

A Brief (but Extremely Entertaining) History of Transportation Planning

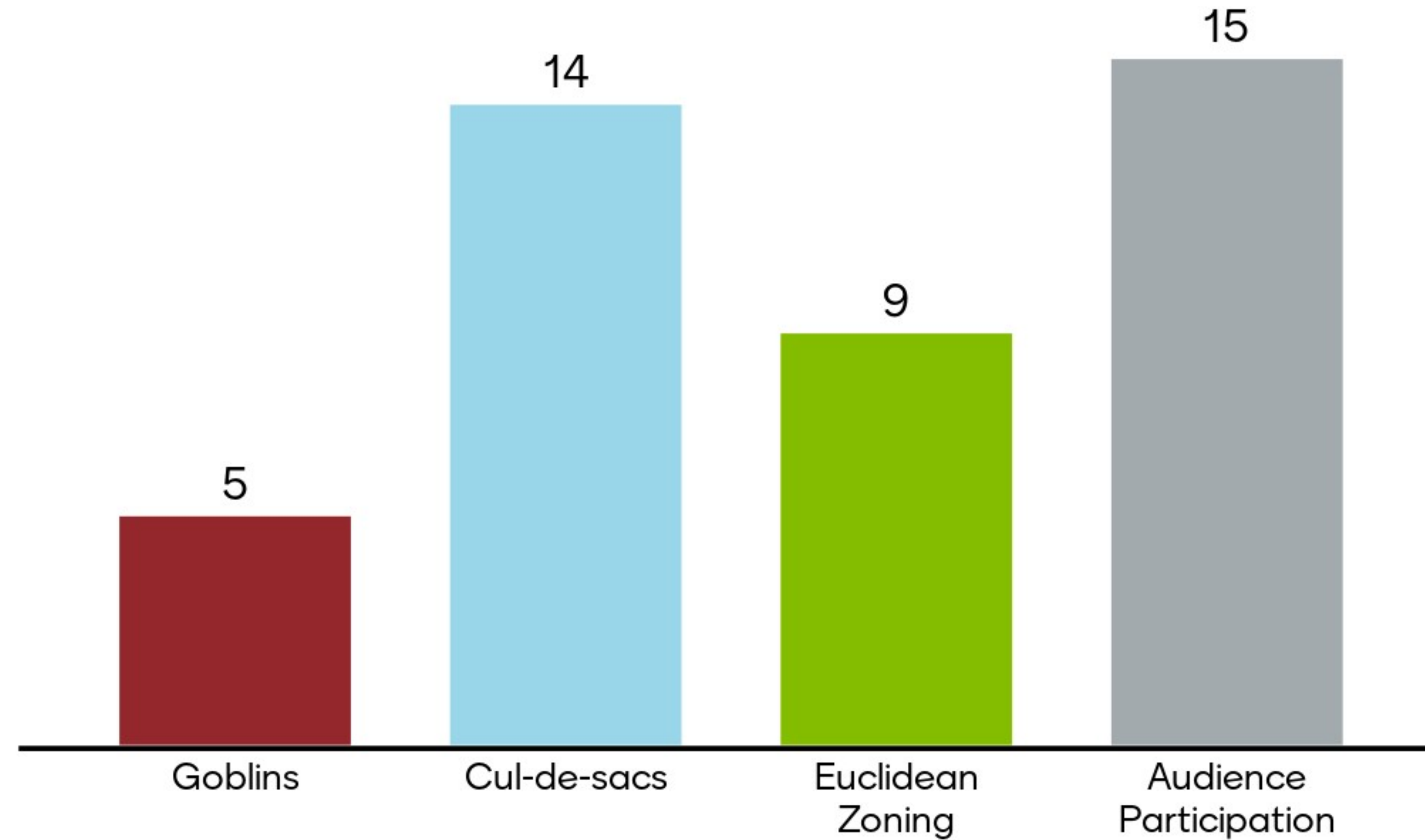
South Carolina Chapter of the American Planning Association
Fall Conference | Thursday, November 2, 2023

