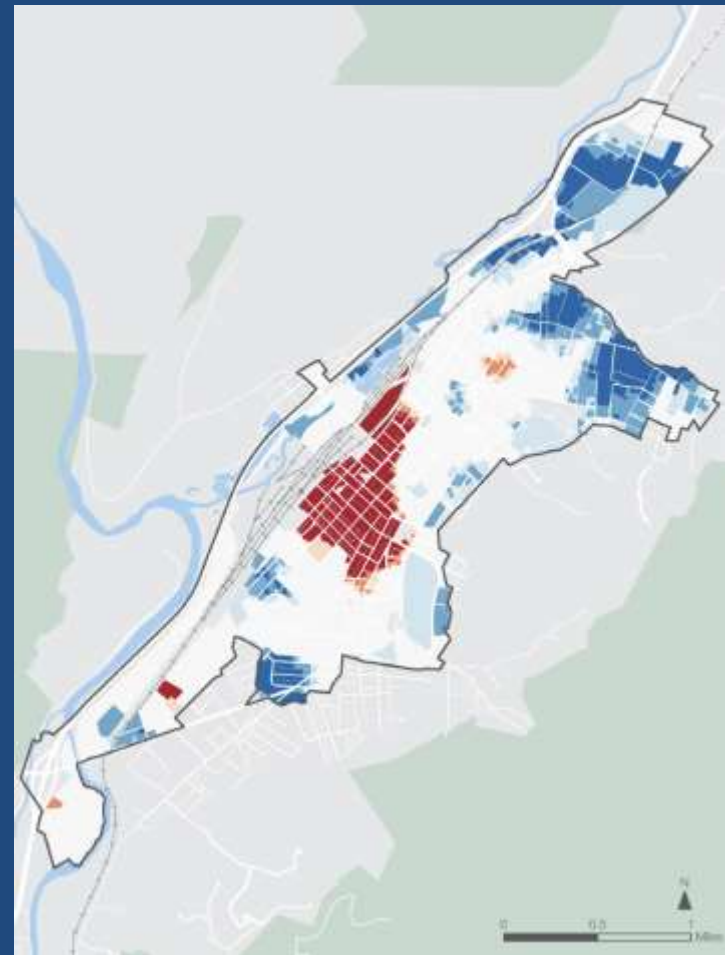


- WALKUP
- WALKABLE NEIGHBORHOOD
- DRIVABLE EDGE CITY
- DRIVABLE SUB-DIVISION

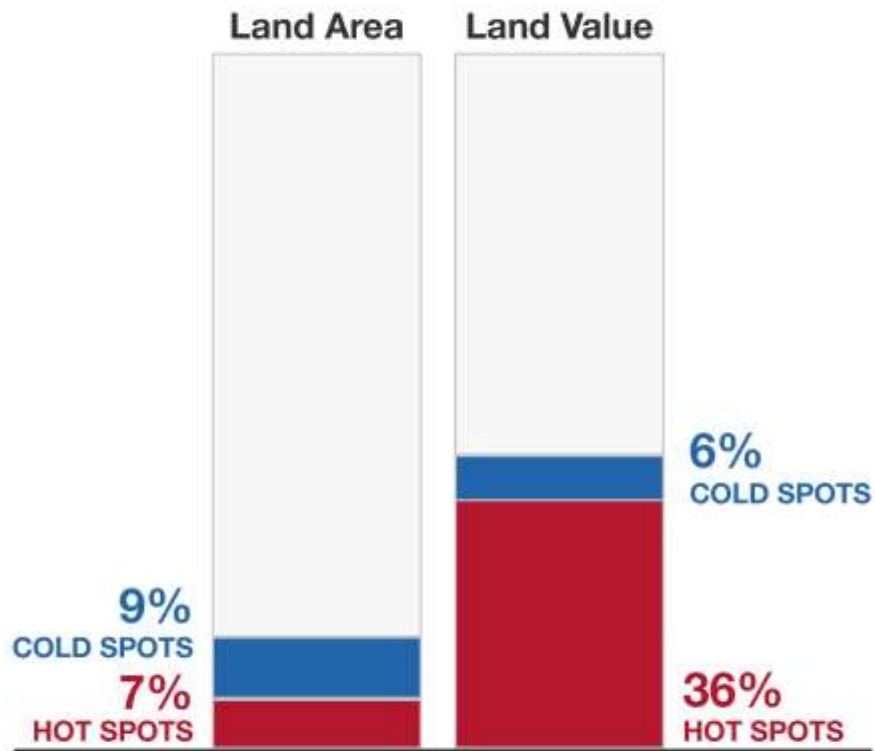
# *Land use pattern impacts revenue*

## *Fiscal Hotspots*

*Housing and economic  
competitiveness analysis for  
Erwin, Tennessee  
(pop. ~ 6,000)*

