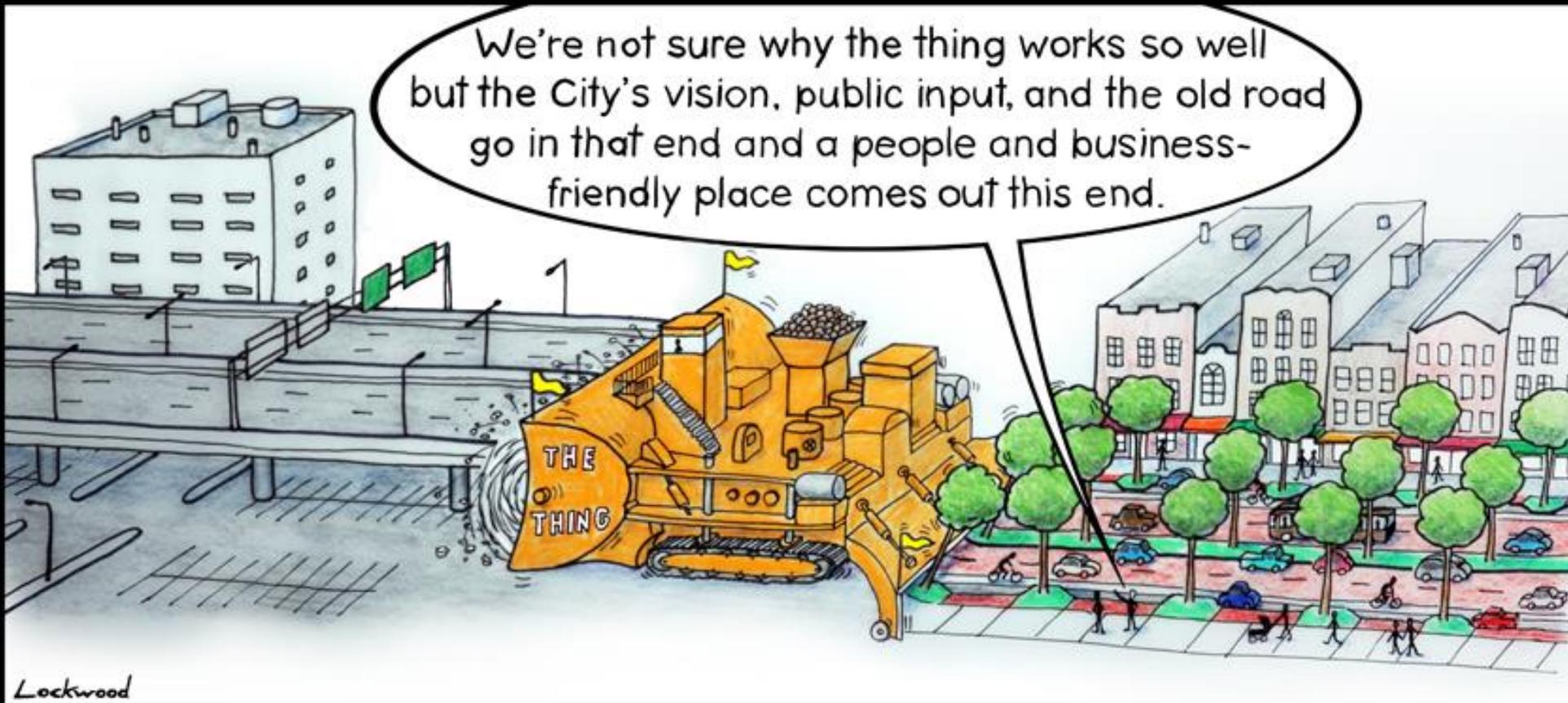


Complete Arterials



Ian Lockwood, P.E.
Livable Transportation Engineer
407-496-2529 ilockwood@tooledesign.com

Toole
Design
Group





**Pedestrians are to cities as
Canaries were to mines**



A. Lenoir - 72

We want to walk









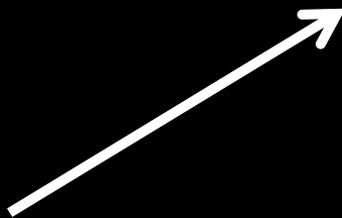
Crash-Related Deaths per 100K

Switzerland	XXXXXX
Norway	XXXXXX
Japan	XXXXXX
Sweden	XXXXXX
England	XXXXXX
Germany	XXXXXXX
France	XXXXXXXXX
Australia	XXXXXXXXX
Canada	XXXXXXXXXX
Spain	XXXXXXXXXX
New Zealand	XXXXXXXXXX
United States	XXXXXXXXXXXX

Most Dangerous State for Walking

Deaths by state: Florida is the most dangerous state in America for pedestrians. In 2011, the last year for which national data are available, Florida saw 2.6 pedestrians killed for every 100,000 state residents. Here are America's 10 deadliest states for pedestrians:

Rank/state	2011 population estimate	Pedestrian deaths	Deaths per 100,000
1. Florida	19.1M	490	2.6
2. South Carolina	4.7M	113	2.4
3. Arizona	6.5M	147	2.3
4. Delaware	907,135	18	2.0
5. New Mexico	2.1M	41	2.0
6. Louisiana	4.6M	88	1.9
7. Maryland	5.8M	102	1.8
8. Nevada	2.7M	46	1.7
9. Hawaii	1.4M	23	1.7
10. California	37.7M	625	1.7



Florida #1

SOURCES: U.S. National Highway Traffic Safety Administration's Fatality Analysis Reporting System, Florida Department of Highway Safety and Motor Vehicles, staff research

SHINIKO R. FLOYD/STAFF ARTIST

The New York Times



The Most Dangerous Cities for Walking



Rank	Metro area	Pedestrian deaths per 100,000	Percentage walking to work	Pedestrian danger index
1	Orlando-Kissimmee	3.0	1.2%	255.4
2	Tampa-St. Petersburg-Clearwater	3.5	1.6%	212.7
3	Jacksonville	2.8	1.6%	177.8
4	Miami-Fort Lauderdale-Pompano Beach	2.9	1.7%	167.9
5	Riverside-San Bernardino-Ontario	2.5	1.8%	139.2
6	Las Vegas-Paradise	2.5	1.9%	135.2

Most Dangerous Cities for Walking

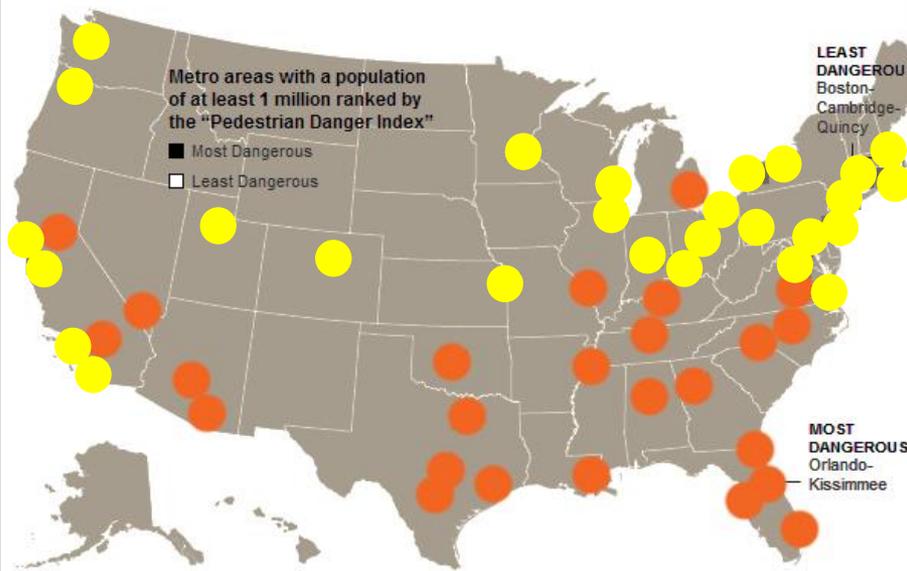


Orlando #1

The New York Times



The Most Dangerous Cities for Walking



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6	Las Vegas-Paradise	2.5	1.9%	135.2

Most Dangerous Cities for Walking

← **Orlando #1**



Movie Previews
and More! [Click](#)

HOME LOCAL WEATHER SPORTS BUSINESS ENTERTAINMENT LIFE HEALTH TRAVEL OPINION VIDEOS CLASSIFIED

BREAKING OBITUARIES CRIME POLITICS SUNRAIL ORANGE SEMINOLE LAKE OSCEOLA WINTER PARK COLLEGE PARK

WEEKLY ADS JCPenney TRENDING: | Trader Joe's | World Cup | Lucy Li | Diagon Alley Search All content Business listings Search

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DRYWALL TO PLUMBING...
WE DO IT ALL!

ASK ABOUT OUR \$500 OFF OFFER! [CLICK](#)

ORLANDO SENTINEL SPECIAL REPORT

BLOOD IN THE STREETS

About the project: For more than a decade, Metro Orlando has earned the dubious distinction of being the most dangerous city in the country for pedestrians. More are struck and killed here than in any other place in America. A three-part Orlando Sentinel investigation explores the magnitude of the problem and takes an in-depth look at the numbers and lives being ended and changed every day on our roadways.

PART 1: A LOOK AT THE PROBLEM



Animated video: The worst city in America for pedestrians



Video: The crisis on our roadways has a very grim toll

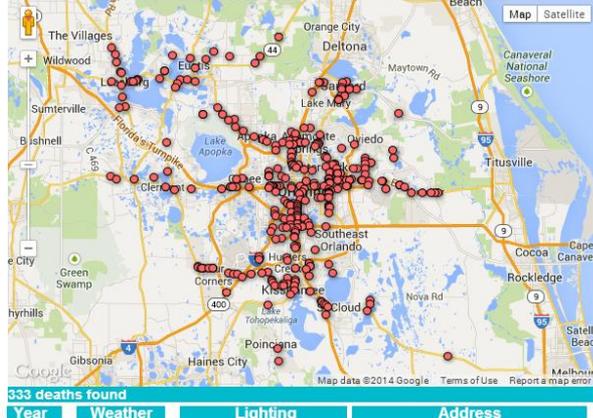


Video: 2 brothers struck: 1 family forever changed

WALKING OUR ROADS — IT COULD KILL YOU

Central Florida's roads run red with pedestrian blood. Nowhere in America are pedestrians at greater risk of being struck and seriously injured or killed. Nowhere are drivers more likely to suffer the life-changing split second of taking someone's life, simply by operating one of the 3,000-pound machines that are so ubiquitous in Central Florida... [Read more...](#)

Interactive Graphic - Metro Orlando Pedestrian Deaths: An Orlando Sentinel review of six years of law-enforcement records found 333 pedestrian deaths from 2007-12. Use the check boxes to sort the results or type in an address to search a specific area. Click on a point for more information. All locations are approximate. To remove any filters, click "Reset."



advertisement

FLOORING SALE ALERT!!!

Too many DEALS to list.

[CLICK HERE NOW](#)

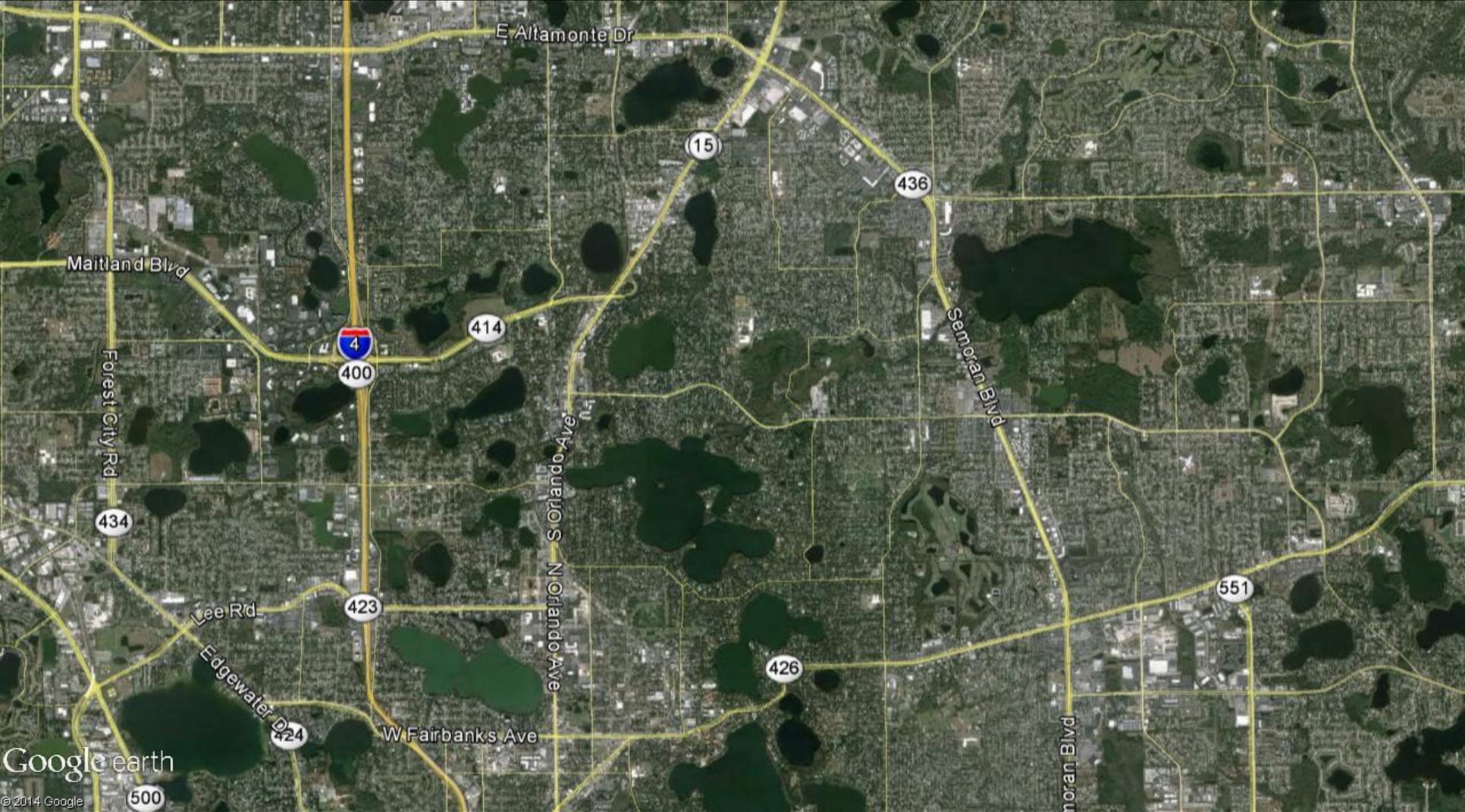
EL AL Flights to Israel [▶](#)

elal.co.il
Direct & Secure Flights to Israel Book Online and Save!

Public Arrest Records [▼](#)

8 Myths of the Golf Swing [▼](#)

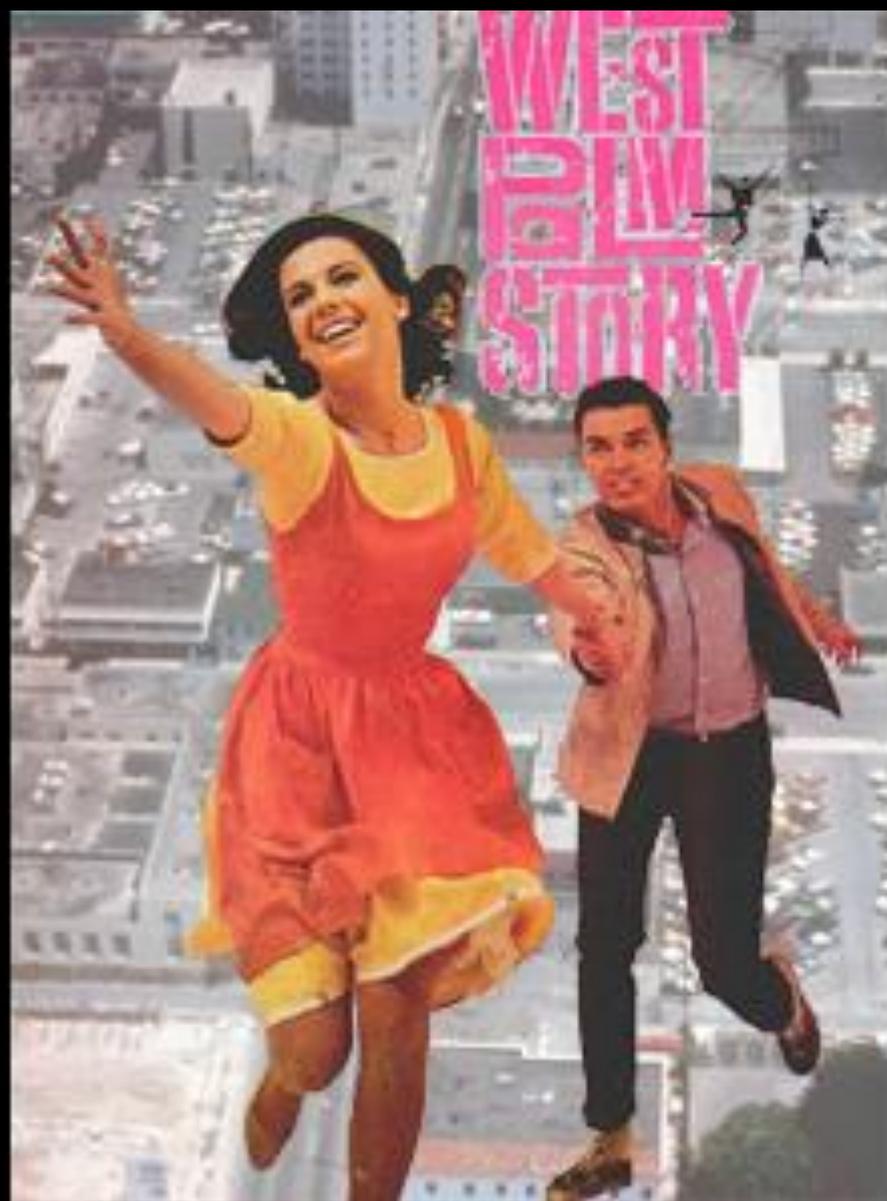
Where are our people being killed?



Where are the destinations?