Ernie Boughman, AICP

Director of Operations, Southern U.S. | Toole Design Group



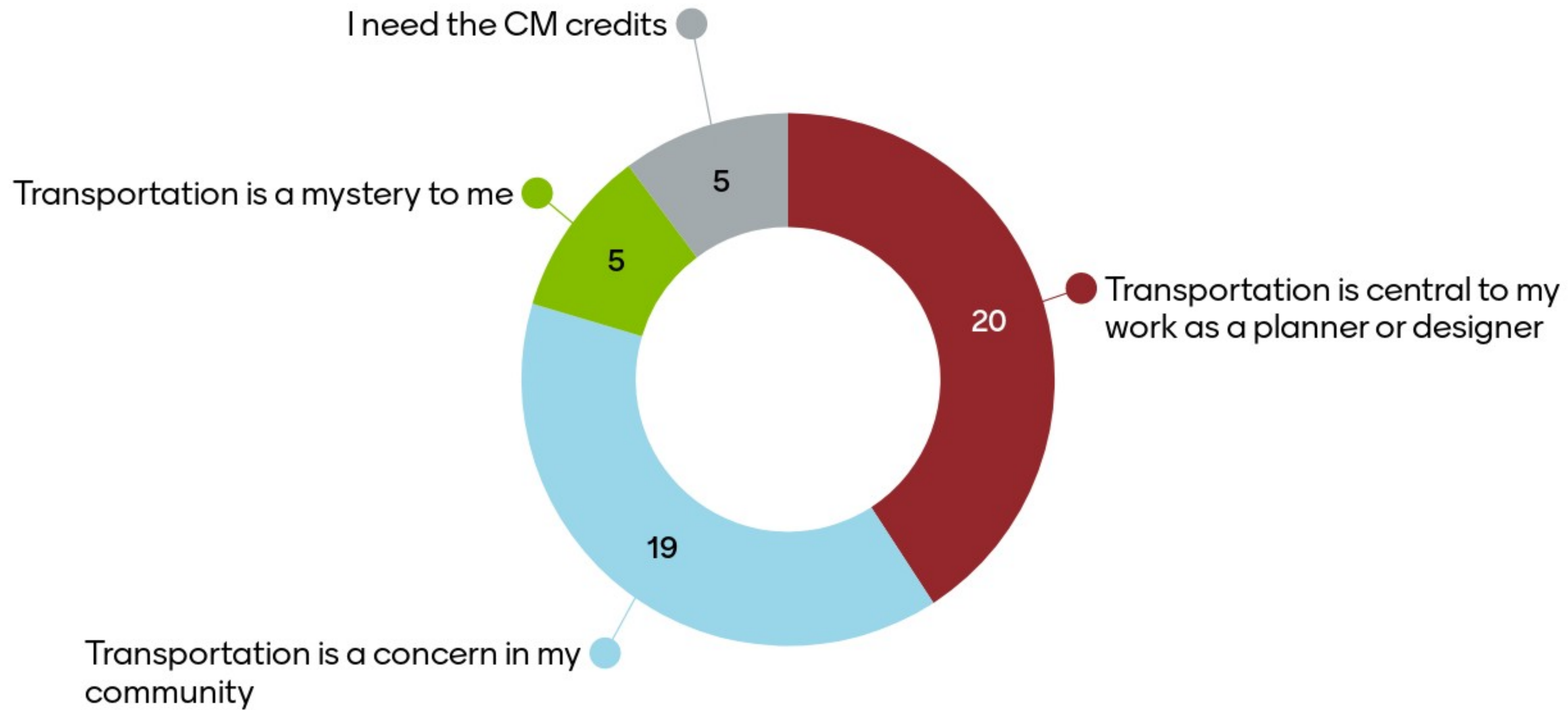
What scares you most?



Why I'm Here



Why are you here?