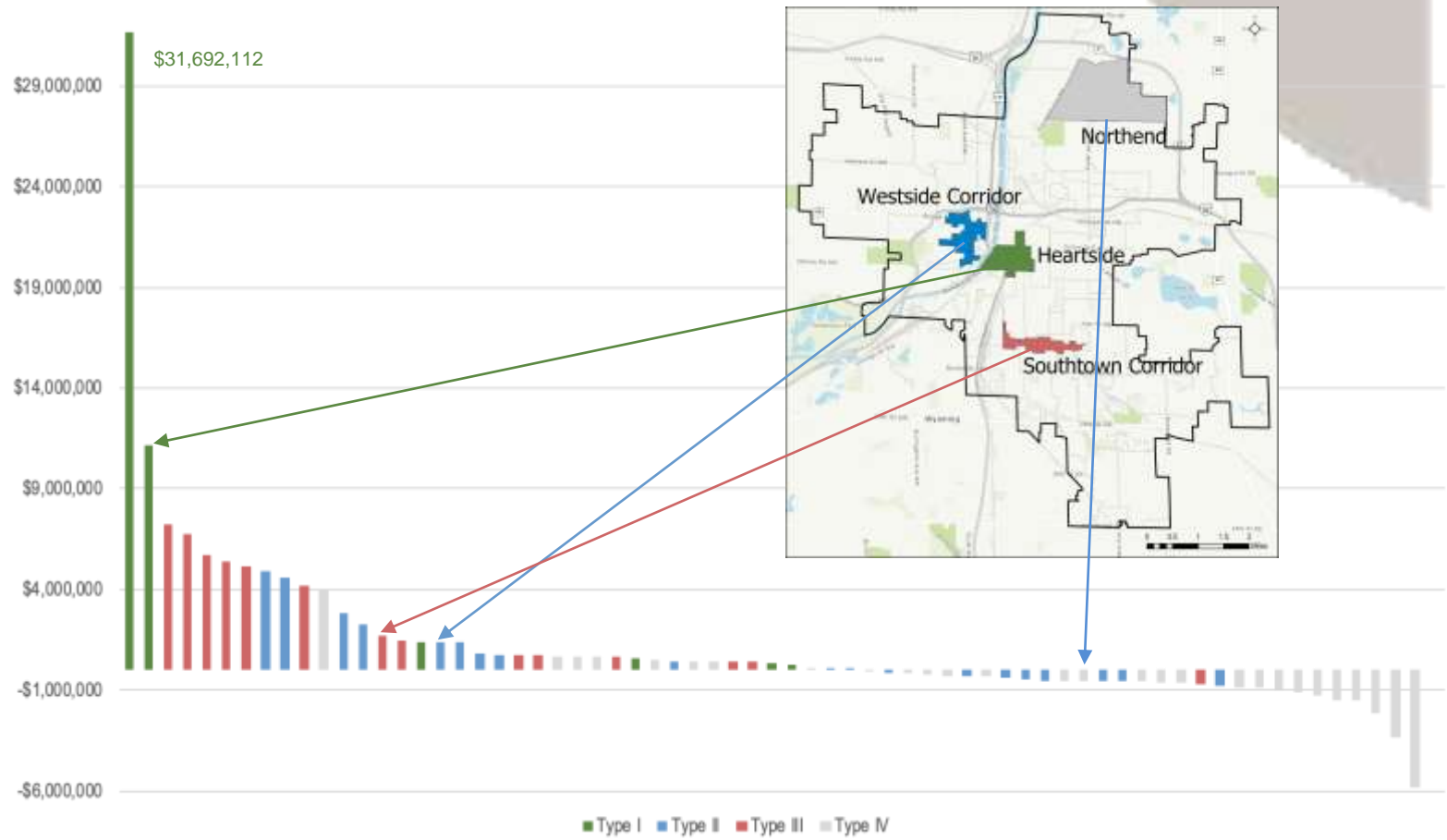


# LAND VALUE IS HIGHER IN HOT SPOTS



Hot spots are **7%** of Ruston & Grambling's appraised land area, but contain **36%** of the land value.

# Economic Assessment Net Fiscal Impact by place



Grand Rapids, Michigan (pop. ~200,000)

Transportation can build or deplete the economic value of the properties it touches.