Idea for Today:

“Mobility” is completely consistent with complete arterial streets.









































NO
TURN
ON
RED

Harris
MUSIC CO.

DISCOUNT
HEARING
AIDS

SALE
ON
SHIRT

Red
Light

FLOWER
SHOP





WEST PALM BEACH GREEN MARKET
EAT DRINK & BE MERRY

S OLIVE
100

NO RIGHT TURN

Red traffic light

WEST PALM BEACH
GREEN MARKET
EAT DRINK & BE MERRY

S OLIVE
100



WEST PALM BEACH
GREEN MARKET
EAT DRINK & BE MERRY















SMART TRANSPORTATION GUIDEBOOK

*Planning and Designing Highways and Streets
that Support Sustainable and Livable Communities*



New Jersey Department
of Transportation



Pennsylvania Department
of Transportation

MARCH 2008

MODEL *for*
DESIGN
MANUAL

LIVING STREETS

Los Angeles County  2011



Healthy Arterial Design

Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions
Bulbouts
Valley Gutters
Parallel or Head-Out Angled Parking



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions
Bulbouts
Valley Gutters
Parallel or Head-Out Angled Parking
Low Scale Lighting



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions
Bulbouts
Valley Gutters
Parallel or Head-Out Angled Parking
Low Scale Lighting
Bike lanes, Protected Bikes Lanes, Cycle Tracks



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions
Bulbouts
Valley Gutters
Parallel or Head-Out Angled Parking
Low Scale Lighting
Bike lanes, Protected Bikes Lanes, Cycle Tracks
Texture



Healthy Arterial Design

Transition Zones
Roundabouts
Entrance Features
Lane Removals
Lane Width Reductions
Bulbouts
Valley Gutters
Parallel or Head-Out Angled Parking
Low Scale Lighting
Bike lanes, Protected Bikes Lanes, Cycle Tracks
Texture
Lateral Shifts (shorten views)



Healthy Arterial Design

Transition Zones
Roundabout
Entrance
Lane Reduction
Lane Widening
Bulbouts
Valley Cuts
Parallel Medians
Low Speed
Bike lanes
Texture



Lateral Shifts (shorten views)
Continuous Medians
Short Medians
Flush Medians



Healthy Arterial Design

Transition Zone
Roundabouts
Entrance Features
Lane Removal
Lane Width Features
Bulbouts
Valley Gutter
Parallel or He
Low Scale Lighting
Bike lanes, Protected Bike
Texture
Lateral Shifts (shorten vi
Continuous Medians
Short Medians
Flush Medians
Canopy Street Trees



Healthy Arterial Design

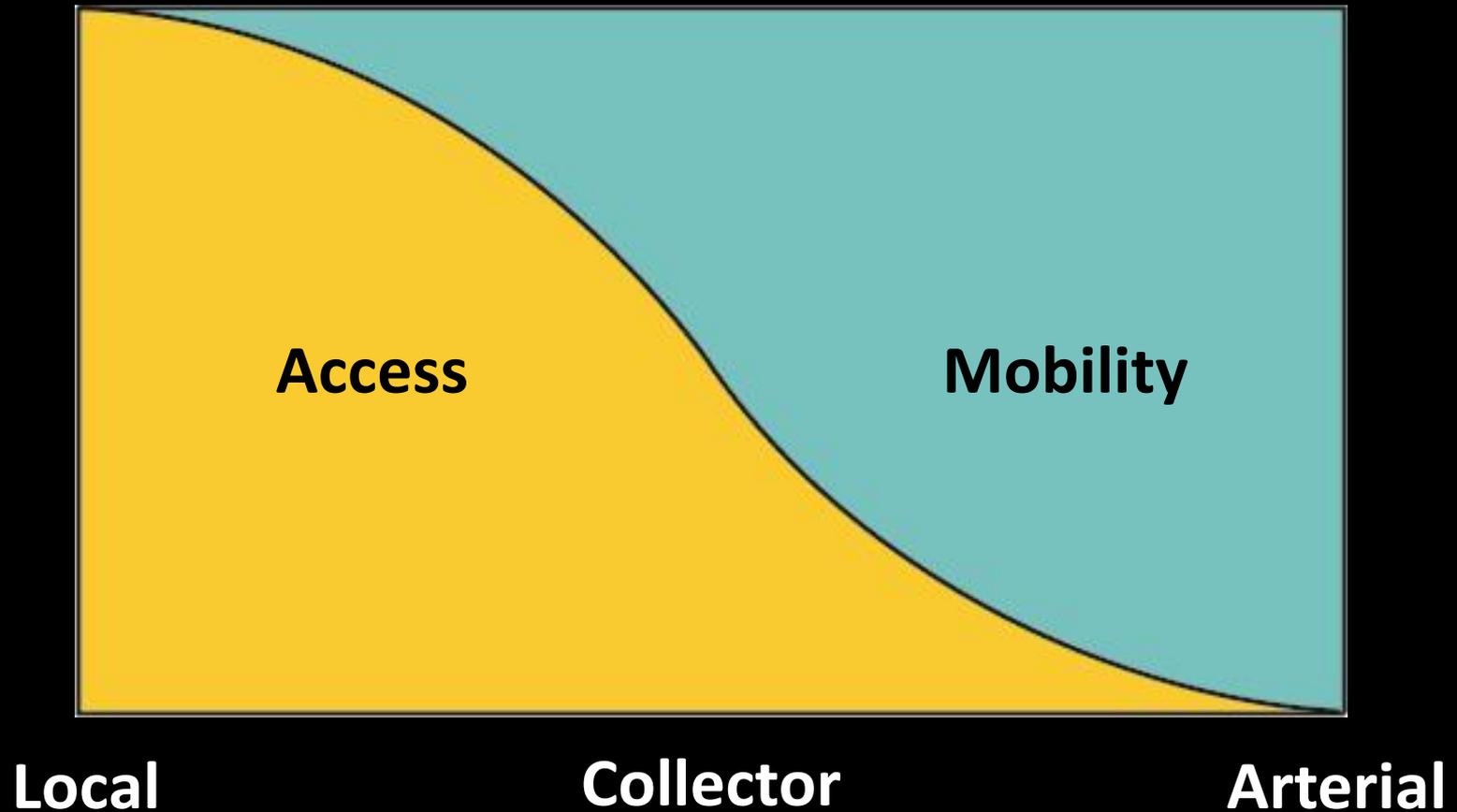
Transition Zones
Roundabouts
Entrance Features

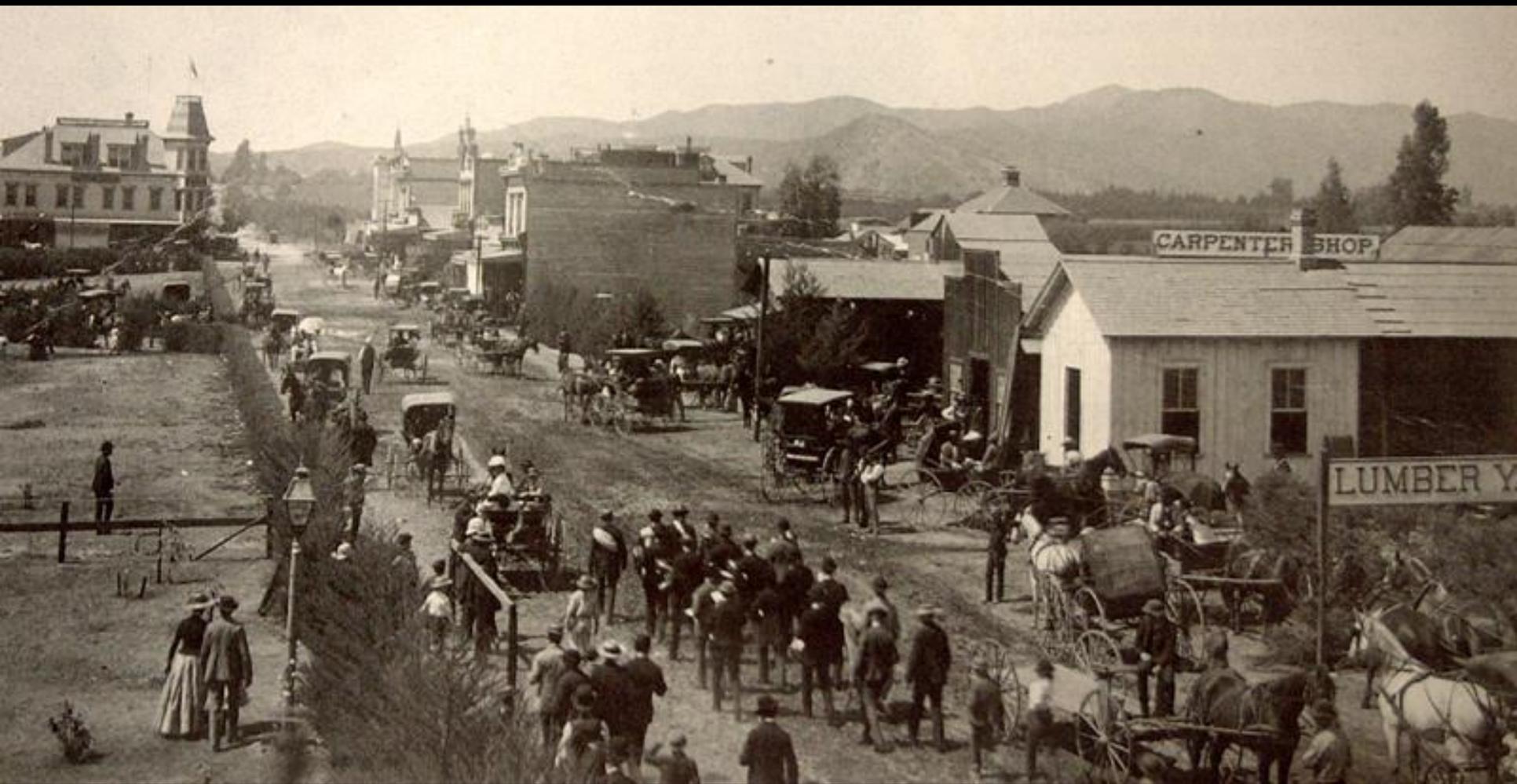


Texture
Lateral Shifts (shorten views)
Continuous Medians
Short Medians
Flush Medians
Canopy Street Trees
Wide Sidewalks
Buildings that Address the Street



Modern Conception of the Purpose of Streets

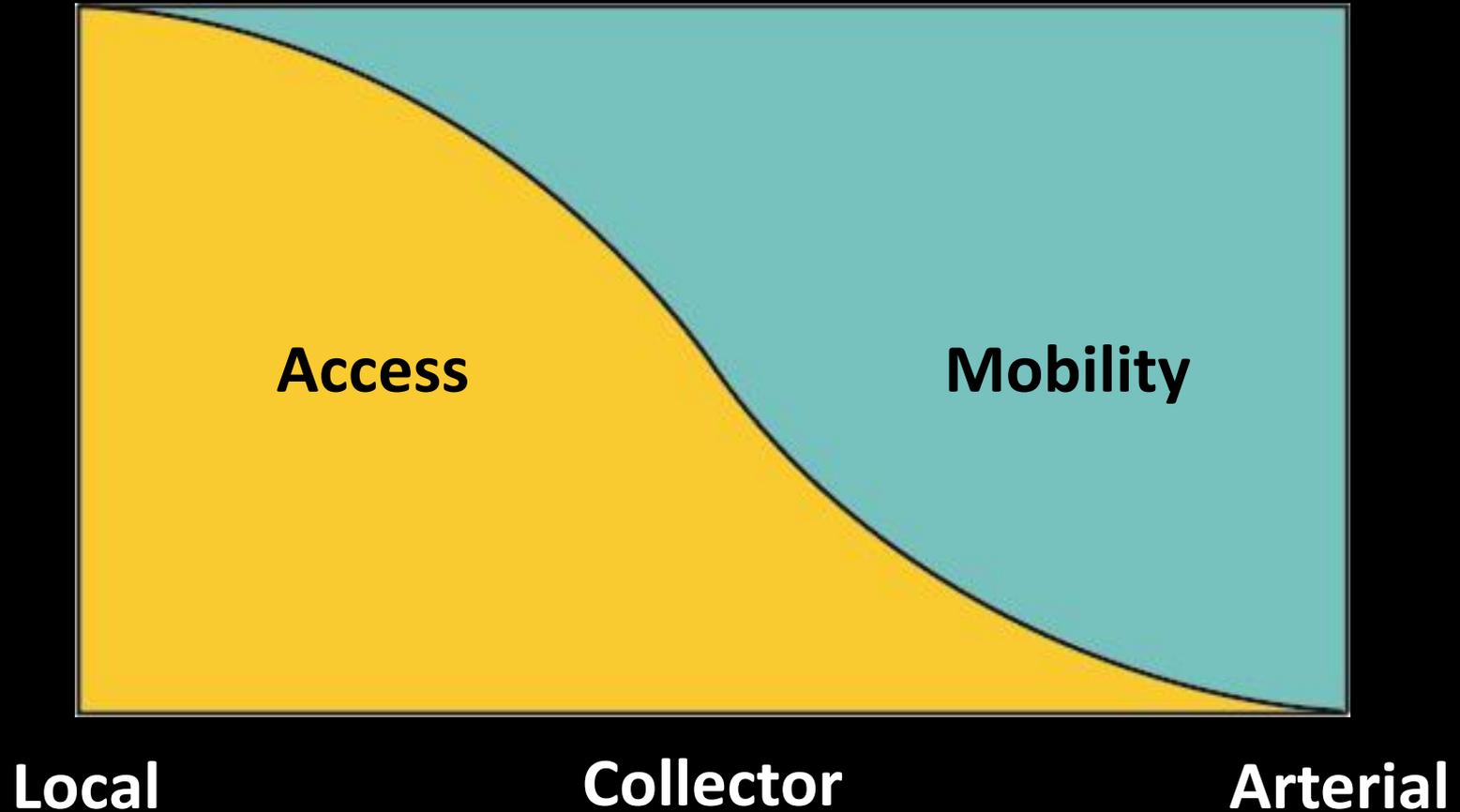




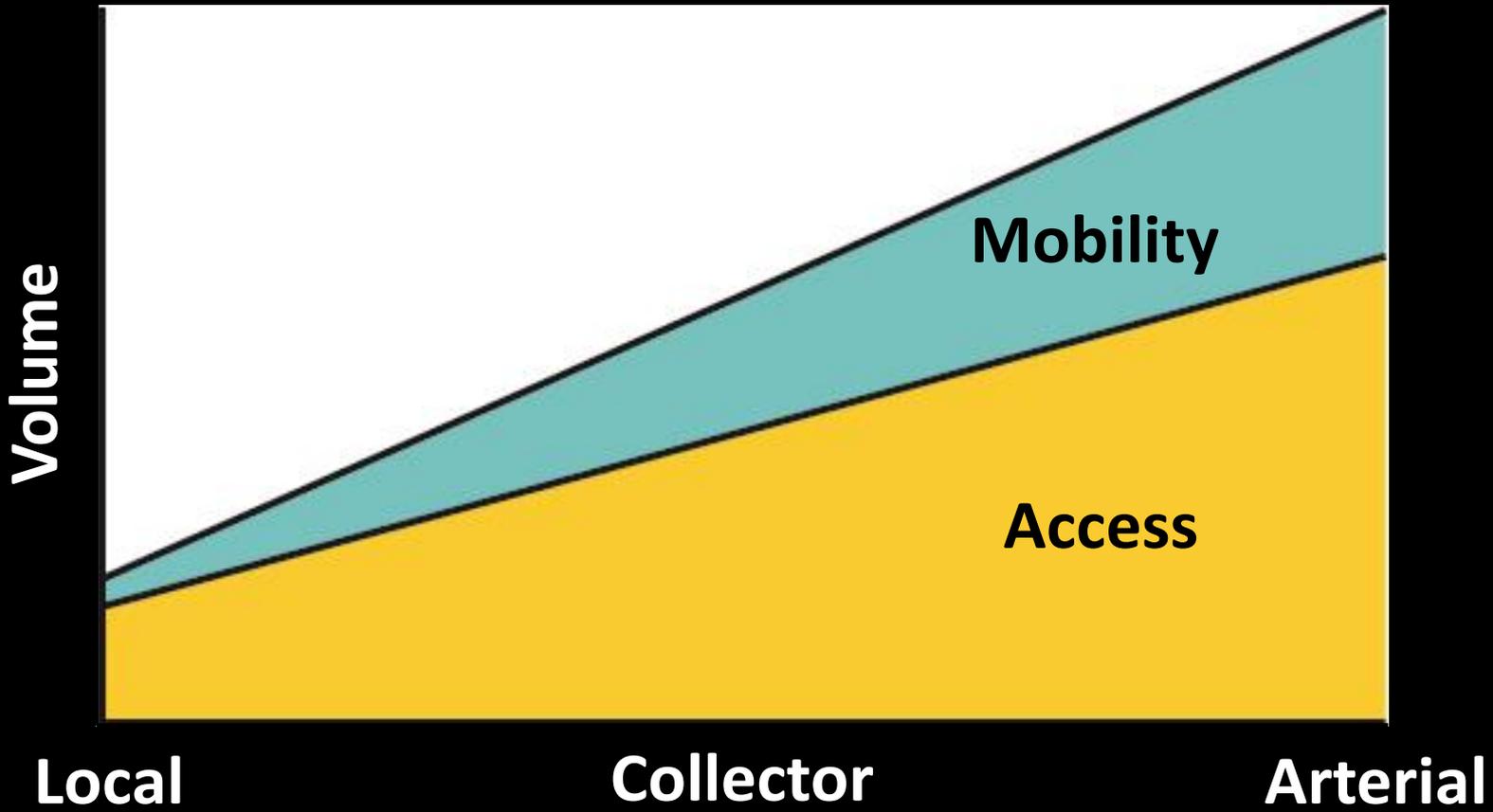




Modern Conception of the Purpose of Streets



Traditional Conception of Access & Mobility



Mobility

the movement of people & goods

Mobility

the movement of people & goods

assumption: faster, farther, and in greater numbers means progress for society

Mobility

Mobility

The population's capabilities and strategies to move in order to access what it needs to live within the city.

Mobility

The **population's** capabilities and strategies to move in order to access what it needs to live within the city.