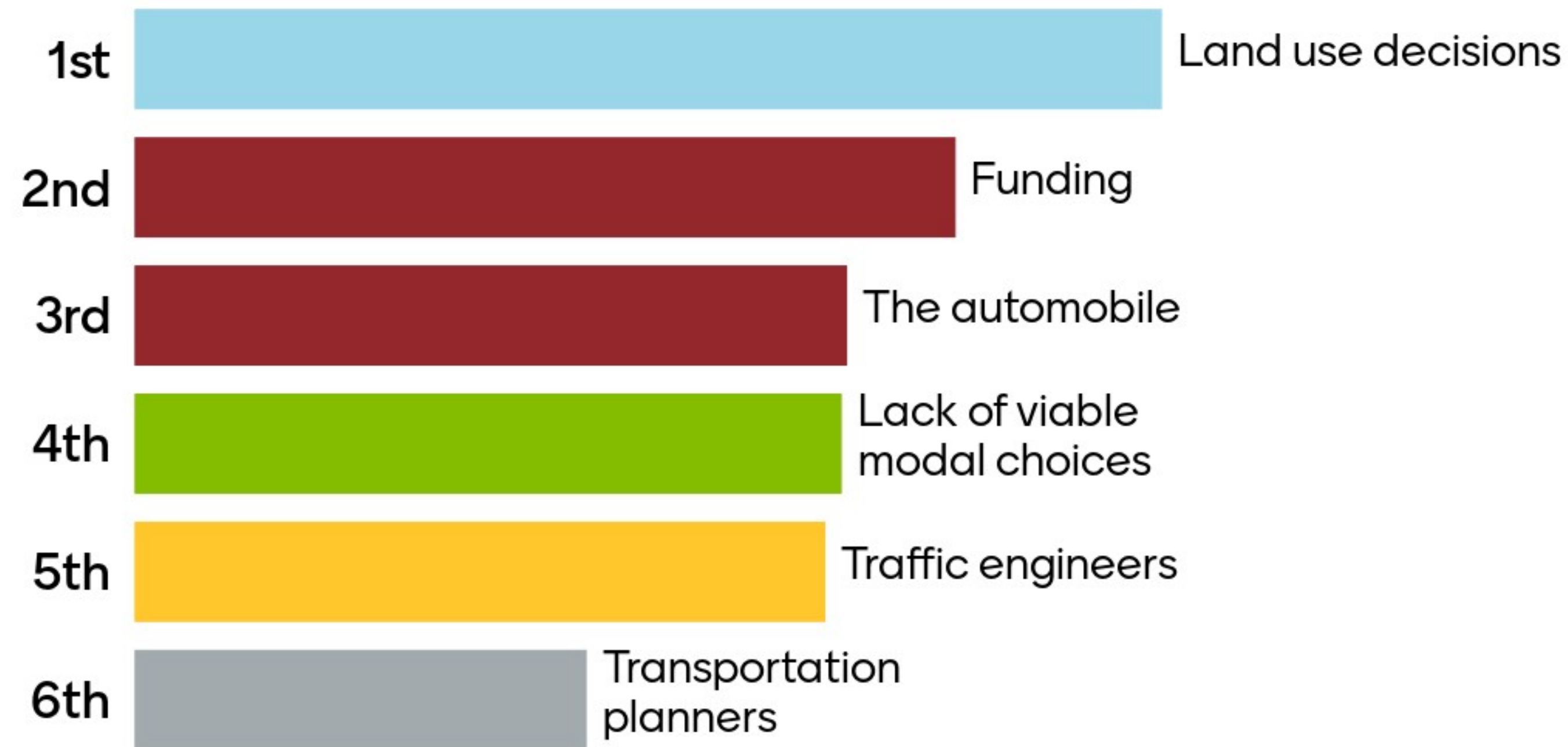


HOW DID WE GET HERE?

Specifically – How did we get here?



Who or what is to blame for our current transportation challenges?