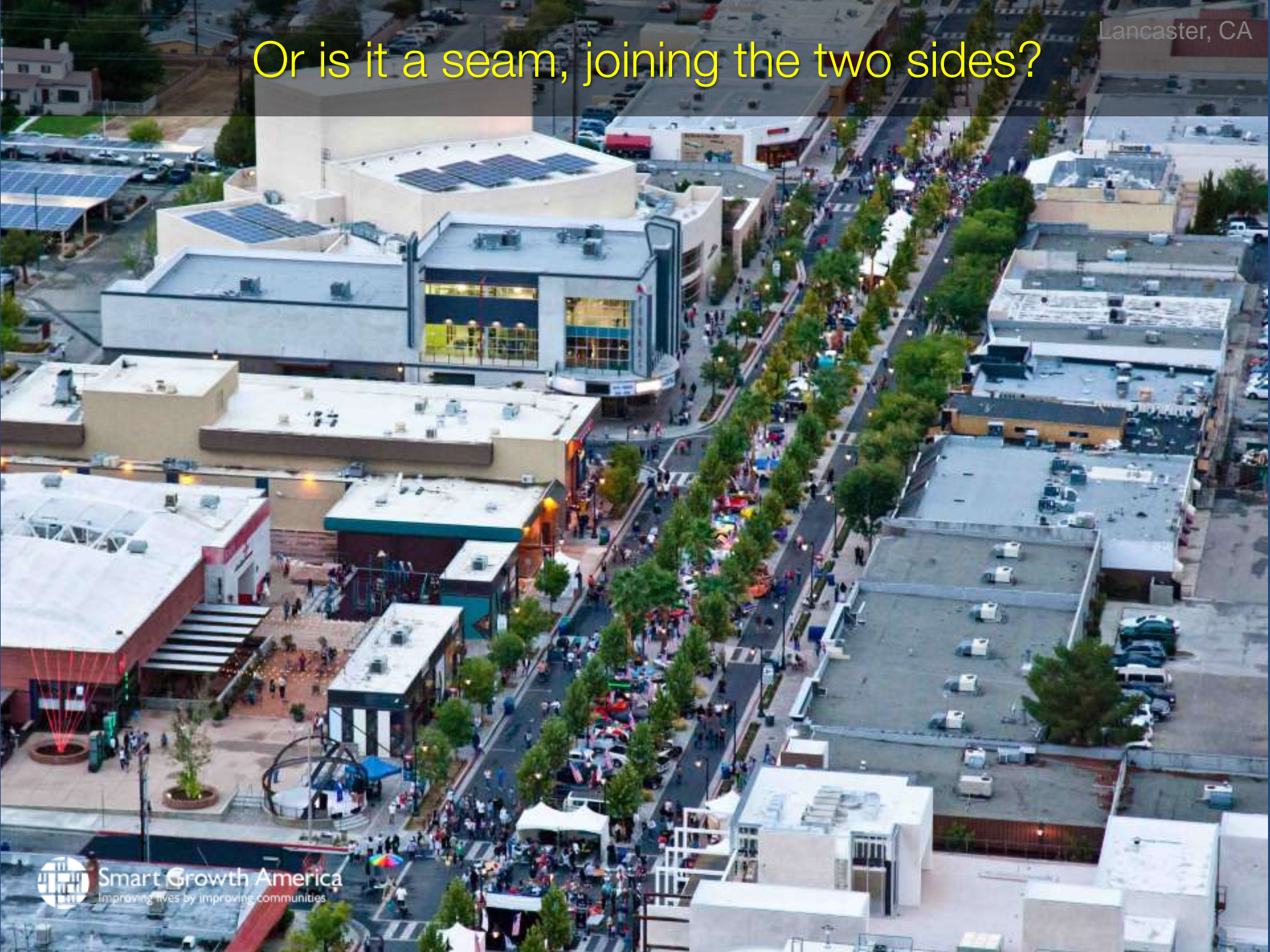


Level of service "A"

Is the road a barrier, creating a divide?



Or is it a seam, joining the two sides?



# Complete streets in South Bend, IN





What's your priority?

It's impossible to prioritize both...

The infographic is divided into two main sections: "Speed" (top left, red background) and "Safety" (bottom right, blue background). A central yellow box with the word "AND" is positioned between them. The "Speed" section shows a road with a 40 mph speed limit sign, a car icon, and a shopping cart icon. The "Safety" section shows a road with a 25 mph speed limit sign, a car icon, a shopping cart icon, and a person icon. The road in the "Safety" section is marked with numbered circles (1-6) indicating various safety features like crosswalks, bike lanes, and pedestrian crossings. A "DANGEROUS BY DESIGN" logo is at the bottom center.