Many Populations: young people, elderly, handicapped, different income levels, millennials, pedestrians, cyclists, transit users, students,...

Mobility

The population's
capabilities and strategies
to move in order to access
what it needs to live
within the city.

- i) **physical ability to walk, cycle,...**
- ii) **mode choices provided privately & publically**
- iii) **population's adaptations to changes to its environment**

Mobility

The population's capabilities and strategies **to move in order to access** what it needs to live within the city.

the movement is purposeful

Mobility

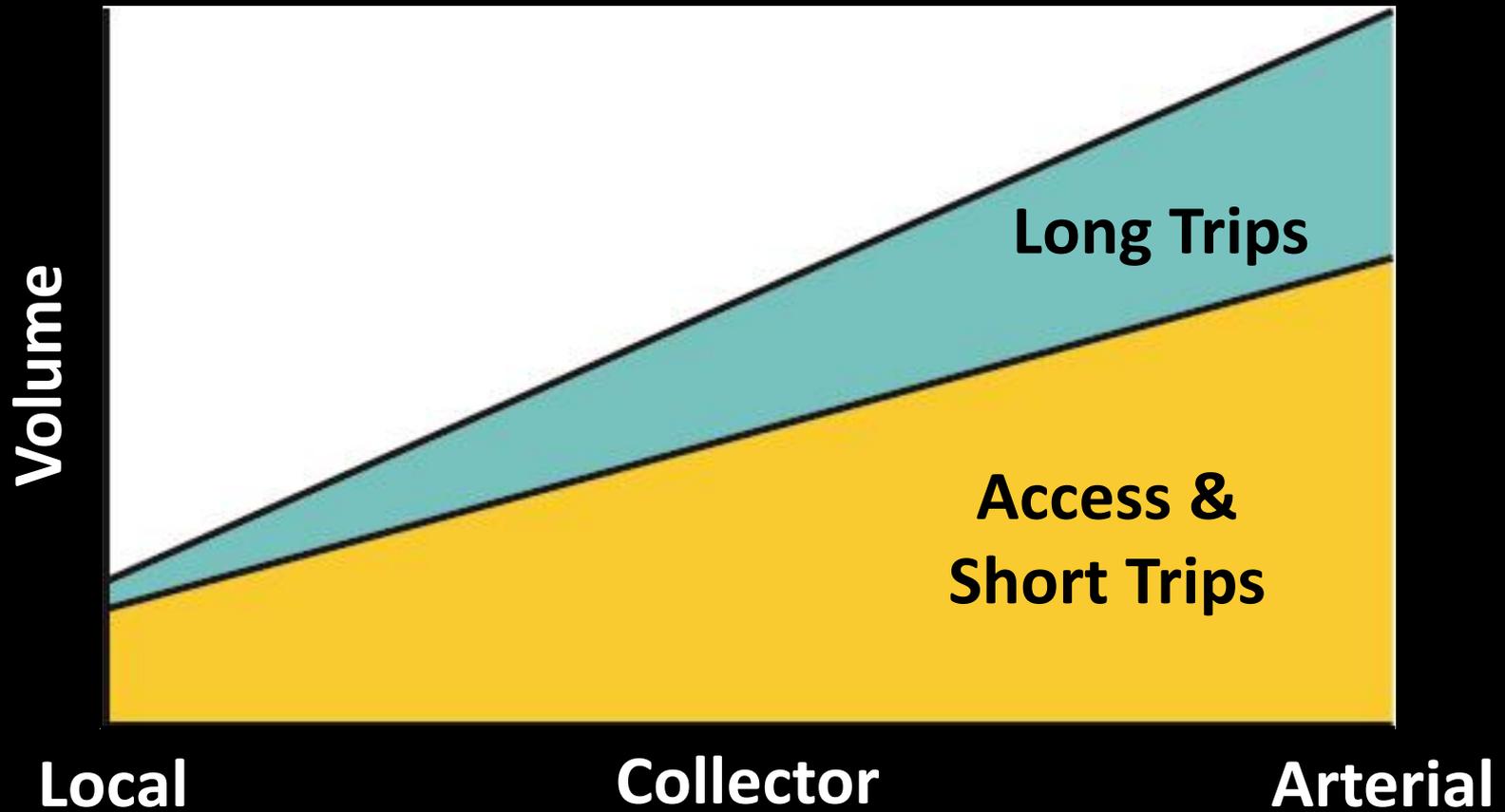
The population's capabilities and strategies to move in order to access **what it needs to live** within the city.

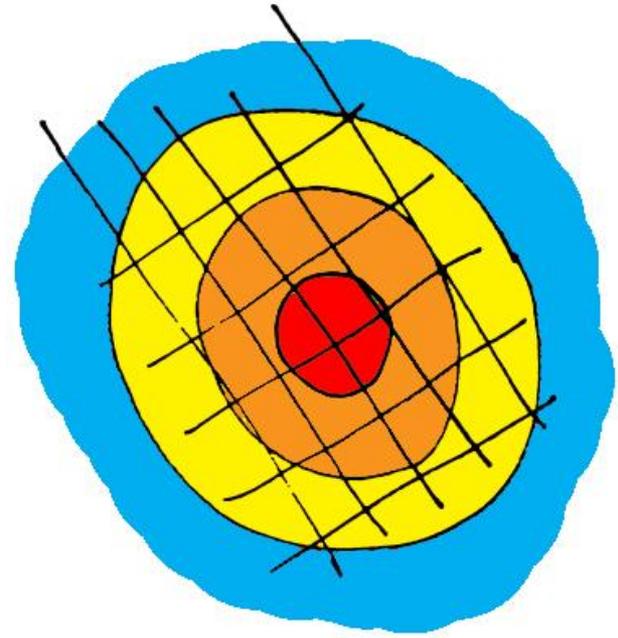
social/recreation	24.5%	work	18.0%
family/personal	24.2%	work-related	2.6%
doctor/dentist	1.5%	shop	20.2%
school & church	8.8%	other	0.2%

Mobility

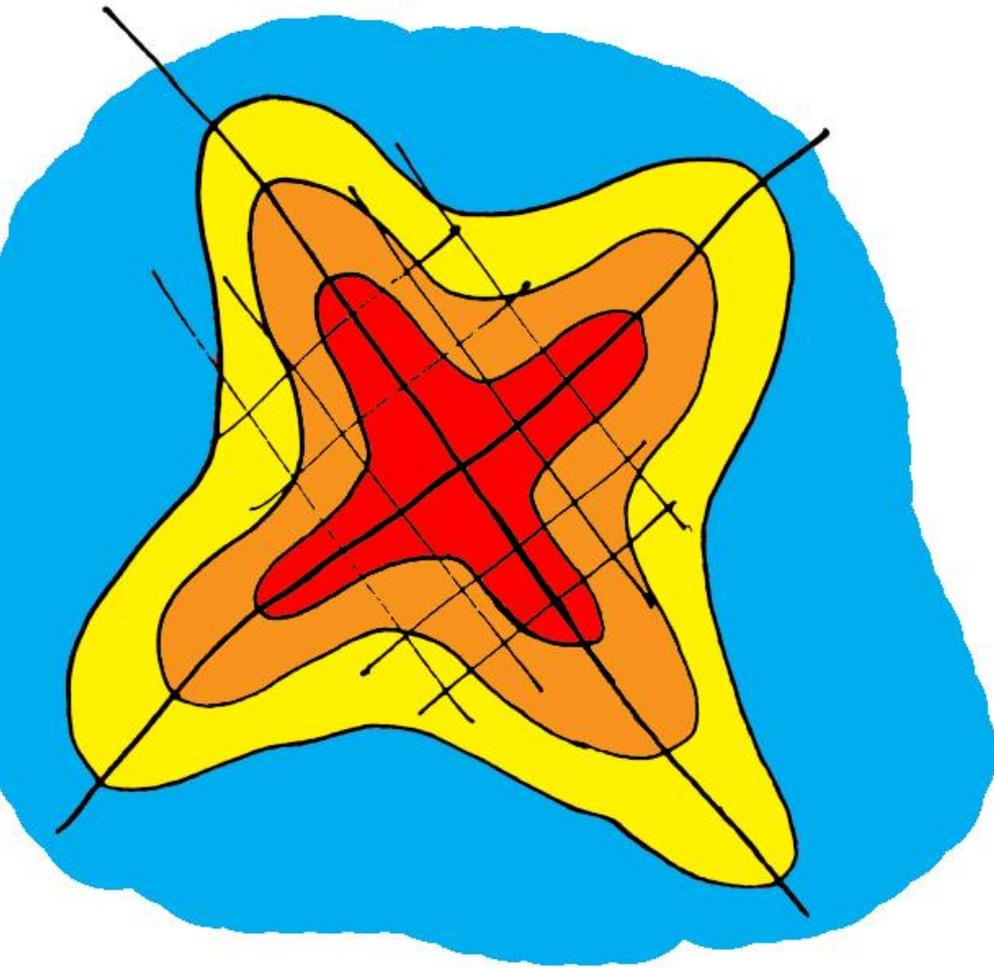
The population's capabilities and strategies to move in order to access what it needs to live within the city.

Traditional Conception of Access & Mobility

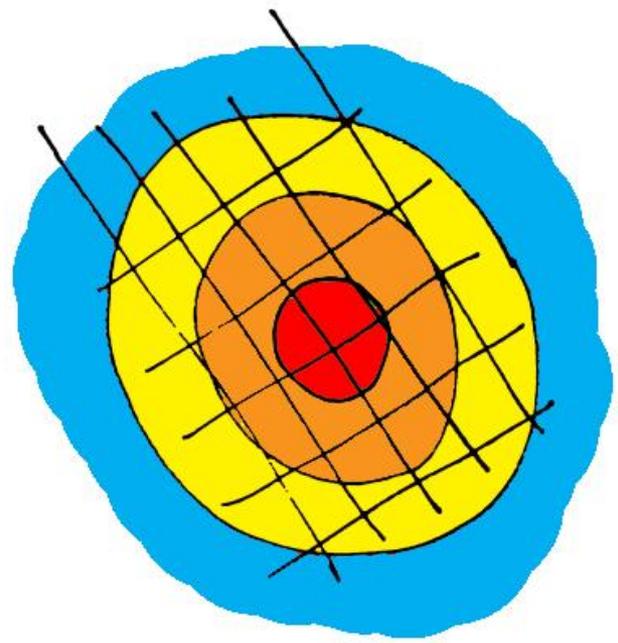




Traditional City
Value = f_n (proximity to center)



Conventional Theory
Value = f_n (travel time to center)



Traditional City
Value = f_n (proximity to center)

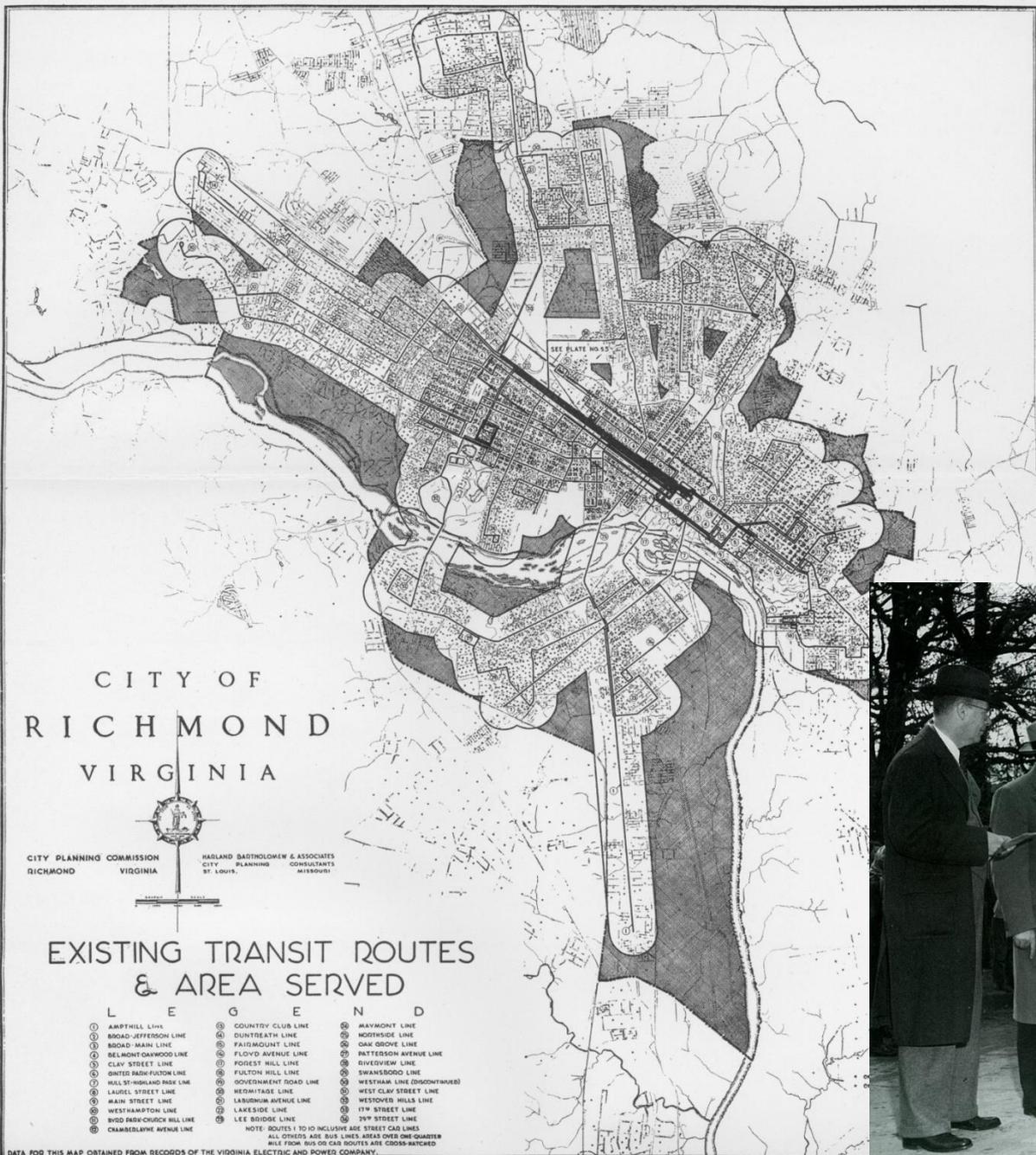


PLATE NUMBER 54







Proportion of wealth spent on transportation?

Phoenix

Denver

Houston

Toronto

Copenhagen

Charlotte

Your City

Proportion of wealth spent on transportation?

Phoenix 16%

Denver 15%

Houston 14%

Toronto

Copenhagen

Charlotte

Your City

Proportion of wealth spent on transportation?

Phoenix	16%
Denver	15%
Houston	14%
Toronto	7%
Copenhagen	4%
Charlotte	
Your City	

Proportion of wealth spent on transportation?

Phoenix	16%
Denver	15%
Houston	14%
Toronto	7%
Copenhagen	4%
Charlotte	?
Your City	?



ANNABELLE HART
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College Park
HAIRCARE DESIGN

Swiss House
Gifts



college park JazzFest 2010

The sponsors of this year's JazzFest were amazing, not only giving financial support, but offering help every step of the way to make sure this was a huge success for the community and that College Park shined for all of the guests we hosted from outside of our community for the annual JazzFest.

**Thank You
Amazon Hose
Tijuana Flats
Florida Hospital
Orange Cycle
SunTrust
Regions Bank**

**Old Florida National Bank
Charles, Amy, Chas and Owen Cook
Florida Department of Art & Cultural
ABC Liquors
Troy Bridges, Local 6**

There were many in-kind sponsors that gave recourses, time and energy to JazzFest.

Old Florida National Bank staff from the College Park Branch...every member of the staff volunteered and managed the ticket sales. **Infusion Tea** had the wristbands printed... **Clear Channel Outdoor** donated a great billboard on Edgewater Drive... **CJ Higginbotham of Leap Creative Services** created all of the eye-catching graphic... **The Community Paper** and **Orange Appeal** both gave us ads in their publications and **The Tap Room, K Wine Bar, Infusion Tea, Publix, Tijuana Flats** and **Adriadico** gave us food for the volunteers and musicians, and **Cavanaugh's Fine Wines** donated wine for the sponsor tables and **Appenberry Gardens** donated the flowers. **Cookie Cousins** and **Regions Bank** hosted the Green Rooms.

We also want to thank the volunteers from the community and the College Park Partnership for giving so much of their time.



College Park Partnership

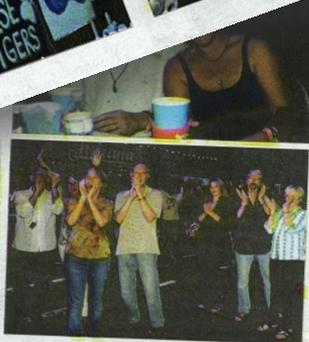


Homecoming Float Contest

The College Park Partnership held it's first annual Community Float Contest for the Edgewater High School Homecoming Parade. It was so exciting to see so many local schools and organizations participate in the parade this year. There were so many great entries which made it hard for the judges to choose. The winners were as follows:

- “Best Represents Homecoming Theme—Music Mayhem” - \$250—Edgewater High School PTSA
- “Most Creative Float” - \$150 - Edgewater High School Crew Team
- “Most Eagle Spirit” - \$100 - Lake Silver Elementary School.

Congratulations winners! We can't wait to see what you come up with next year!