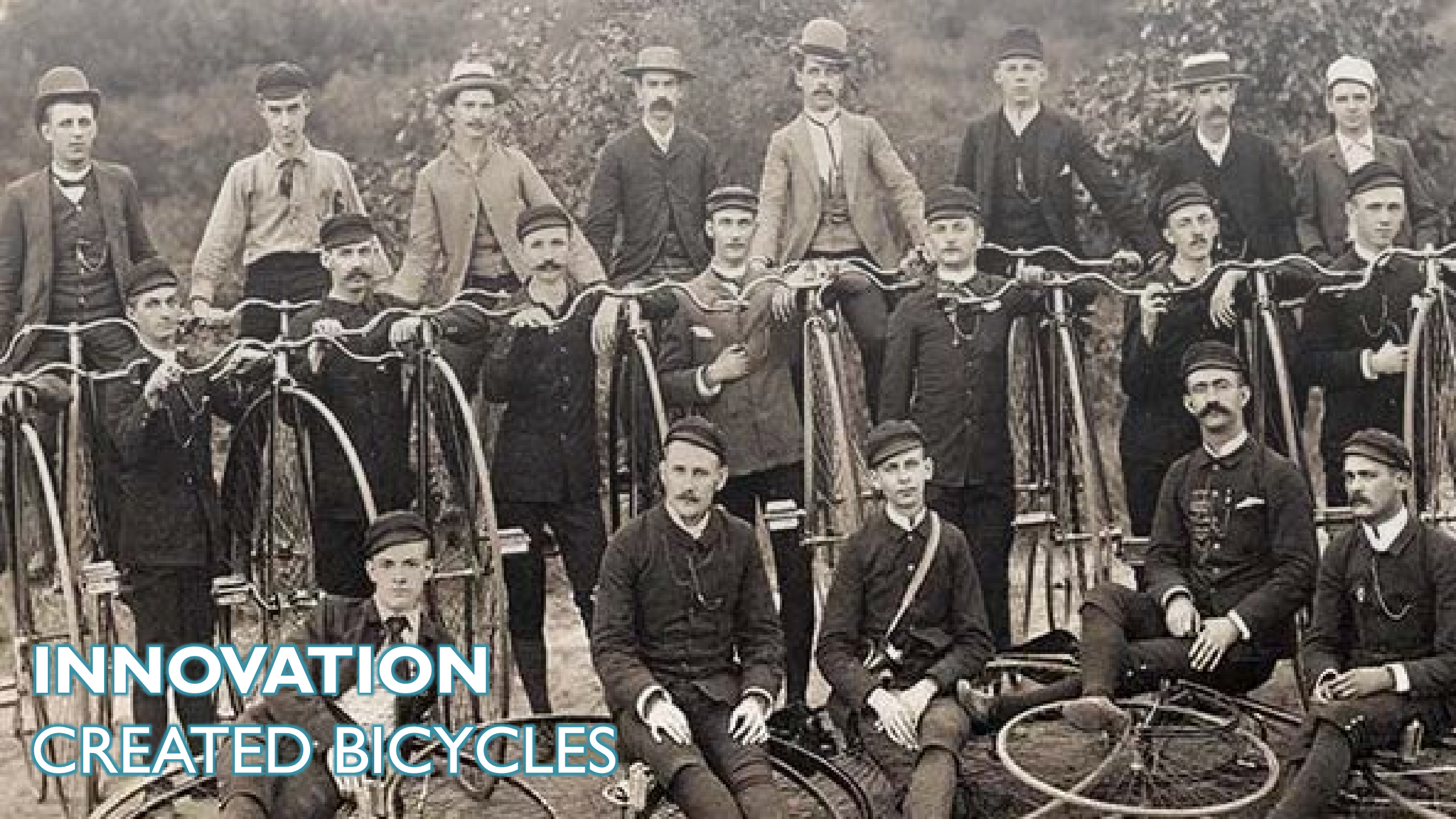
CITIES WERE
CREATED FOR THE
PURPOSE OF
EXCHANGE