Speed

AND

Safety

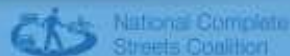
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DANGEROUS BY DESIGN

National Complete Streets Coalition



# Complete Streets: high value



## SAFER STREETS, STRONGER ECONOMIES

Complete Streets project outcomes  
from across the country



- ↓ Collision & injury costs
- ↑ Employment levels
- ↑ Property values
- ↑ Private sector investment
- ↑ Net new businesses

# ...and these safer conditions saved money.

- Every avoided collision produces cost-savings for individuals.
- For individual projects, these savings alone can justify the cost of these improvements.



Within our sample,  
Complete Streets  
improvements  
collectively  
averted

**\$18.1 million**  
in collision costs in  
**1 year.**

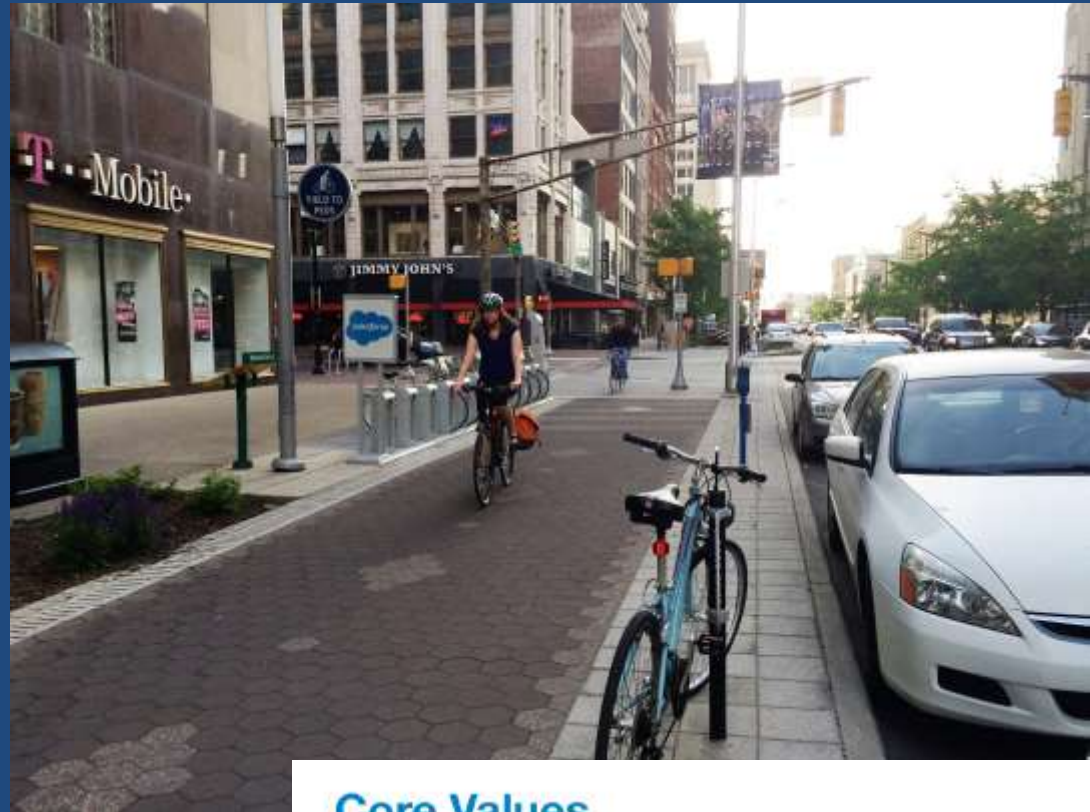


# To attract and retain talented workers: Millennials

Image: Indianapolis Cultural Trail (CZ)

*“Our younger employees don’t want to go to a suburban office park. It’s boring as all get out out there. Here they walk outside and see cool stuff and it’s fun. I wanted to be where they wanted to be.”*