Community Paper

Contest

Edgewater High School Homecoming Parade.
in the parade this year.
winners were as follows:
School PTSA



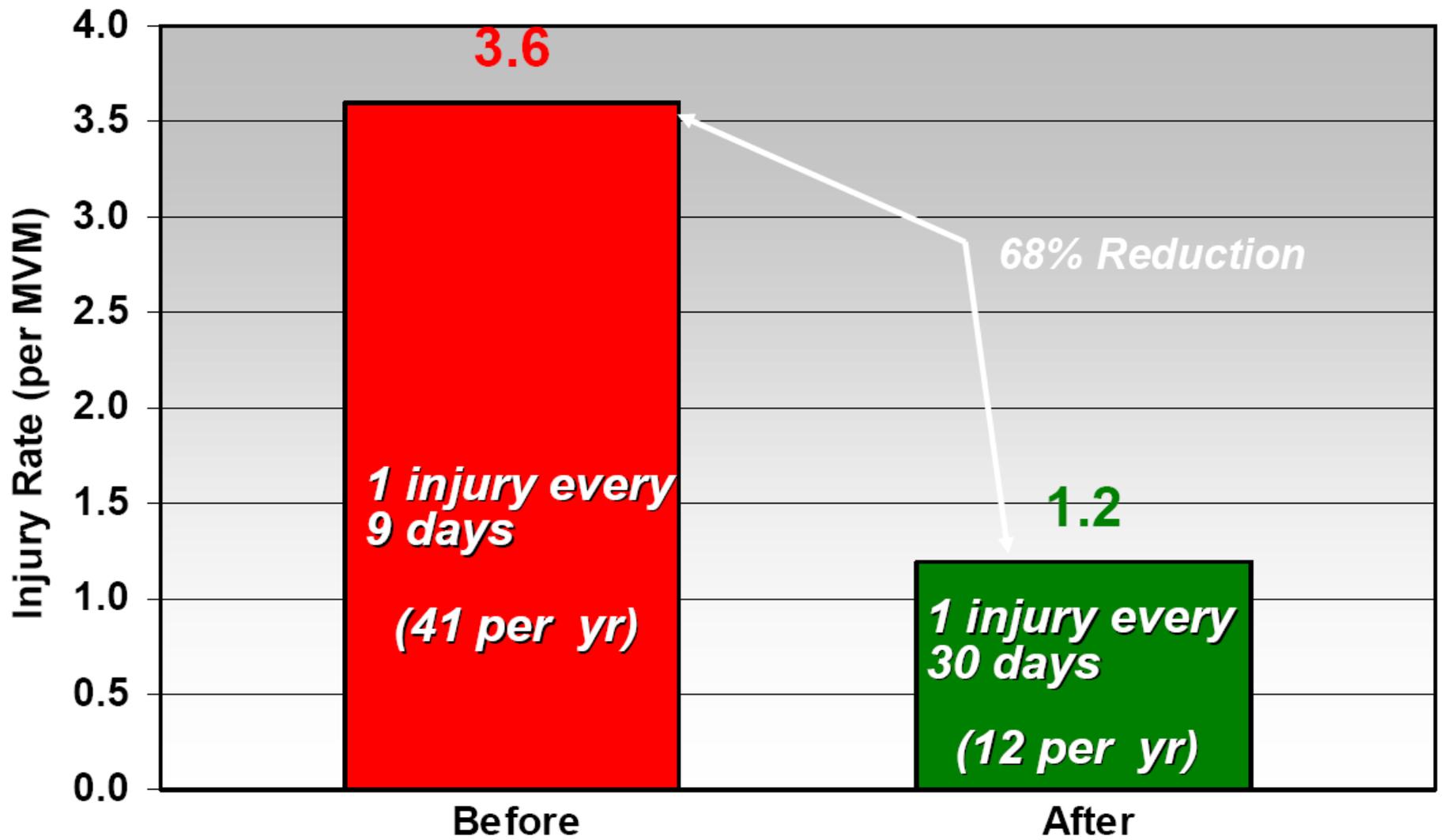
Save the Date!

Edgewater Drive will shut down for an evening filled with fun for the entire family. Carriage rides, carolers, pony rides and more. Santa himself said he will pay us a visit!
Look for more details on www.collegeparkpartnership.com

Holiday on the Drive

Thursday, December 2nd





The New York Times



Grand Makeover Is Set for Maryland Strip City

by EUGENE L. MEYER

Rockville Pike, heading north.



Above, a rendering of the White Flint plan,
which seeks to create a walkable community.







- 24hr Service Guarantee
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- No Spill-Water Coolers
- Community Service Award Winner

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water

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Way 2

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HART & FLEMING

DRYCLE

SMILE DENTAL

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M...
HART & FLEMING
ver...
DAVIDSON SALON
NAIL...
JENNIFER
LEATHER





CENTER
ce DEPOT
OFFET
ZA
BAGEL CITY
PLUS
SIZES

Bank of America
UNITE
BANK

LEASE
JBG Rosenfeld Retail
301.657-0700

8th Avenue

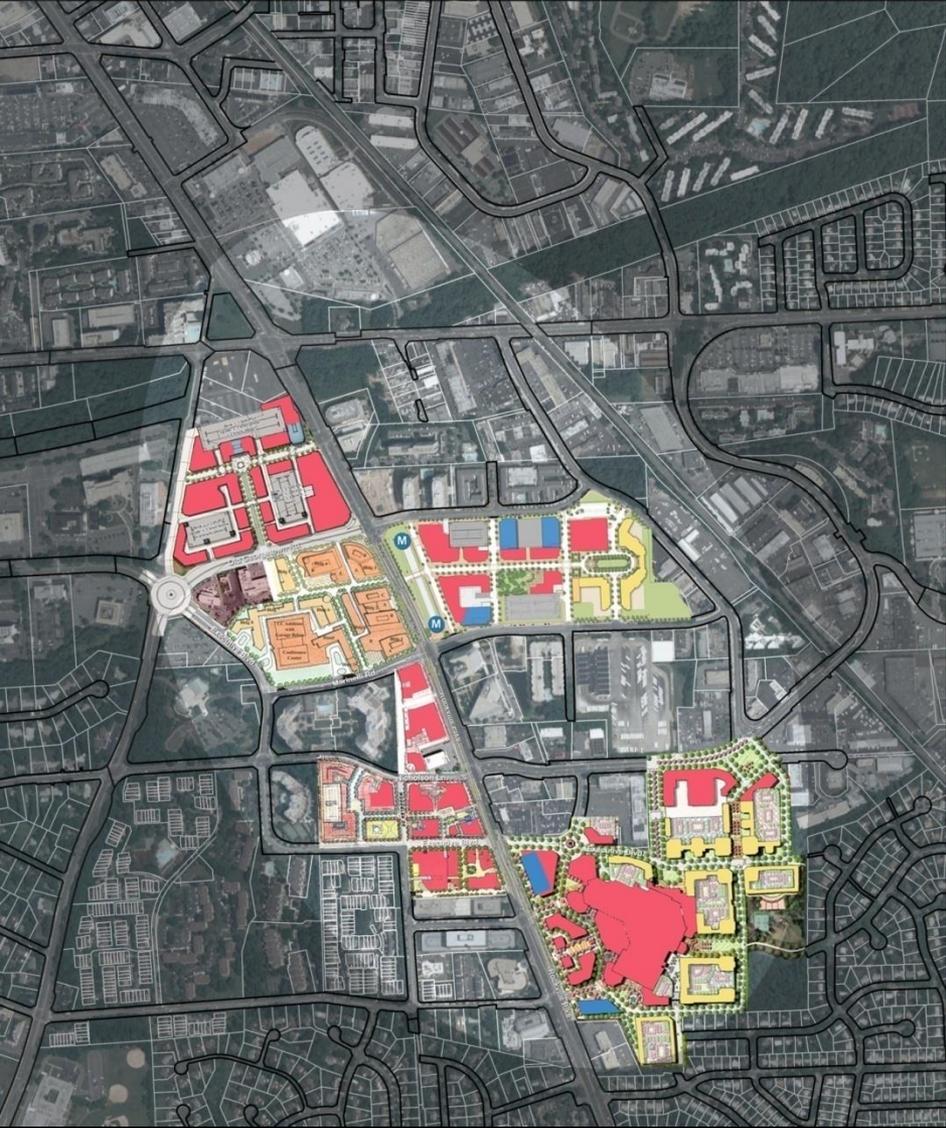
W. 8th Avenue

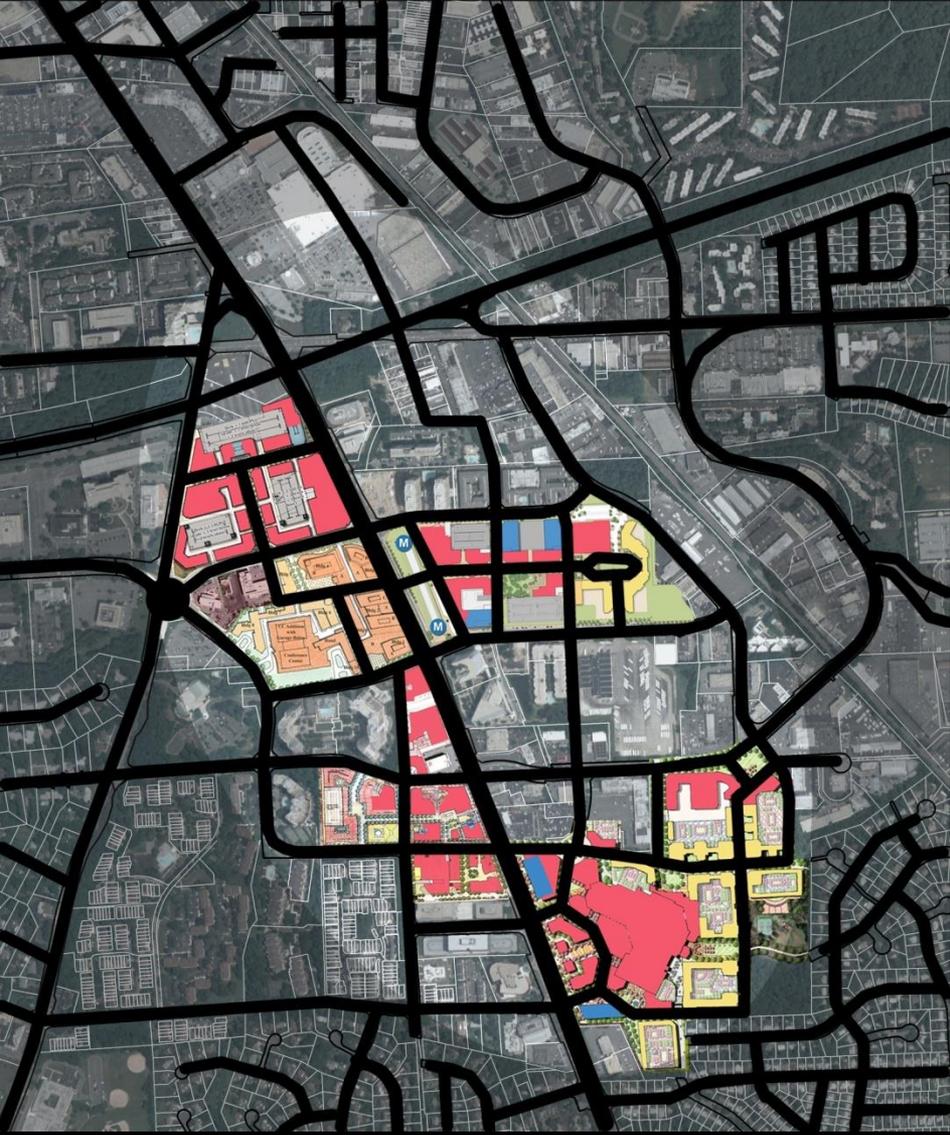
Pancake House

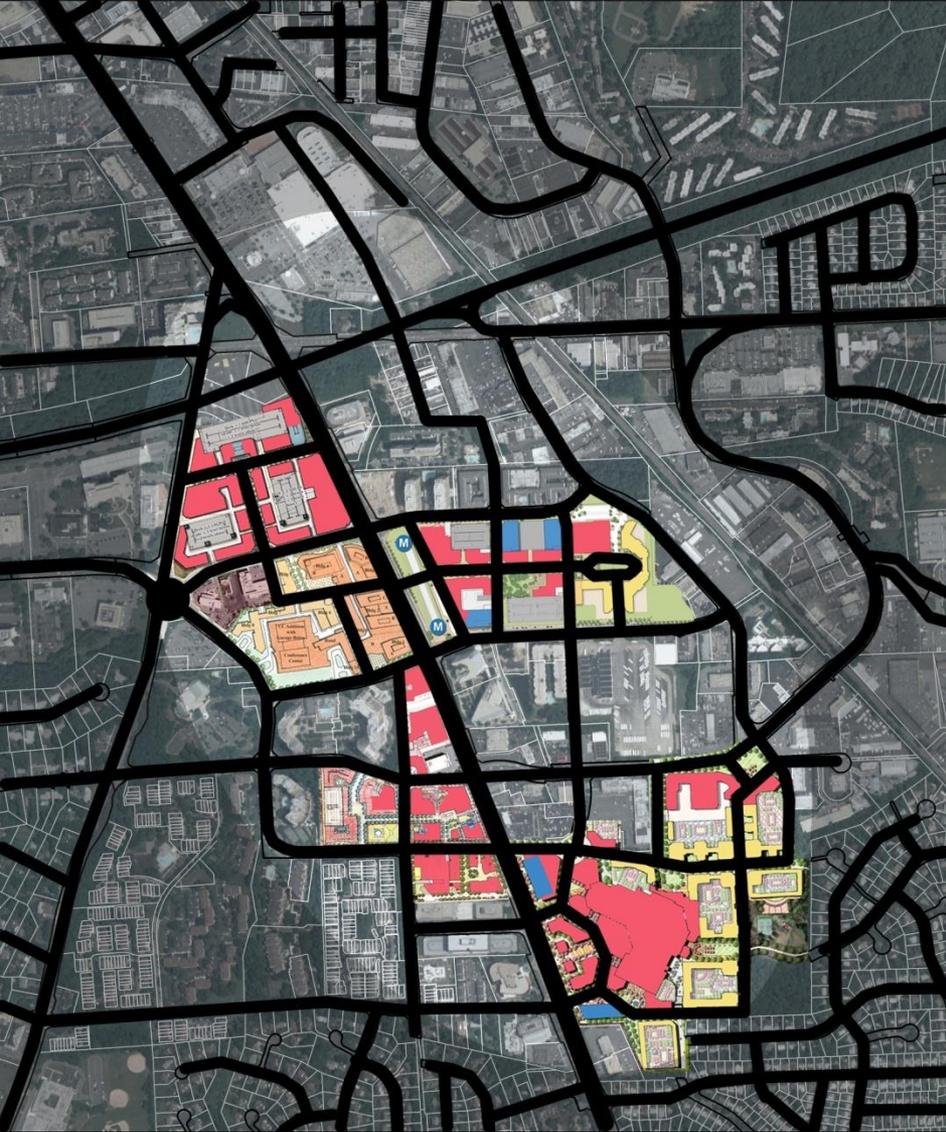
PANCAKE HOUSE

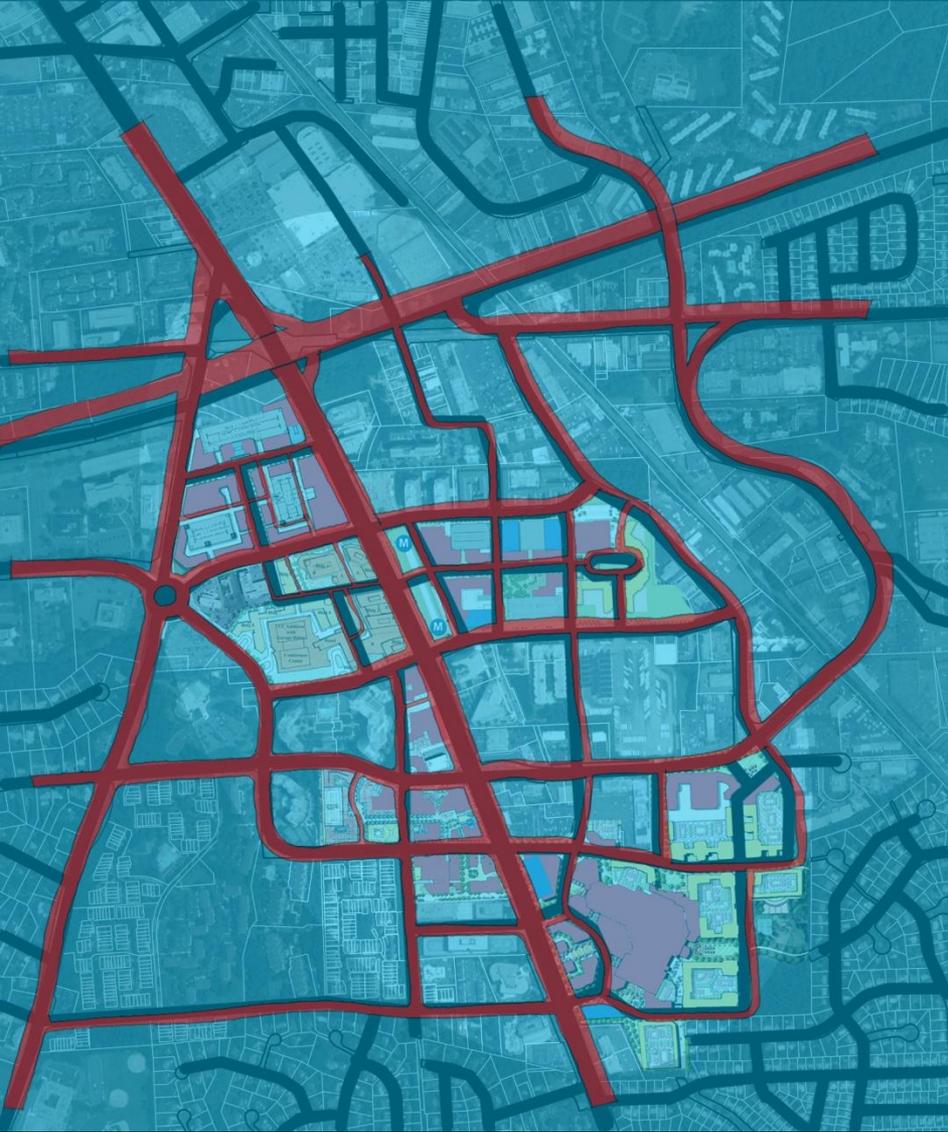
THE
LEASE
NOW
STARTS
AT
\$1,000
PER
MONTH

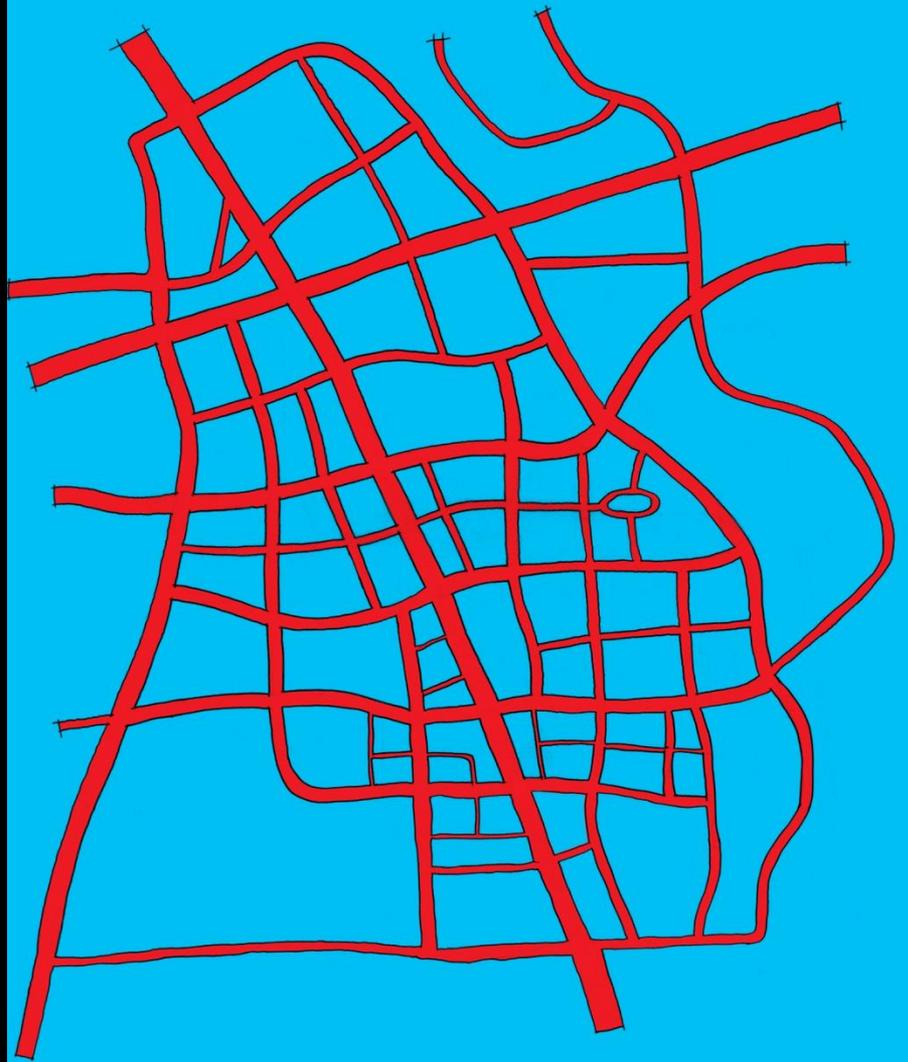






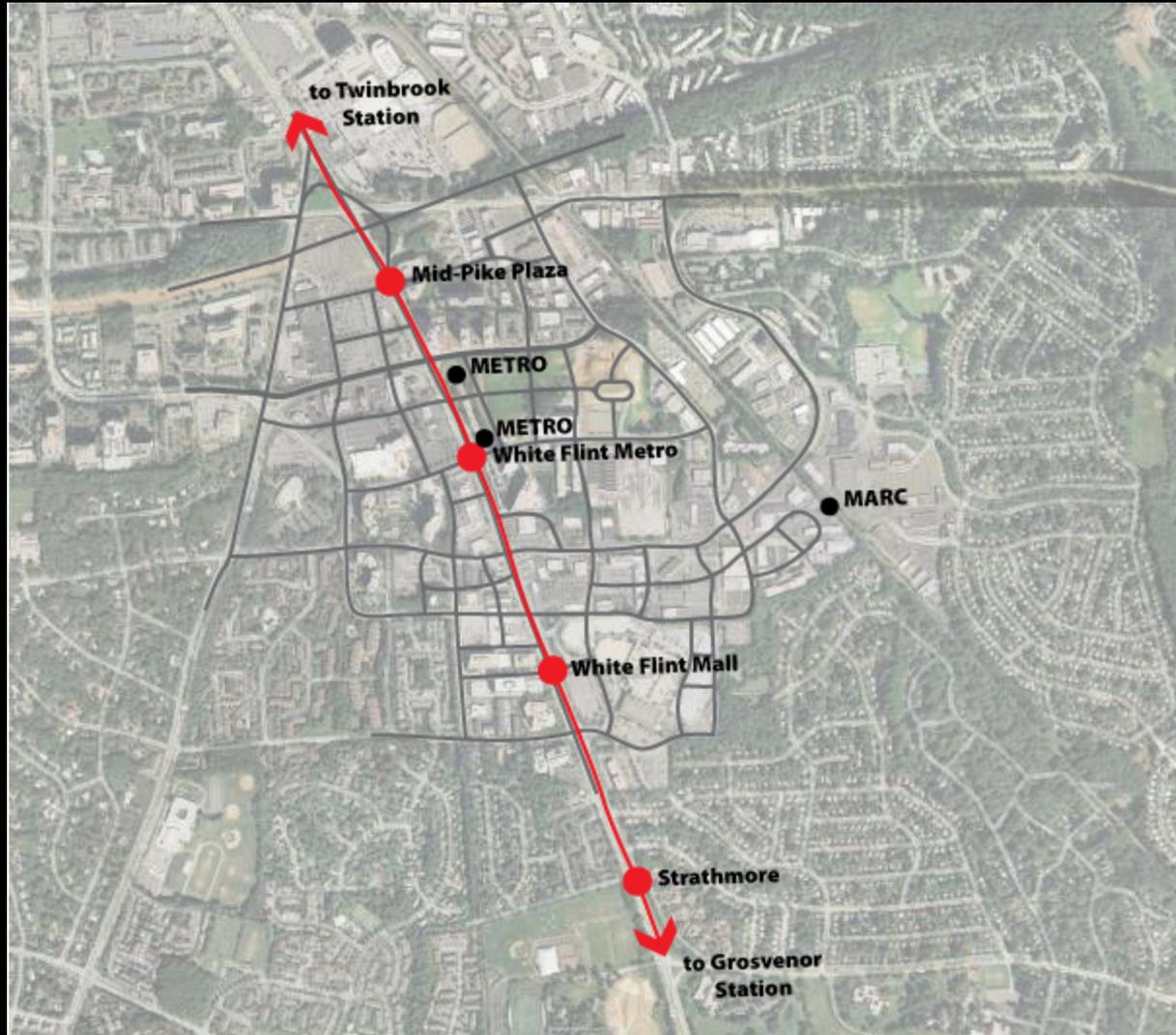




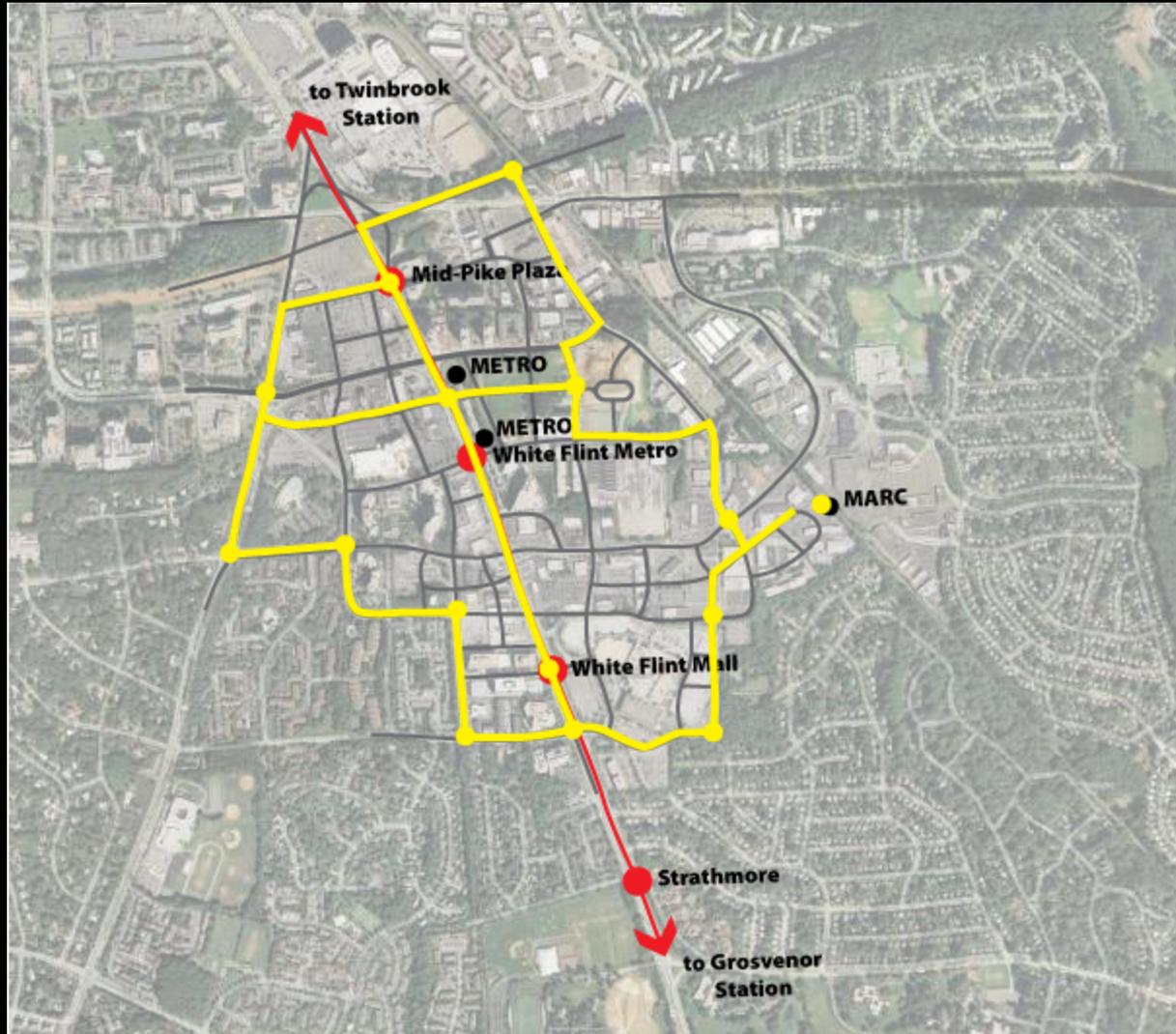




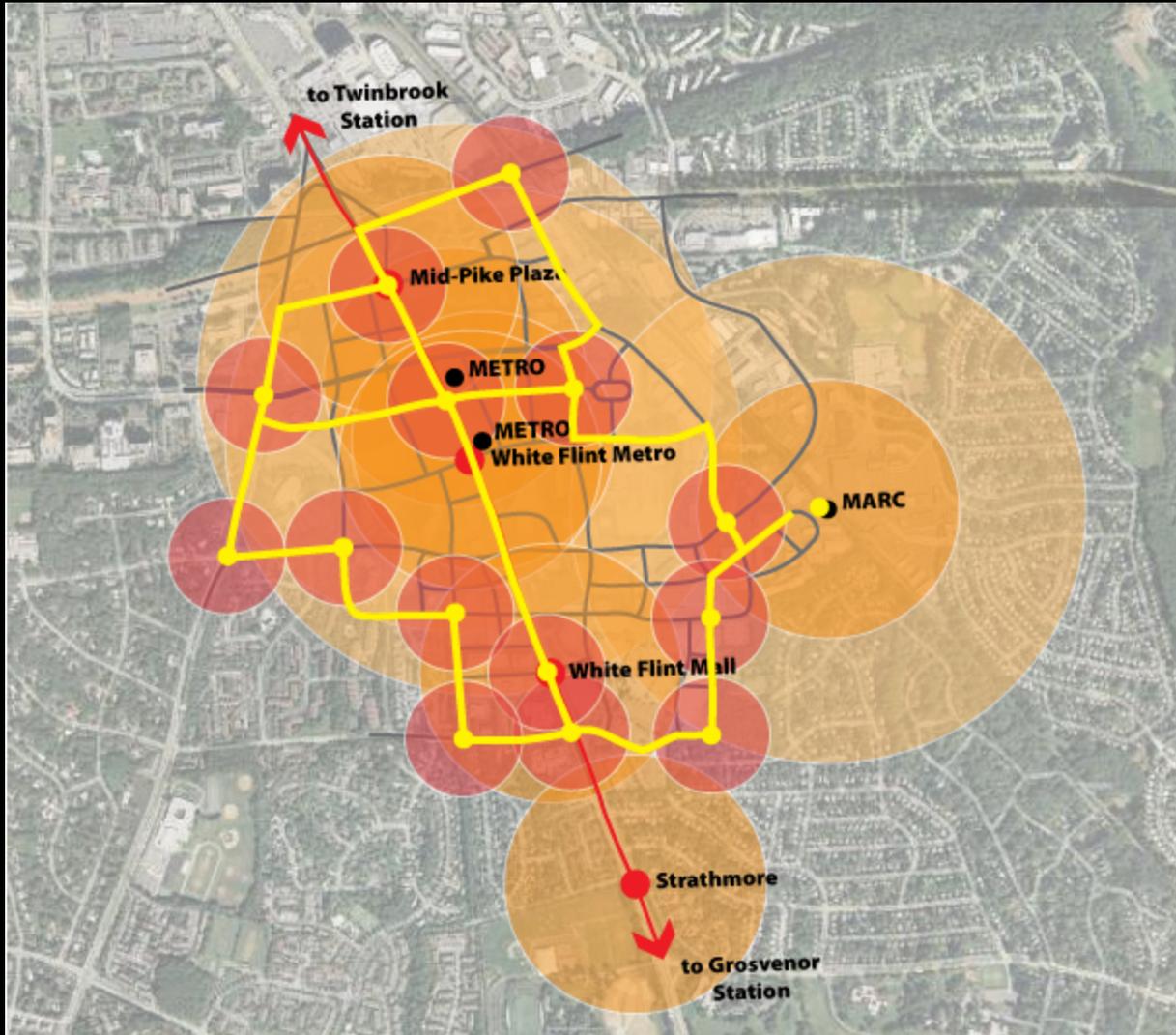
Public Transit



Public Transit



Public Transit





5' 12' 10' 11' 4' 10' 10' 15' 11' 10' 12' 5'

50' 39'











ARHAUS

SEASONS

Scamm

... DIFFERENTIA...
... STUPEND...
... STAND ON A VERY HIGH...
... RIGHT COMES UP THE SE...
... ALONG THE FOOT OF THE...
... MILES TO SEEK A VENT...
... GEORGE ALSOP 1666 AD...
... SITUATED UPON THE LARG...
... AMERICA, UNDER THE...
... BALTIMORE, ADJACENT...
... CONFINES OF NEW ENGL...
... SOUTHWARDLY UPON THE...
... ANGLE UPON THE BAY OF...
... DEGREES OF 36 AND 38, IN THE...
... PLINY 79 AD "PYRITICUM...
... ALIQUOT FACILIT PLURIM...
... VIVOS APPELLAMUS, HEC...
... EXPLORATORIBUS CASTR...
... QUI CLAVO VEL ALTERO...
... EDUNT QUAE EXCEPTA...
... VEL FO... IIS DICTO CELEBR...
... JOHN LEDERER 1669 AD...
... SIXTEENTH; AND ON THE...
... REACHED THE APALACH...
... PEAK AND OHILL AND...
... THE MOUNTAINS...
... MISH... STE. THE EIGH...
... HAD IN VAIN ASSAYED TO...
... LEFT MY HORSE WITH ONE...



WHOLEFOODS MARKET

WHOLEFOODSMARKET

ROCKVILLE

ROCKVILLE

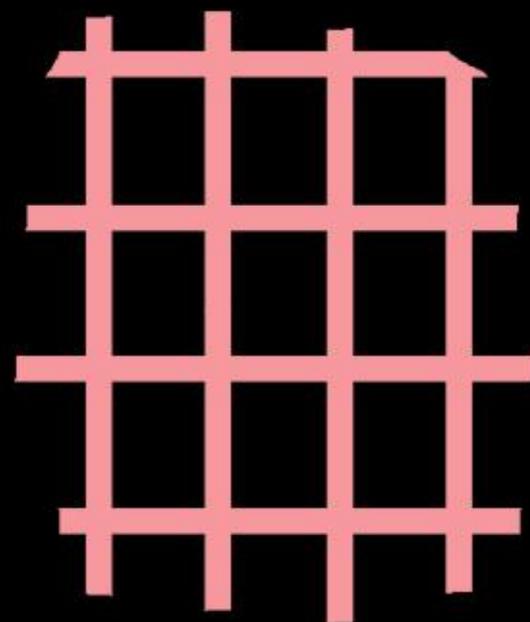
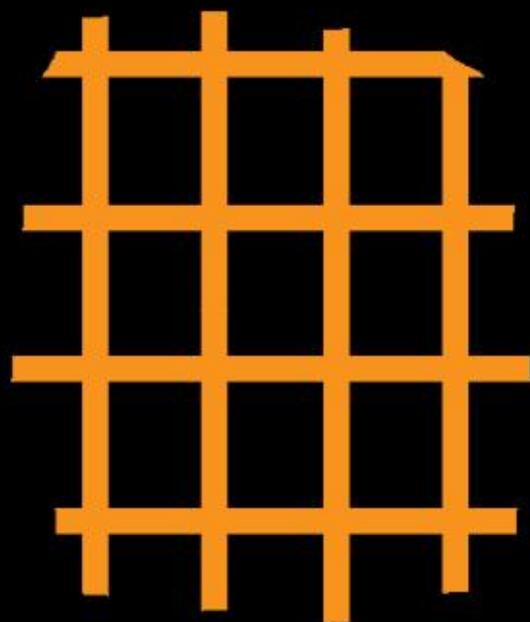