*- Reg Shiverick, President,  
Dakota Software, Cleveland, OH*



## Core Values

Why American Companies are Moving Downtown



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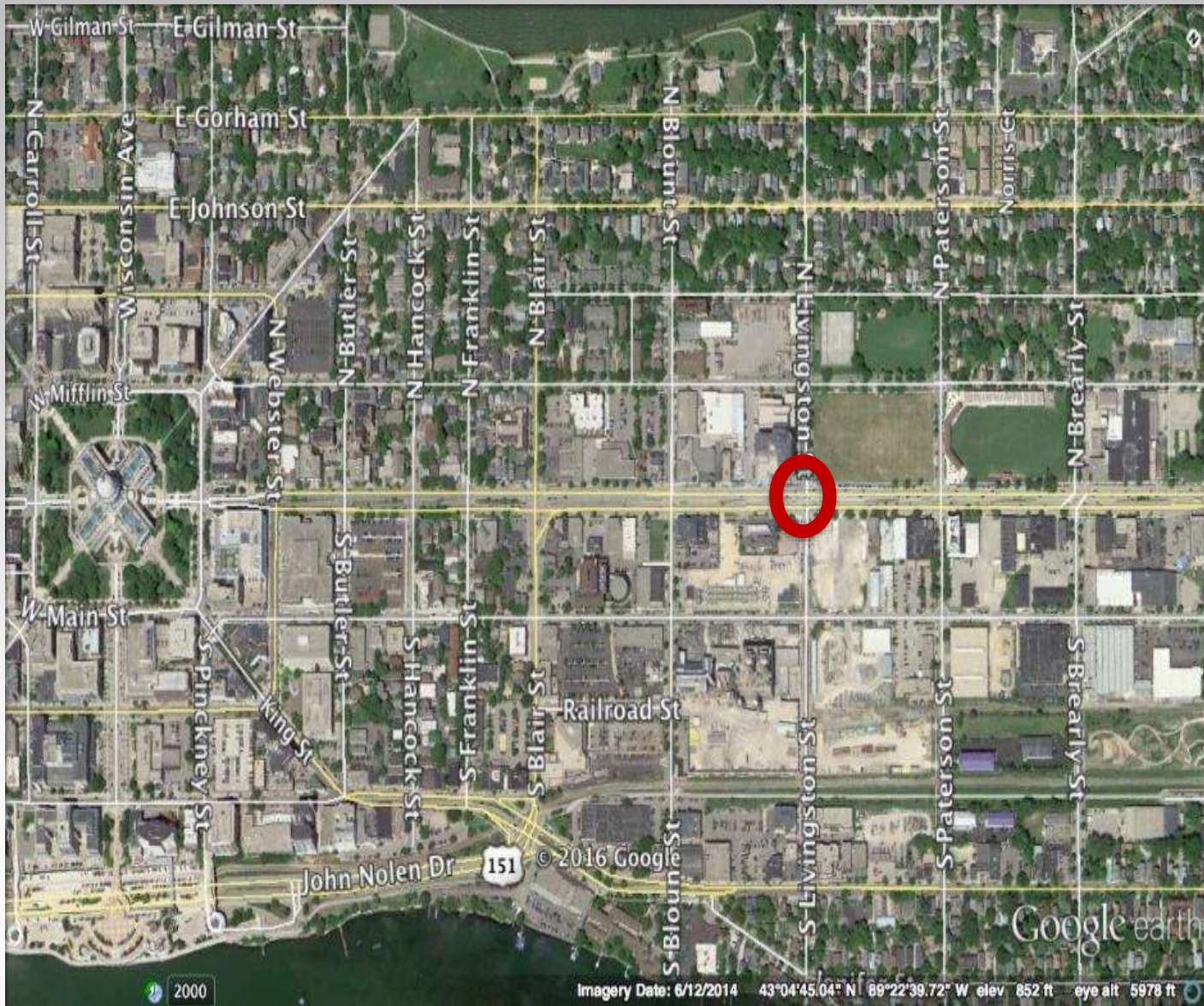