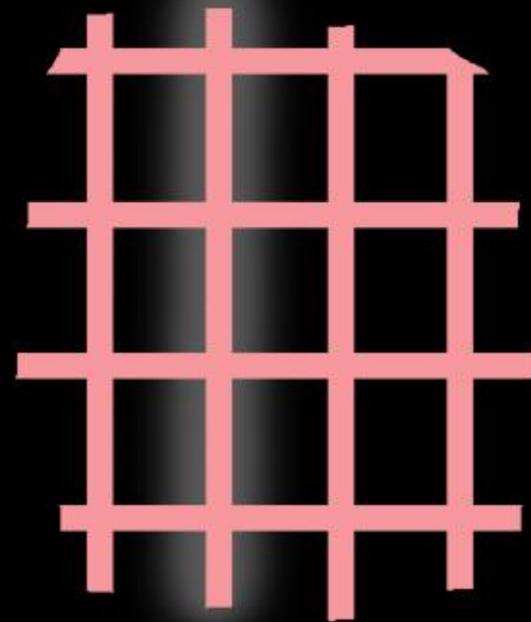
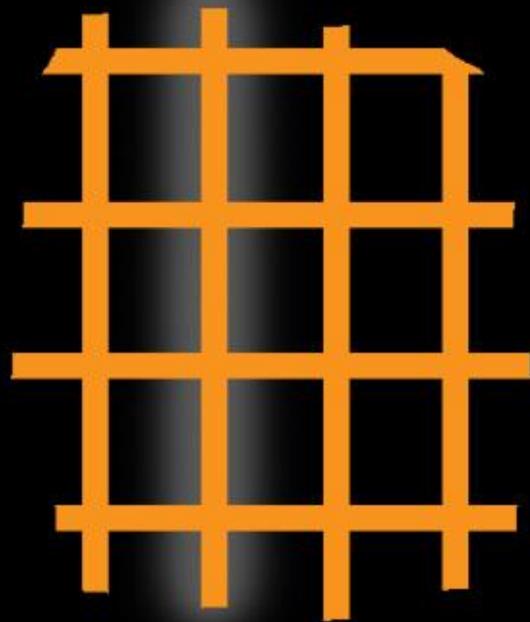
WHOLE FOODS MARKET

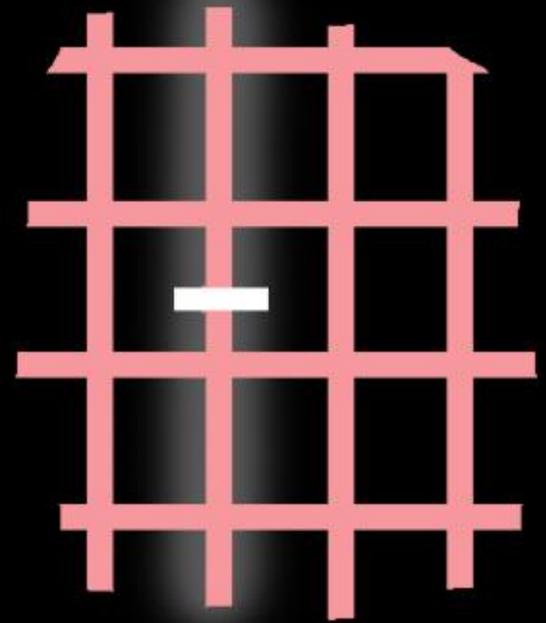
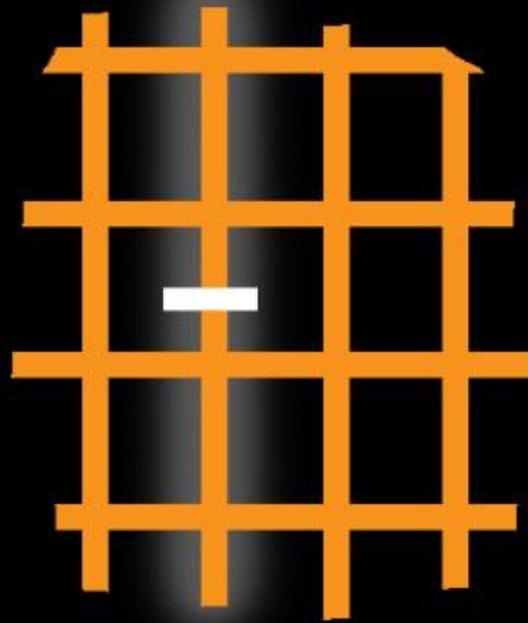
11355

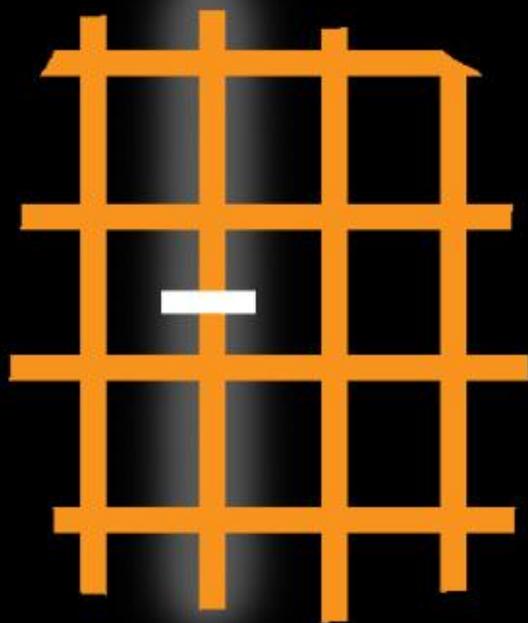
COFFEE BAR
- Open Daily

Welcome to
Whole Foods Market
Get a fresh start on
your shopping journey

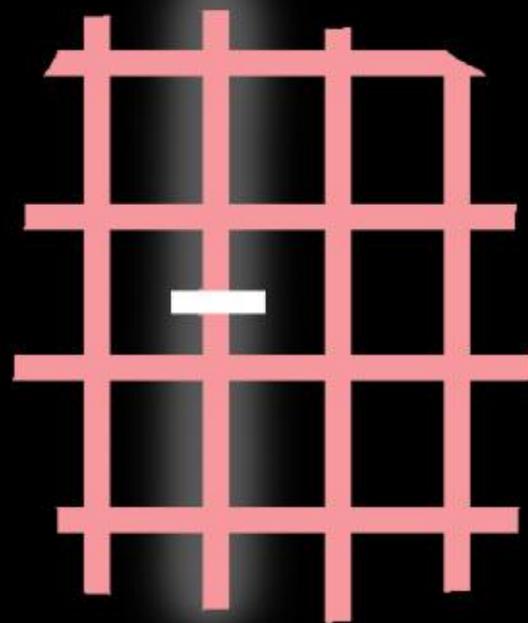






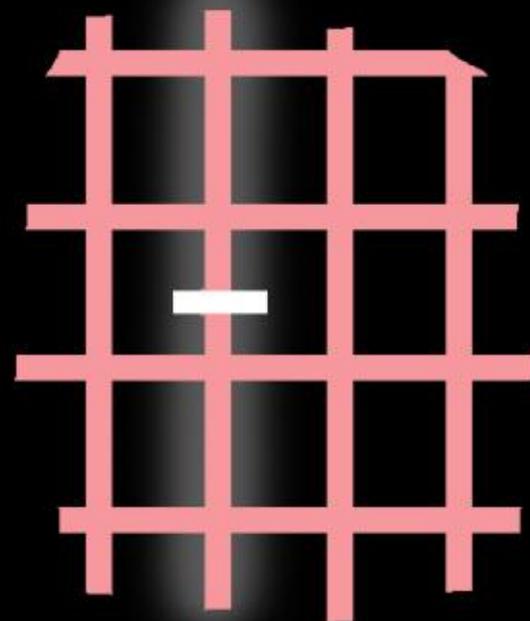
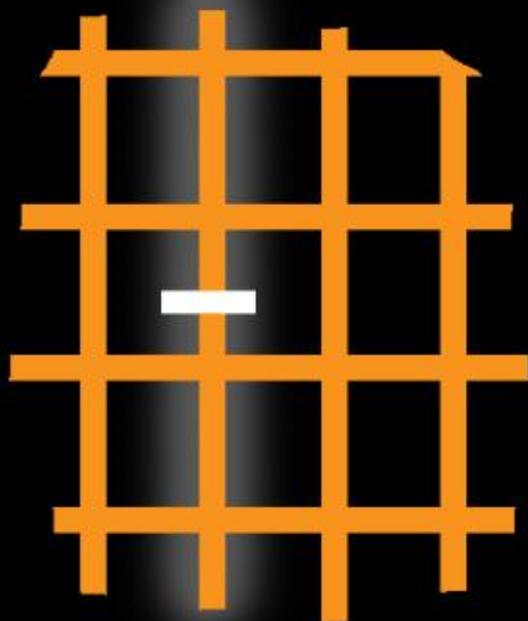


18,000



18,000

Volume



Volume

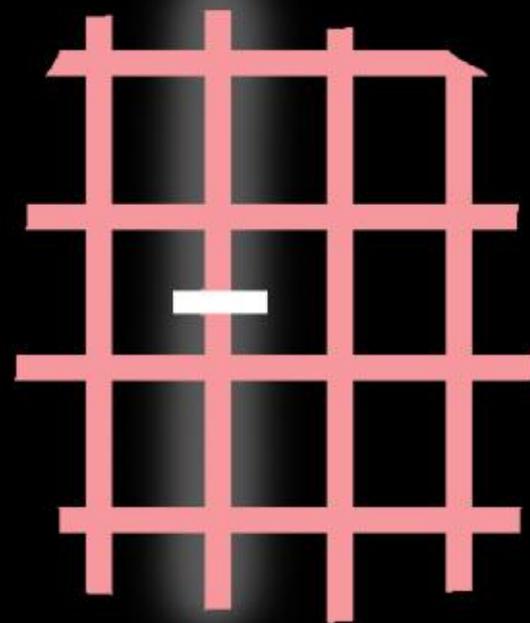
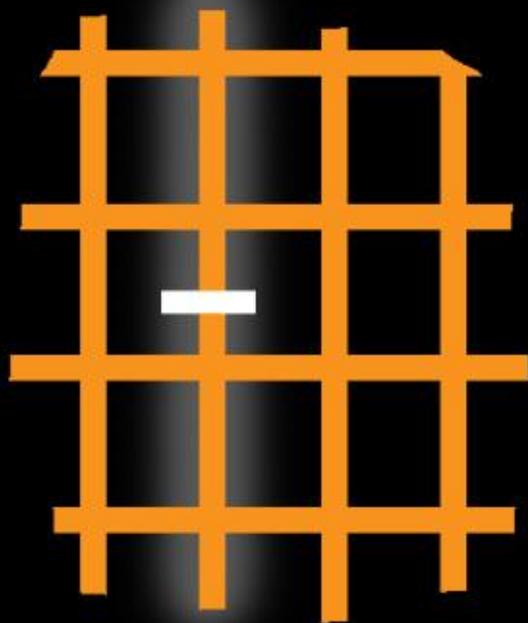
18,000

18,000

Avg Trip Length

2.0

6.0



Volume

18,000

18,000

Avg Trip Length

2.0

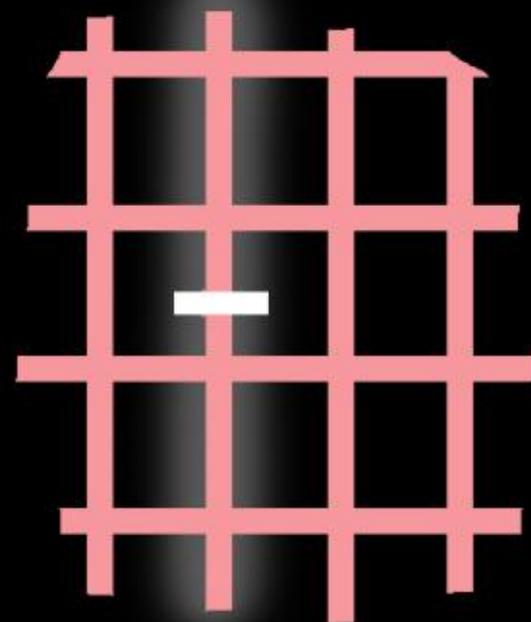
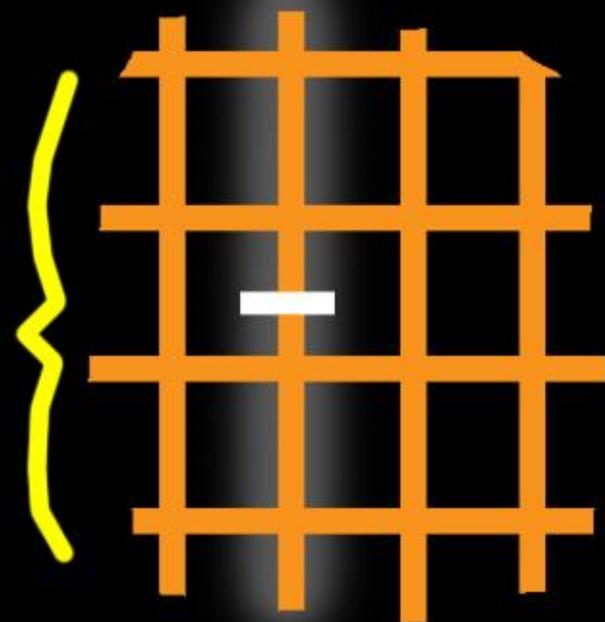
6.0

Trip Making

3

1

**More
Vibrancy**



Volume

18,000

18,000

Avg Trip Length

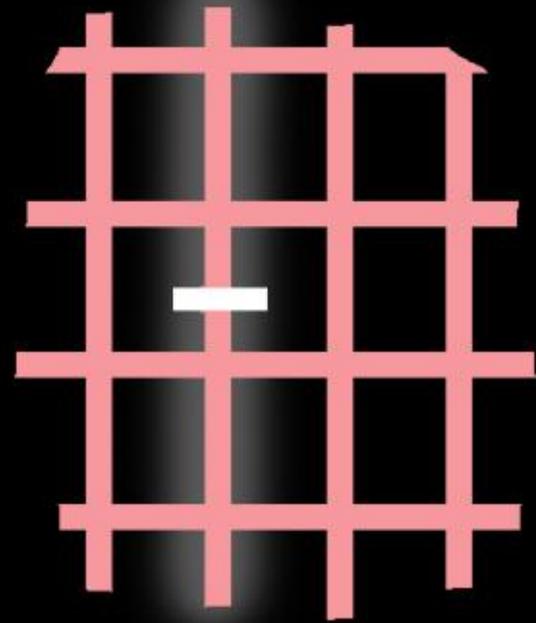
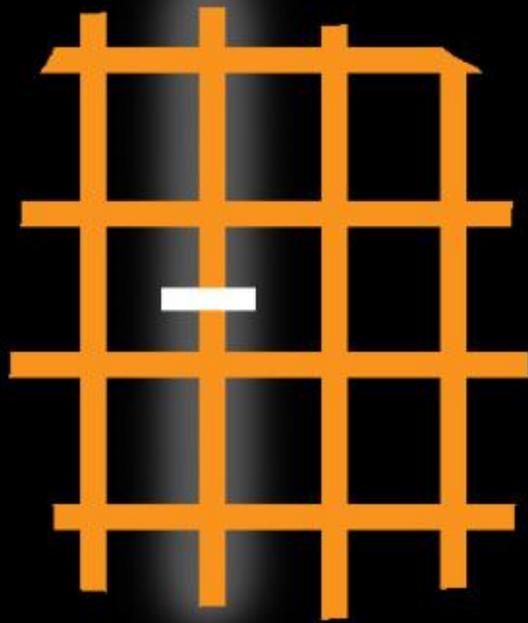
2.0

6.0

Trip Making

3

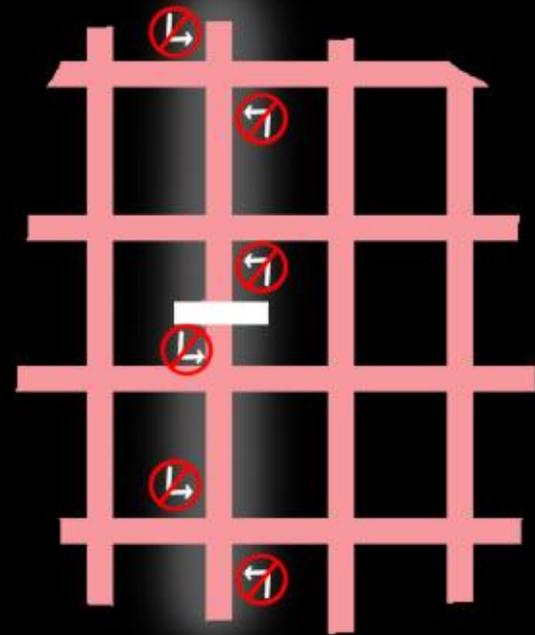
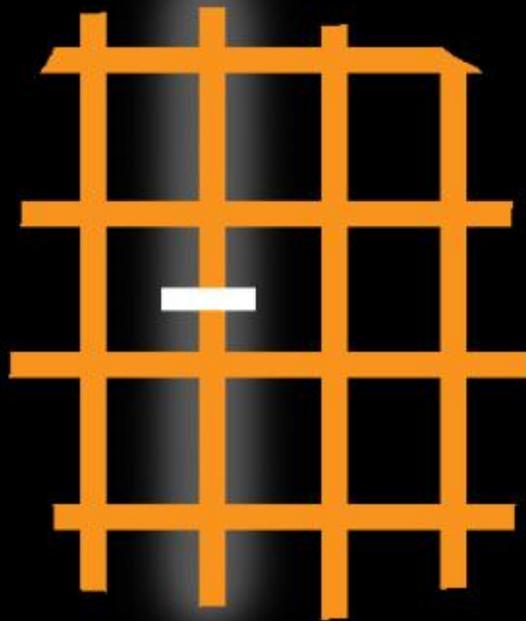
1



Volume

Avg Trip Length

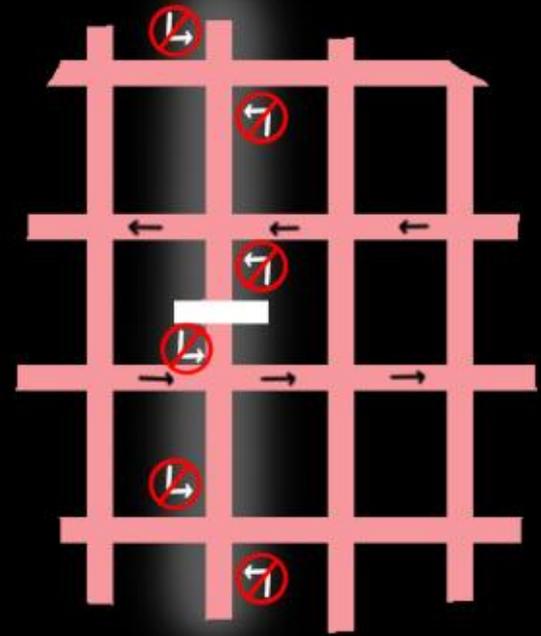
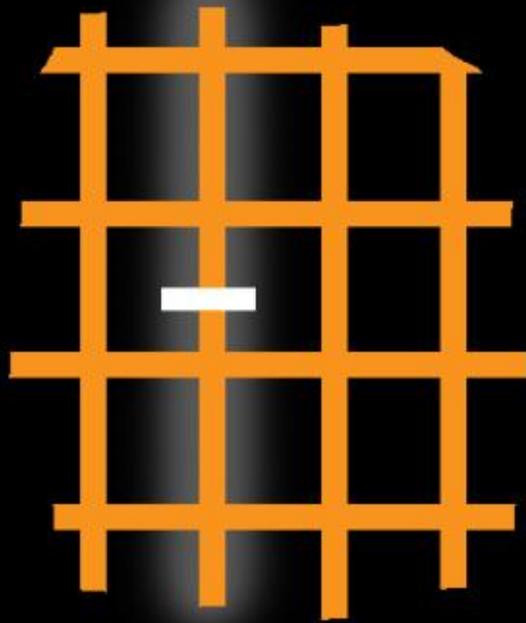
Trip Making



Volume

Avg Trip Length

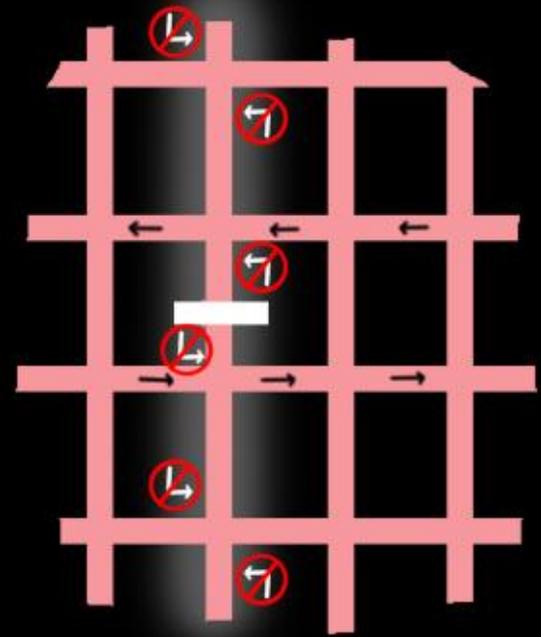
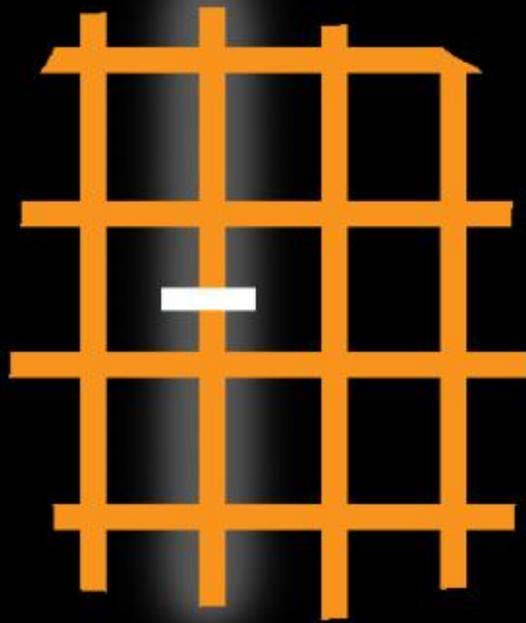
Trip Making



Volume

Avg Trip Length

Trip Making

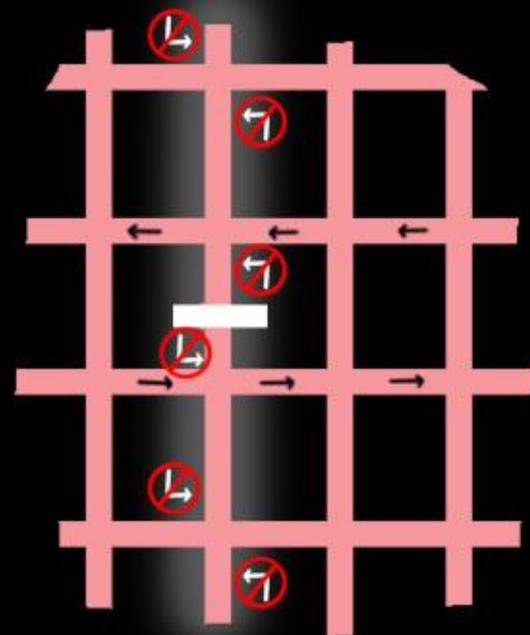
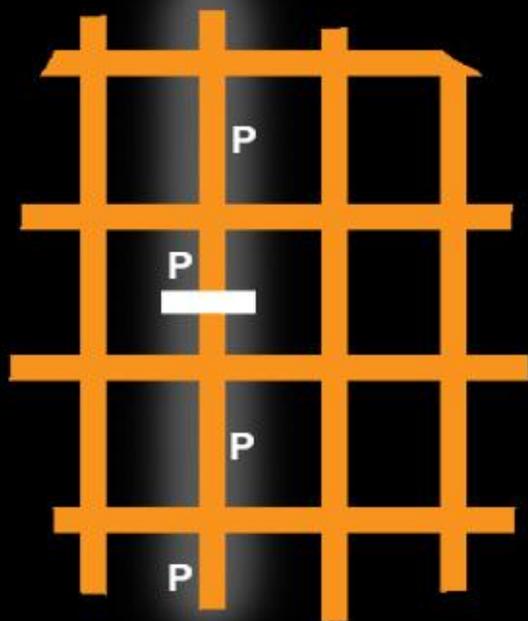


Volume

20,000

Avg Trip Length

Trip Making

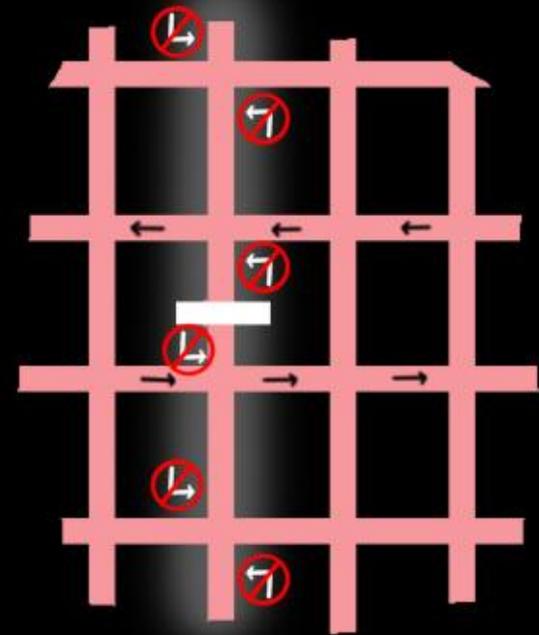
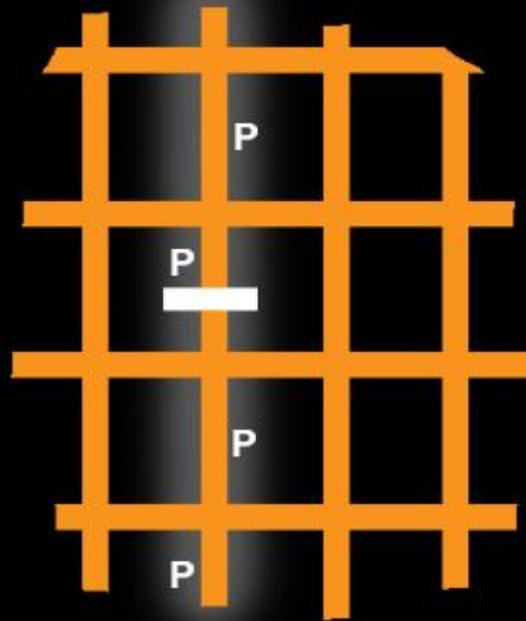


Volume

20,000

Avg Trip Length

Trip Making



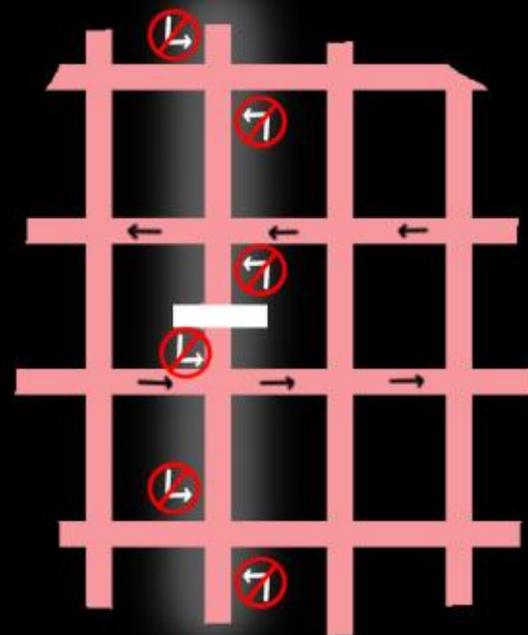
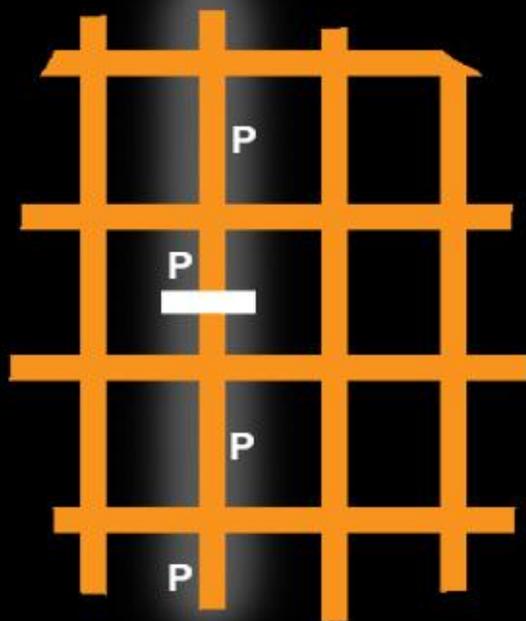
Volume

15,000

20,000

Avg Trip Length

Trip Making



Volume

15,000

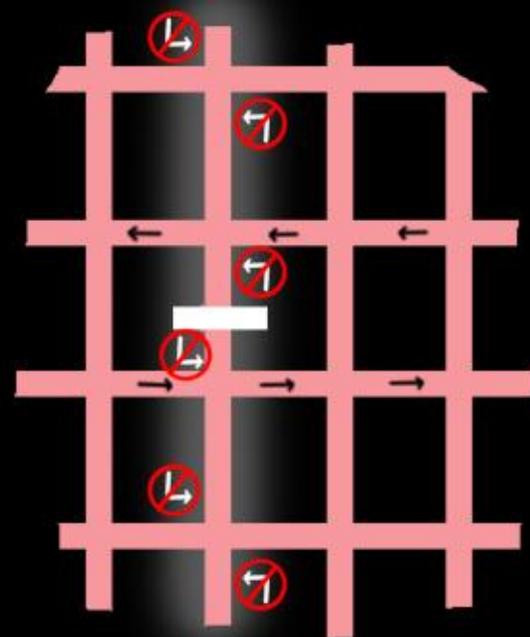
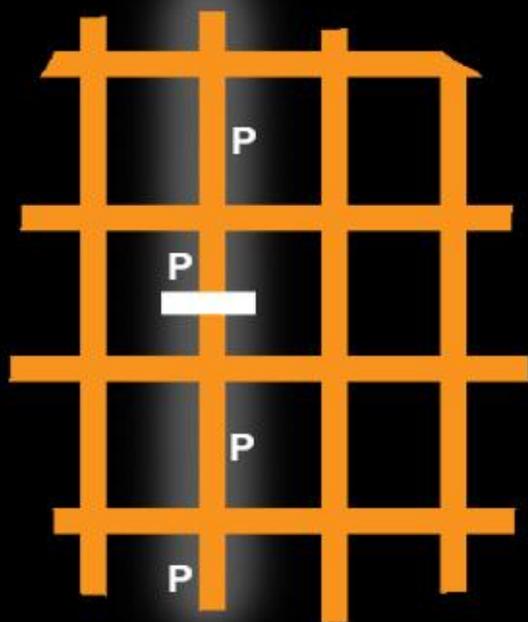
20,000

Avg Trip Length

1.0

8

Trip Making



Volume

15,000

20,000

Avg Trip Length

1.0

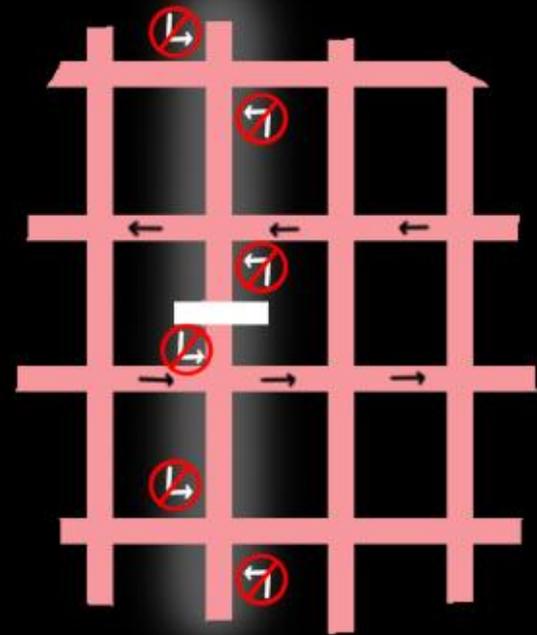
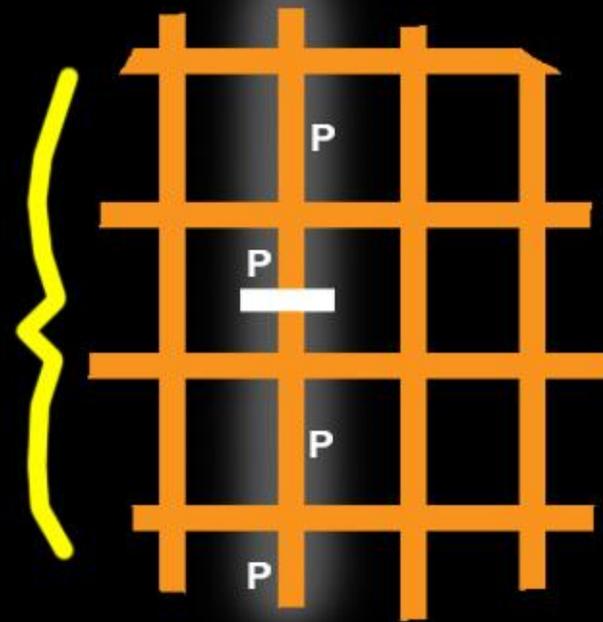
8

Trip Making

6

1

**Even
More
Vibrancy**



Volume

15,000

20,000

Avg Trip Length

1.0

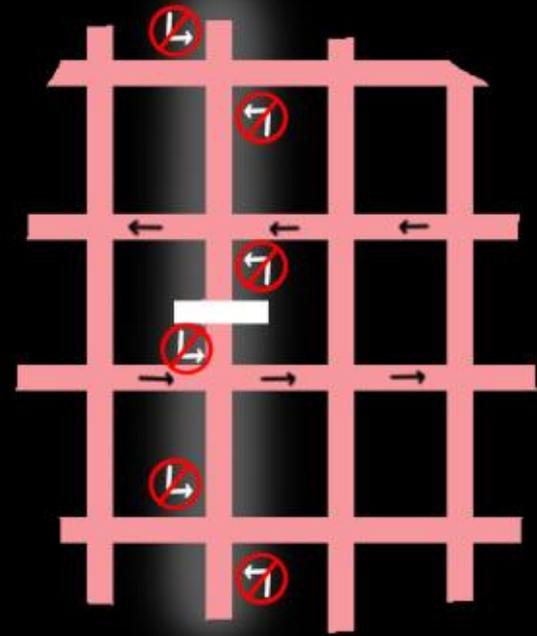
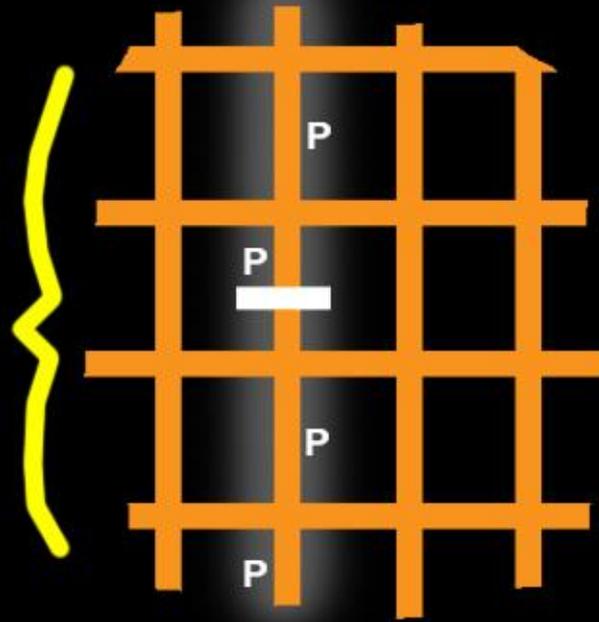
8

Trip Making

6

1

**Even
More
Vibrancy**



Volume

15,000

20,000

Avg Trip Length

1.0

8

Trip Making

6

1

& Efficient

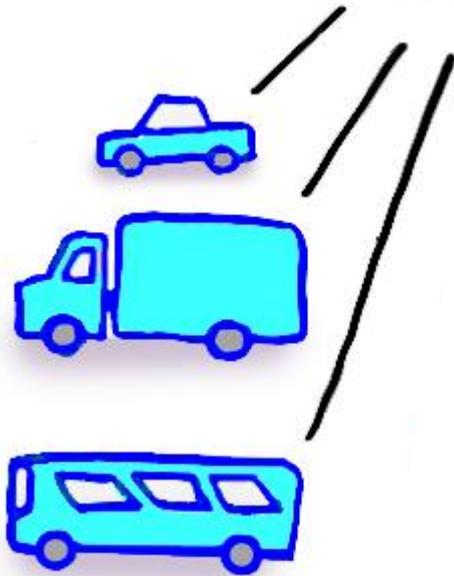
Litmus Test for Sustainable Mobility:

Does the “change” reward
the short trip or transit trip?