AN INVESTORSHIP WITH



Center for Real Estate  
and Urban Analysis

# What to measure?



## Mobility measures

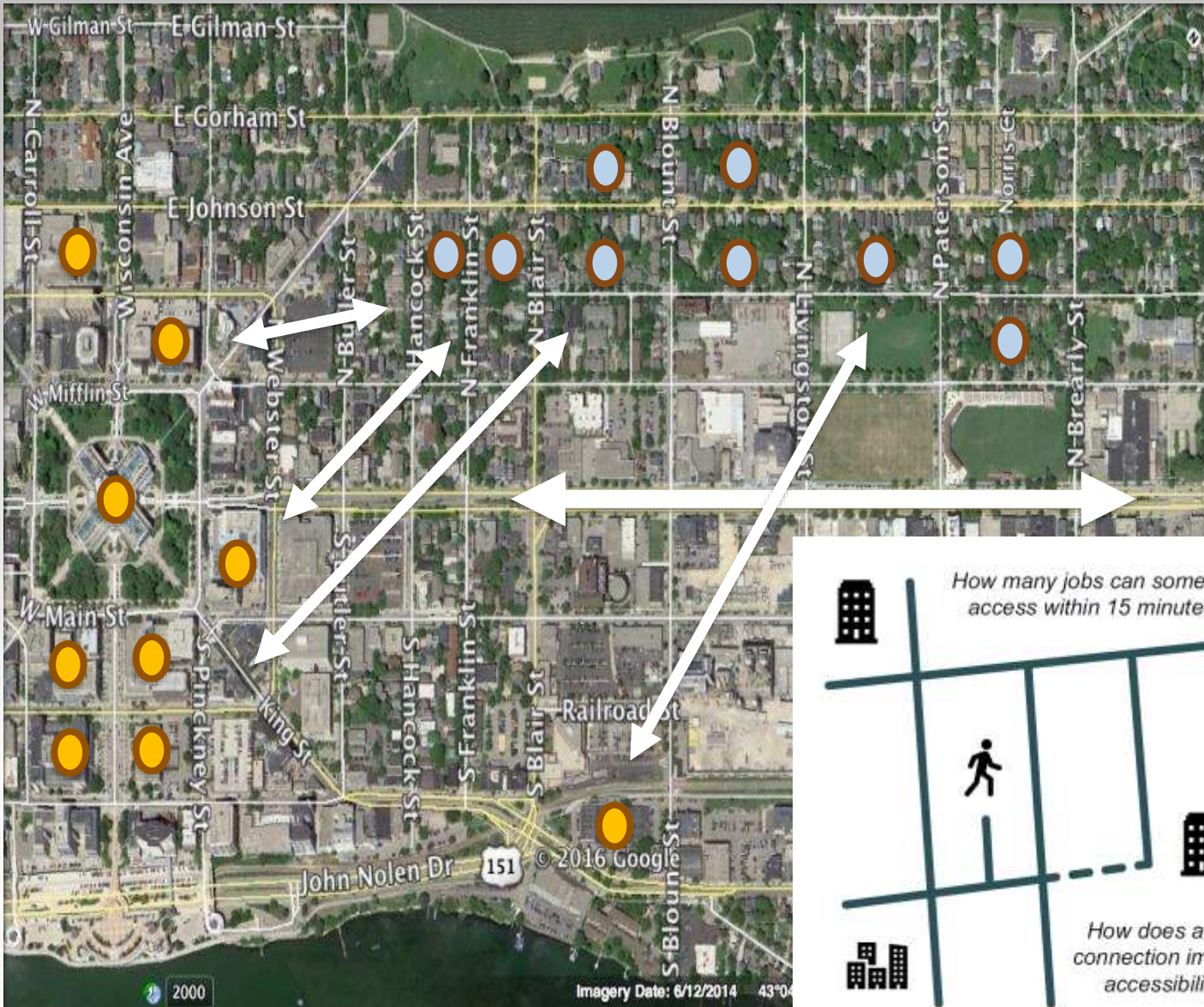
Travel speed

Level of service

Vehicle throughput

Person throughput

# What to measure?



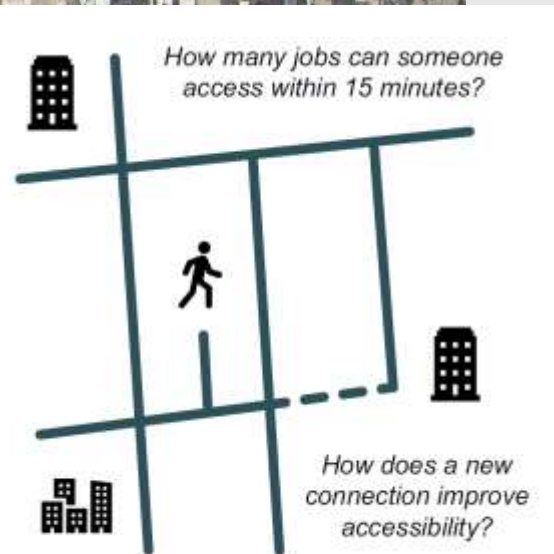
## Accessibility measures

Origins

Destinations

Ability to travel

between them



# Accessibility measures

## Two measures

### Access to jobs

- 20% of trips; 30% of VMT
- Reported as “number of jobs”

### Non-work access

- Groceries, parks, schools, restaurants, and other non-work destinations
- 80% of trips; 70% of VMT
- Reported as a score (0-100)