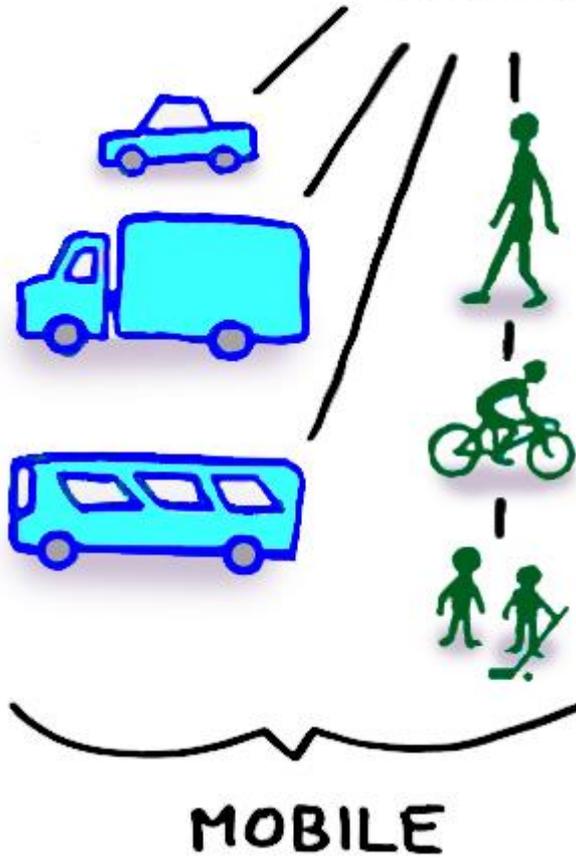
Change:

*change in policy, street design,
land use, operations, transit
initiative, etc.*

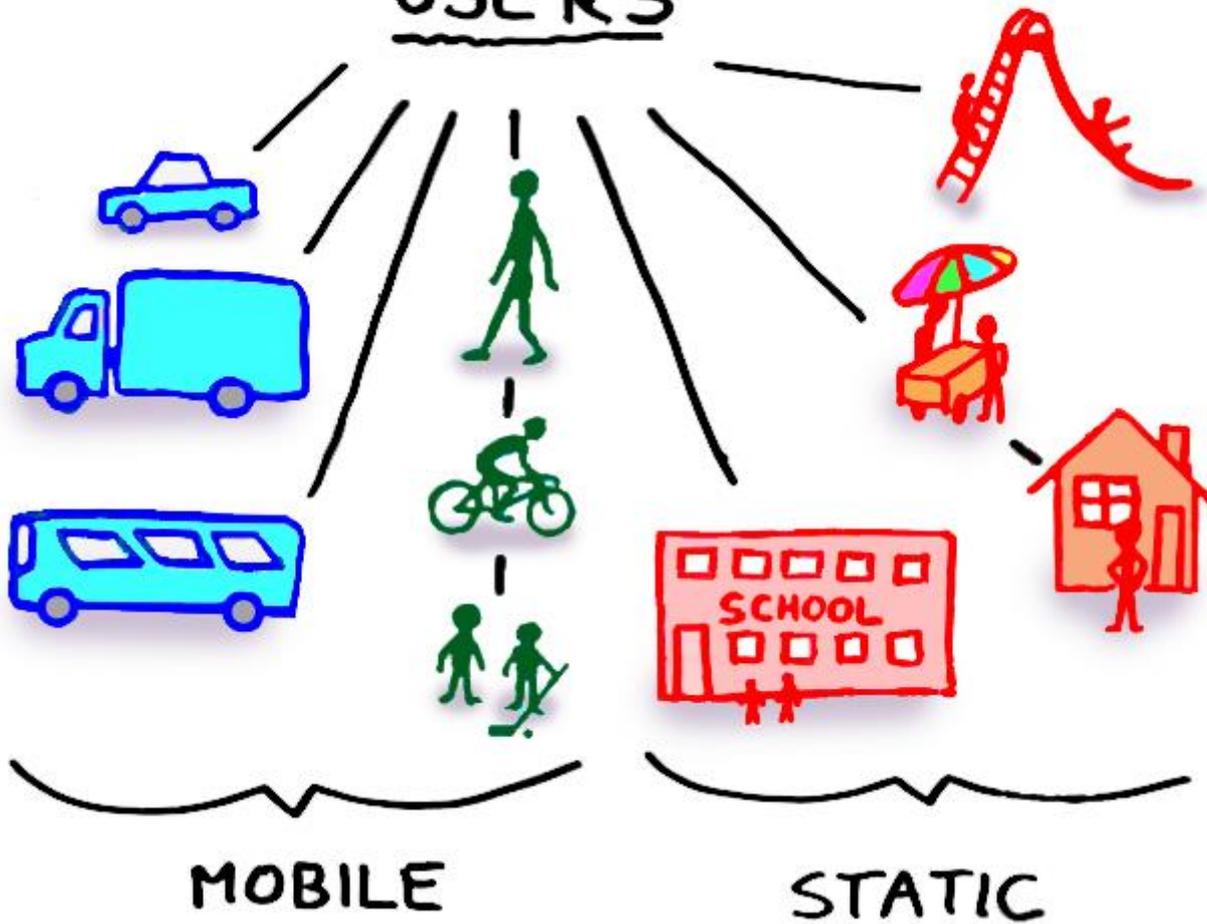
STREET USERS



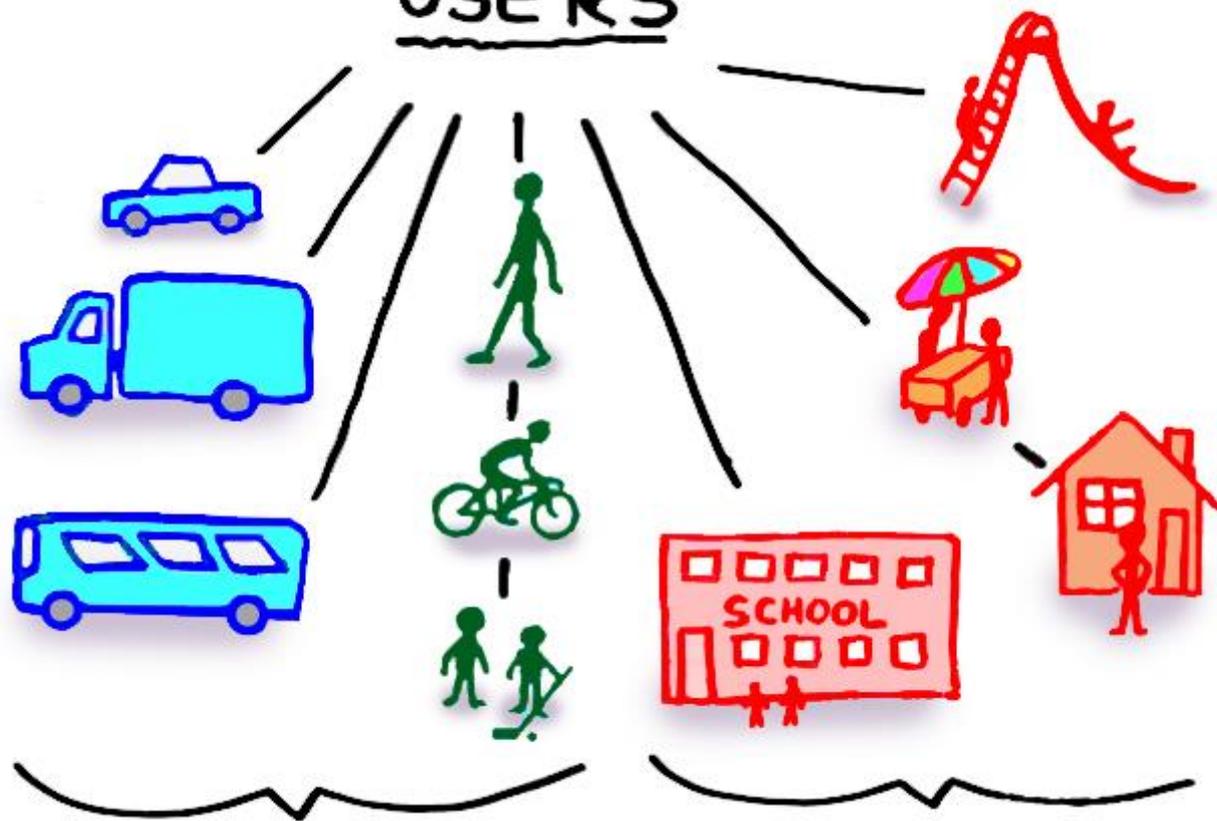
STREET USERS



STREET USERS



STREET USERS



MOBILE

STATIC

VULNERABLE

Thank You

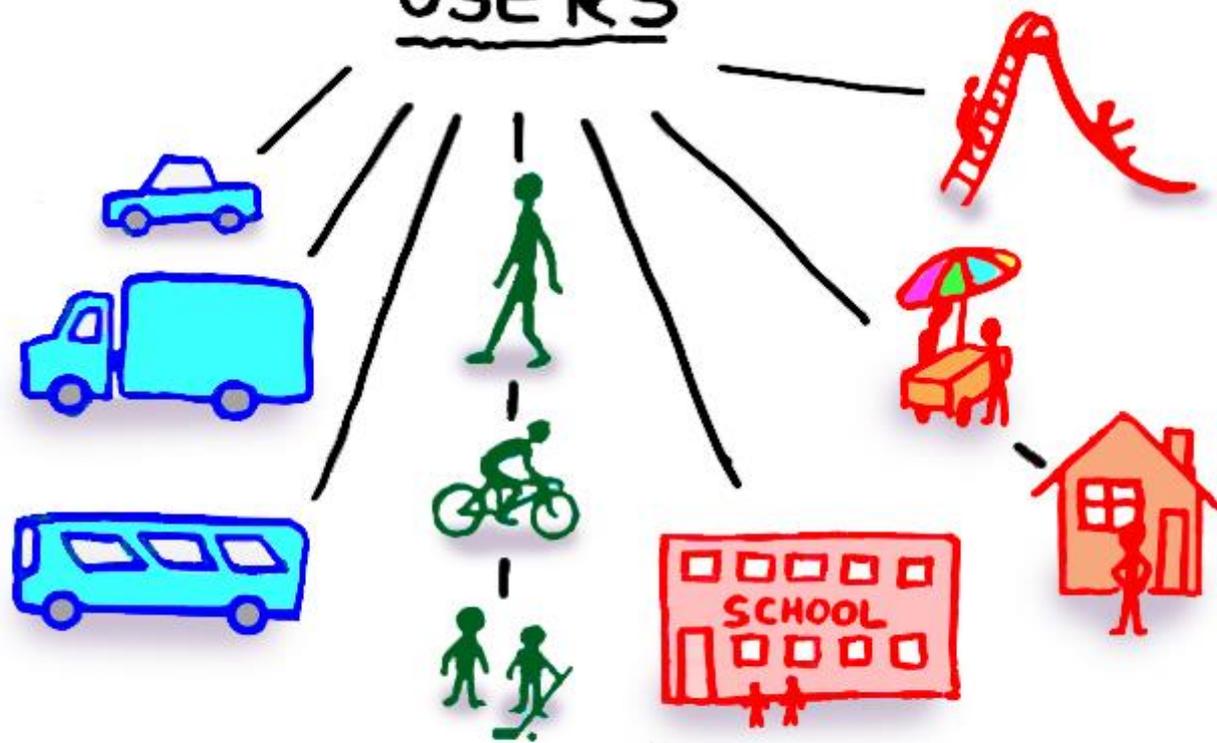


Ian Lockwood, P.E.
Livable Transportation Engineer
407-496-2529 ilockwood@tooledesign.com

Toole
Design
Group



STREET USERS

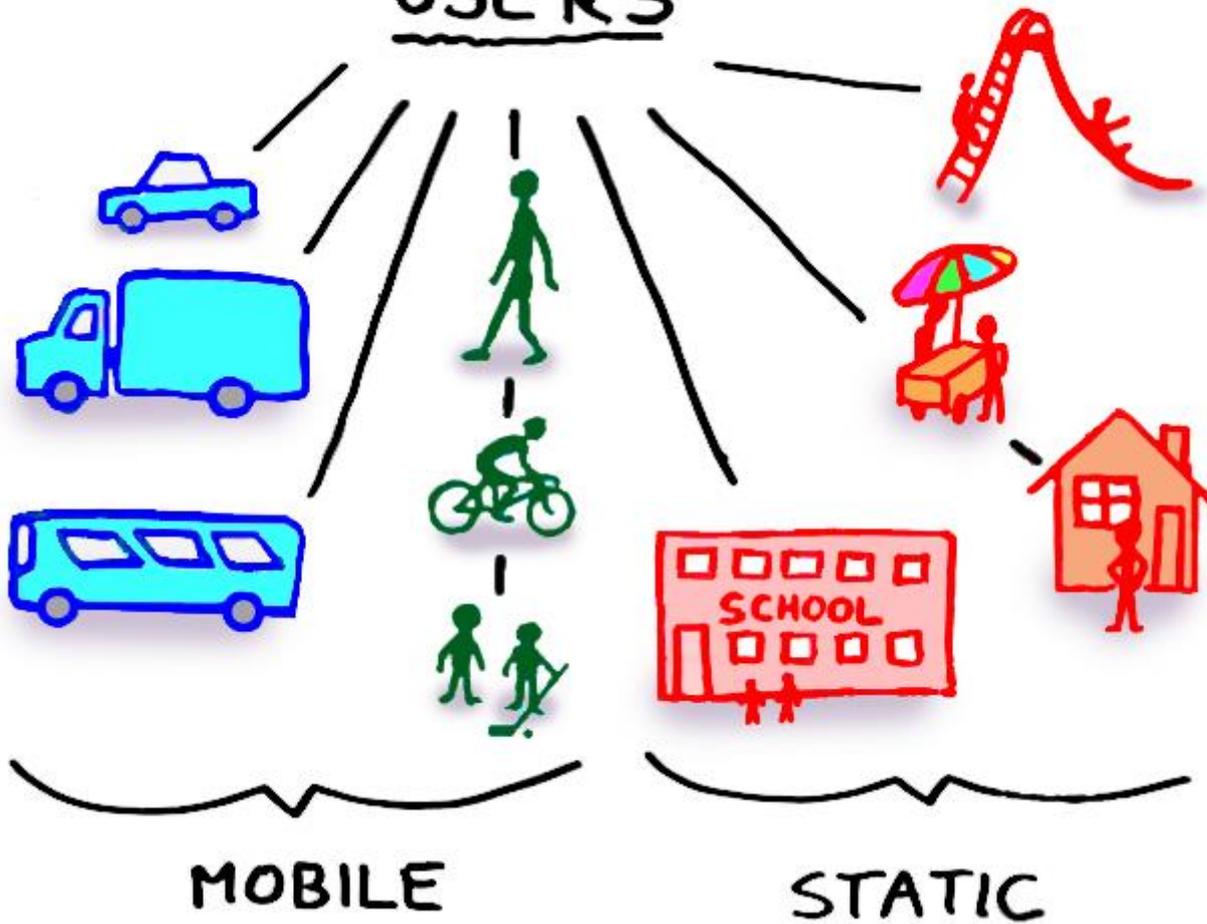


MOBILE

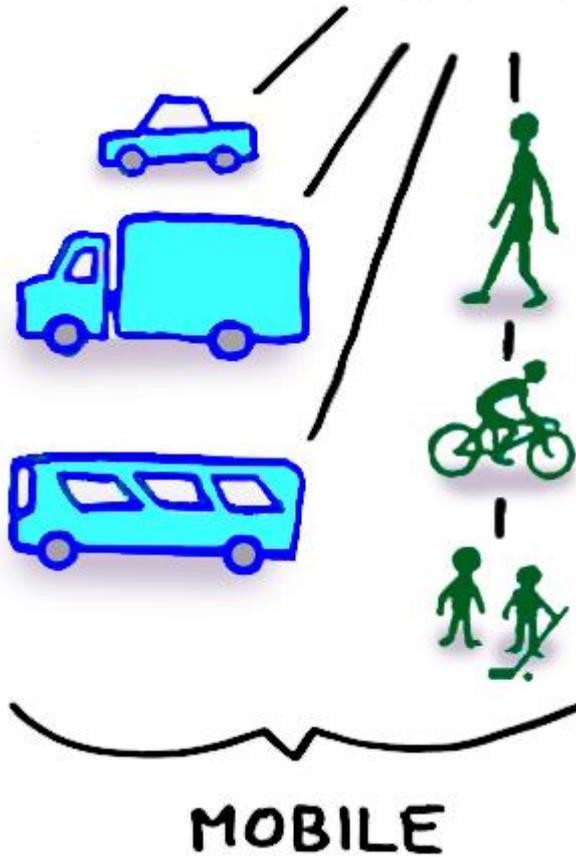
STATIC

VULNERABLE

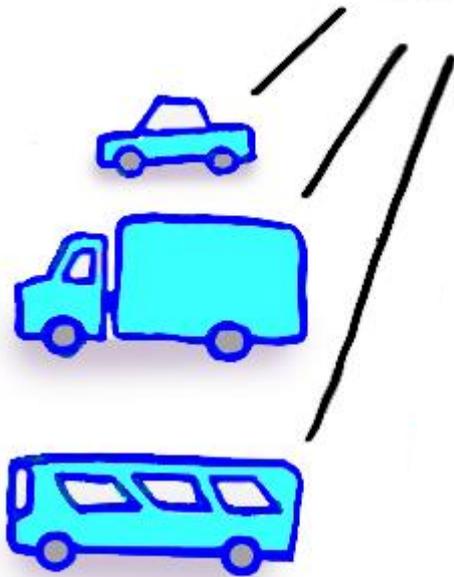
STREET USERS



STREET USERS



STREET USERS



Litmus Test for Sustainable Mobility:

Does the “change” reward
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Change:

*change in policy, street design,
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