## What’s needed?

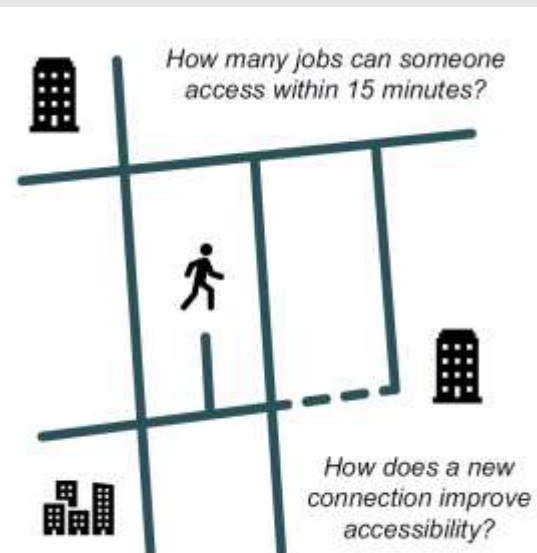
### Transportation networks

- Roads, bike paths, sidewalks, vehicle speeds, and transit routes and schedules

### Land uses

- Jobs and non-work destinations

### Calculation methods



# Maximizing return on investment

## PROJECT SCORECARD

## HB2 Funding the Right Transportation Projects

I-64 Peninsula Widening

App Id: 550

Widen I-64 corridor from 1.55 miles west of Jefferson Ave (Exit 255) to Route 199 west of Williamsburg (Exit 234) with addition of travel lane and shoulder in each direction within median to widen roadway from 4 to 6 lanes.

### Performance

VTrans Need: East-West Corridor of Statewide Significance

[Click for details](#)

### Project Benefit Score

24.9

### Final Score

1.7

### Statewide Rank

151/287

### District Rank

14/40

### HB2 COST

### TOTAL COST

1.7

228/287

21/40

Congestion Mitigation		Safety		Accessibility			Environment		Economic Development			Land Use
45% of score		5% of score		15% of score			10% of score		5% of score			20% of score
50%	50%	50%	50%	60%	20%	20%	50%	50%	60%	20%	20%	100%
Increase in Daily Person Throughput	Decrease in Person Hours Delay	Reduction in Fatal and Severe Injury	Reduction in Fatal and Severe Injury Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Improved Access to Multimodal Choices (Users Benefit Value)	Air Quality (Total Benefit Value)	Acres of Natural/Cultural Resources Potentially Impacted	Economic Development Support (Sq. ft.)	Intermodal Access Improvements (Tons Benefit Value)	Travel Time Reliability Improvement	Transportation Efficient Land Use
52.3	38.2	100.0	0.4	2.7	3.4	0	0.1	0		35.2	16.4	6.0



# Route 10 “Superstreet”

Proposed for Chesterfield County, VA







# Richmond Hwy (Route 1)

A main street for Amazon's new HQ in Arlington



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# “Reimagine Route 1”

A business view

DEVELOPED BY:

**TOOLE**  
DESIGN



“If done right, Route 1 can be transformed into an inspired gateway to National Landing that prioritizes the community by putting people first.”

-- BID Executive Director Tracy Sayegh Gabriel

# “Reimagine Route 1”

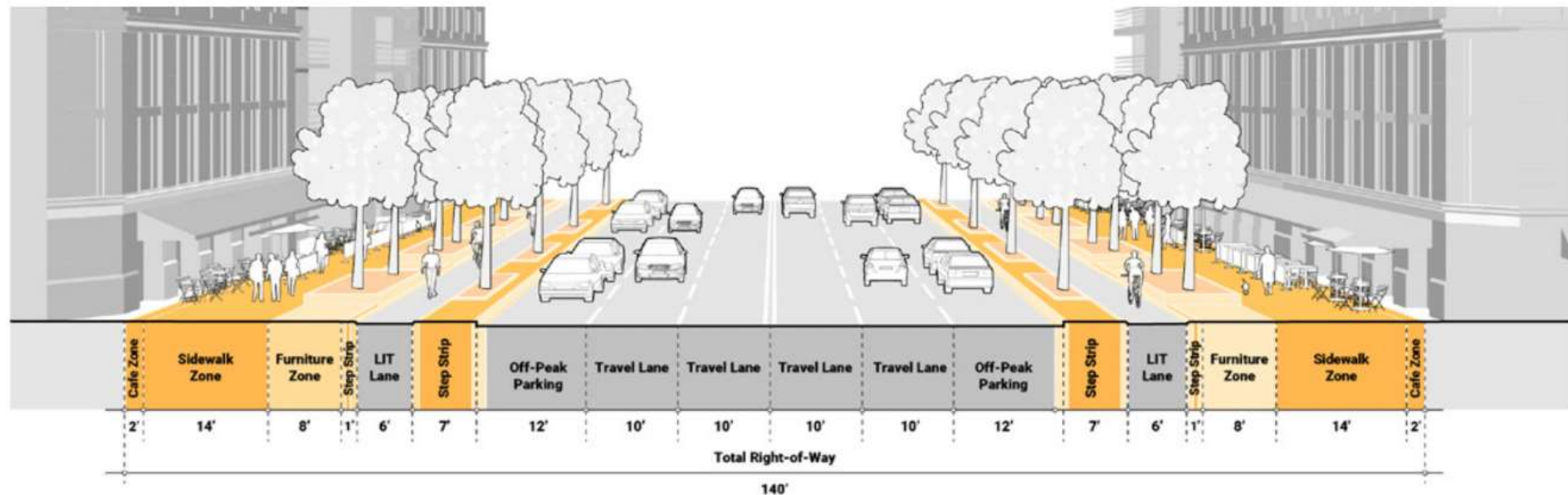
A business view

DEVELOPED BY:

**TOOLE**  
DESIGN

## CONCEPT B- MAXIMUM SIDEWALK BOULEVARD

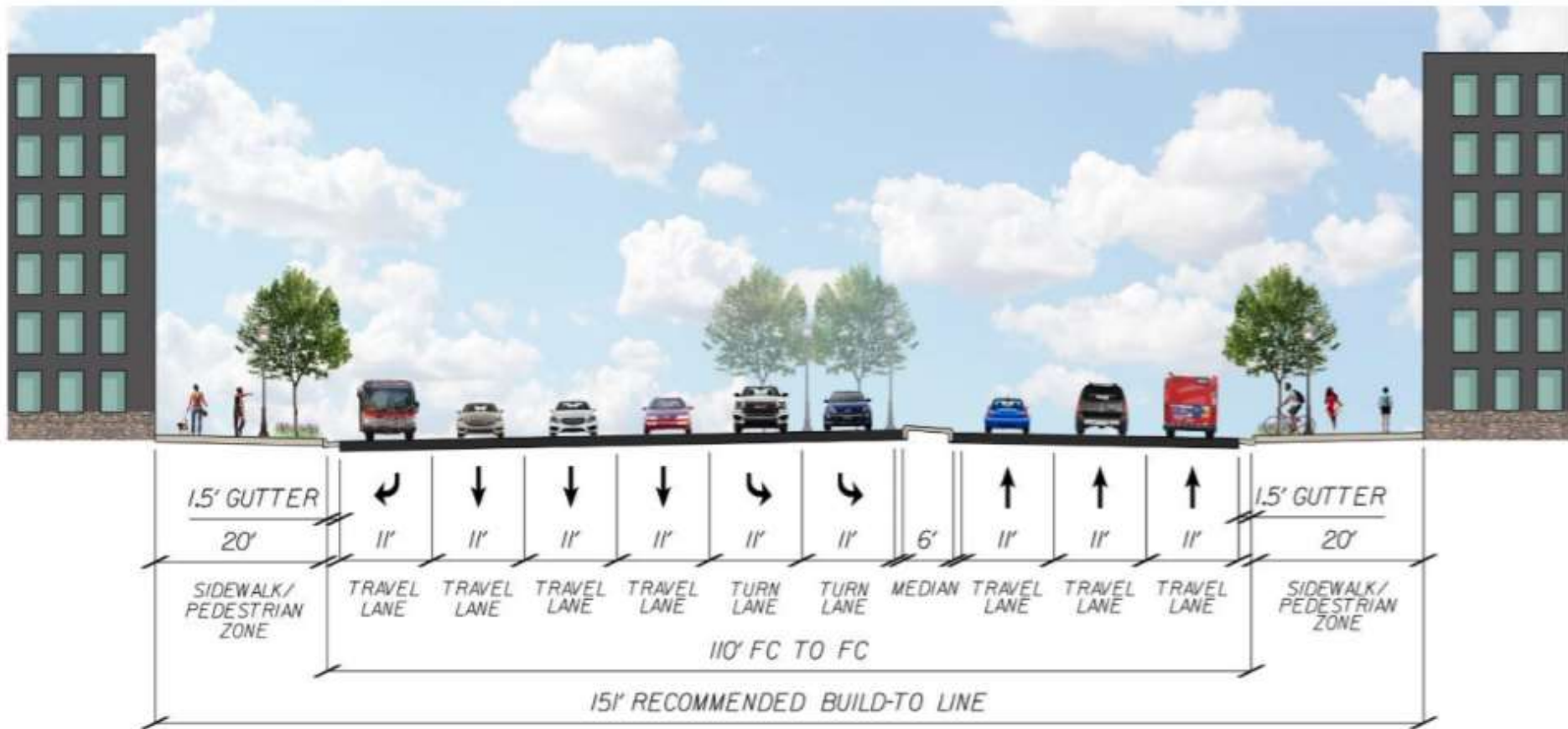
6 lanes (3 lanes in each direction) with no median. Outer lanes become parking during off-peak hours.



- 140 feet building face to building face
- 64 feet for cars in 6 lanes
- 76 feet for pedestrians, bikes, trees, street furniture

# “Route 1 Multimodal Improvements”

A state DOT view



- 151 feet building face to building face
- 110 feet for cars in 9 lanes
- 40 feet for pedestrians, bikes, trees, street furniture

# Thank you



Christopher Zimmerman  
Vice President for Economic Development