Spartanburg, SC 1884



SMALL TOWNS AND
RURAL COMMUNITIES
WERE TOO

Source: Herald-Journal



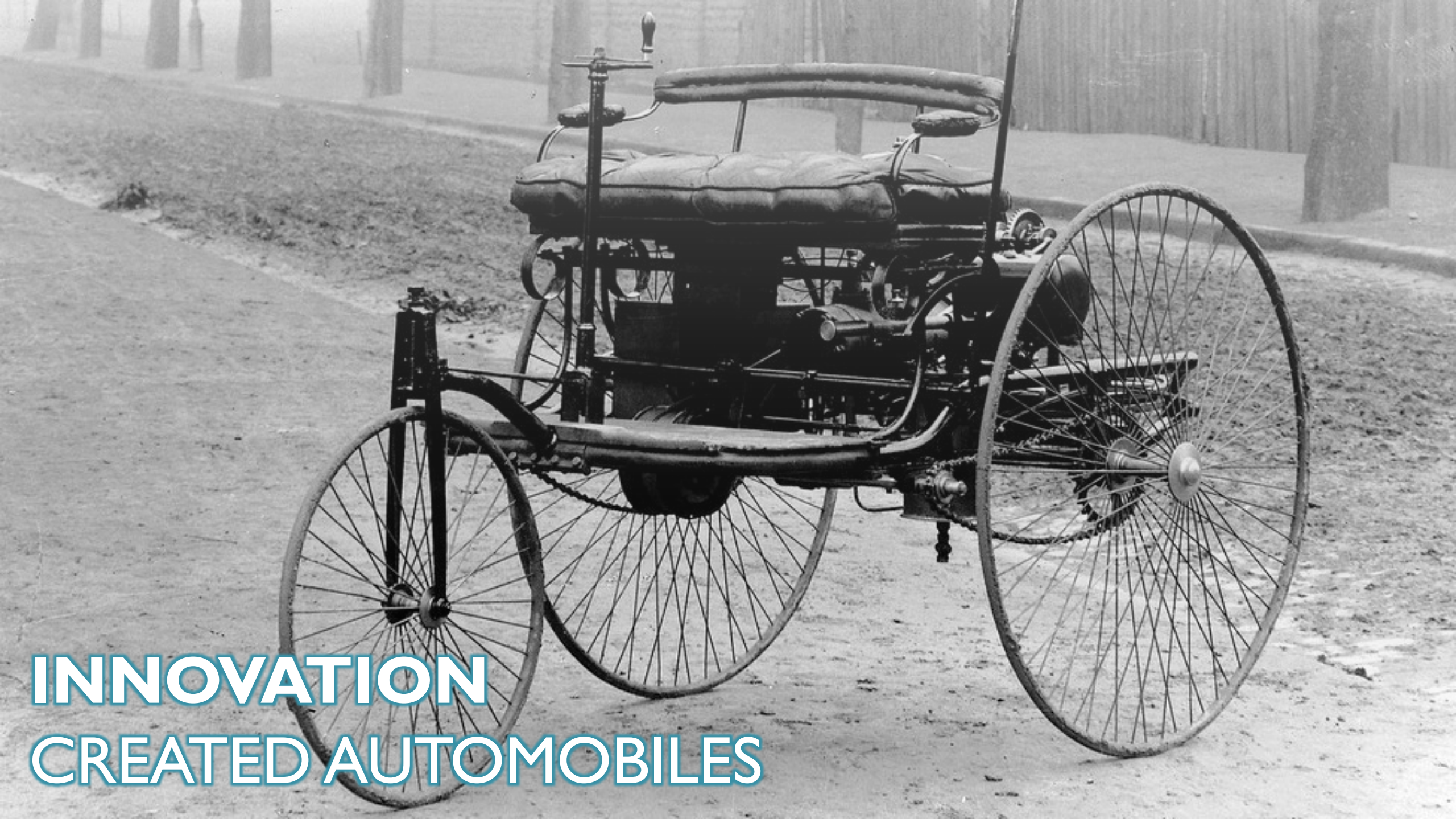
**INNOVATION
CREATED BICYCLES**



**MODERN PAVEMENT
BECAUSE OF BICYCLISTS**

Ancient Ephesus near Selçuk, Turkey





**INNOVATION
CREATED AUTOMOBILES**



**PAVEMENT
ENABLED TRAFFIC**



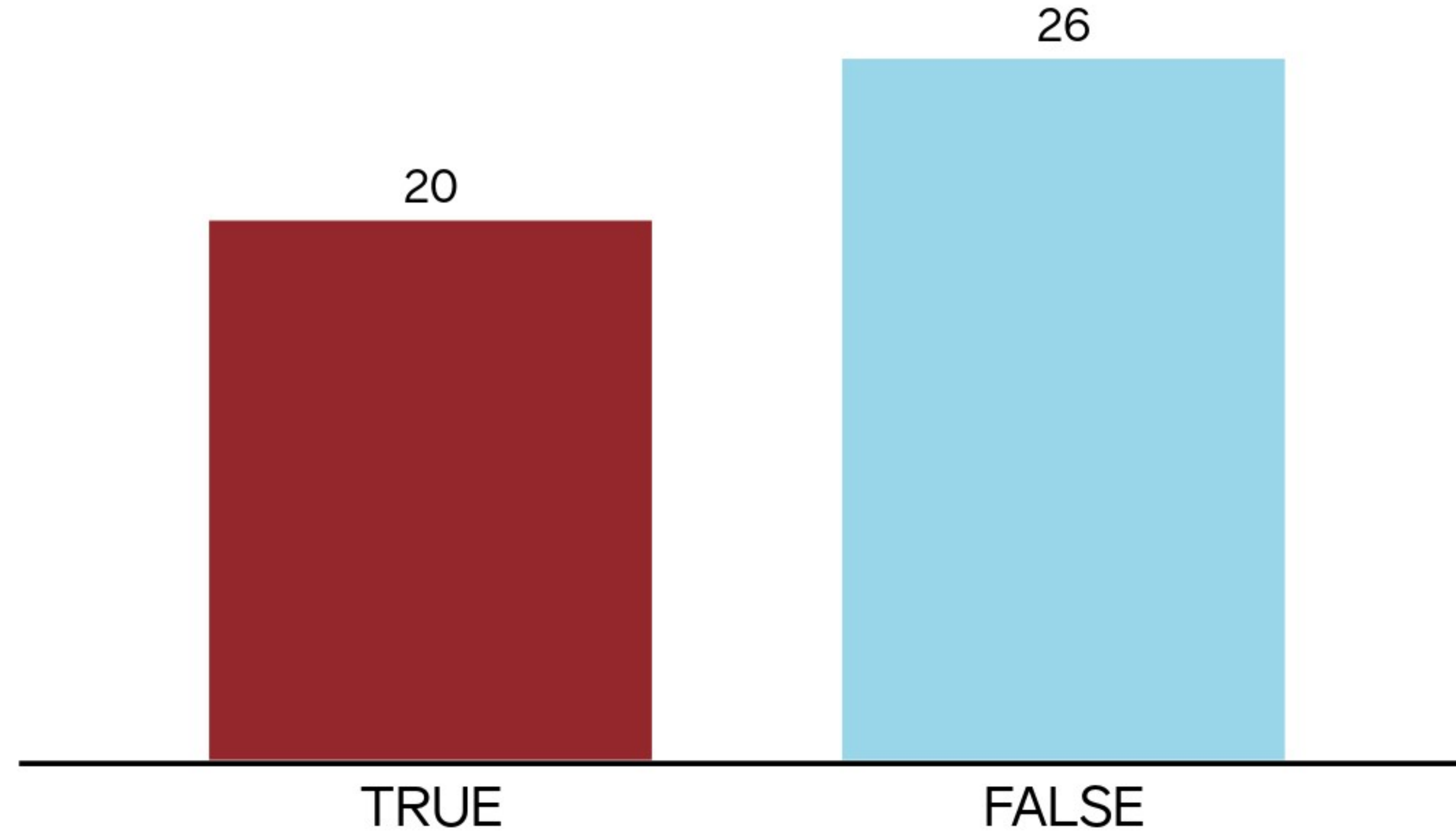
**MORE TRAFFIC
BECAUSE OF MORE PAVEMENT**

CHOAS BECAUSE OF TRAFFIC



WHAT HAPPENED?

U.S. Roads are more dangerous than ever.



Audience Poll #5

What is your definition of a "street"?

39 responses

A travel way

Travel space

A pathway to bridge destinations

Framework

A path for travel

Place for all!!! Pedestrian and autoists

A designated travelway

Public rights of way between
buildings or lots

Travel space

What is your definition of a "street"?

39 responses

A path to move

A safe human scaled pathway

Path for people vehicles goods

Avenue for transporting people and goods between destinations.

Path for travel

A path that enables a means of transportation from one place to another.

A parhway that connects various places

Community thoroughfare with sidewalks

Linear path which facilitates commerce both in travel and on the edge.

What is your definition of a "street"?

39 responses

A link for transportation

Travel way for vehicles

Designated right of way

a dedicated thoroughfare for transportation by all modes

A travel way

A path to connect commerce and communities.

Mechanism for travel

Space for people and vehicles

A route to use from a to b

What is your definition of a "street"?

39 responses

Travel way for transportation
between destination

A road for vehicles

A designated route for the movement
of people and goods.

A designated Space used for
traveling from one place to another

Centralized route to match origin to
destination

An address.

A path which is used for travel.

Space for people, animals and
vehicles

A public connection between places.

What is your definition of a "street"?

39 responses

A linear improved surface occupied by motorized and non-motorized vehicles , and pedestrians.

Community thoroughfare for all modes of transportation

A path to connect commerce and communities

Streets

Public spaces for
people, commerce,
cars, trucks, transit,
and bikes



Streets

Richmond, VA

Life on the street
circa 1920



Streets

Spartanburg, SC

Life on the street
circa 1940s



Source: Herald-Journal

HIGHWAYS

Originally intended to link
but not intrude into cities



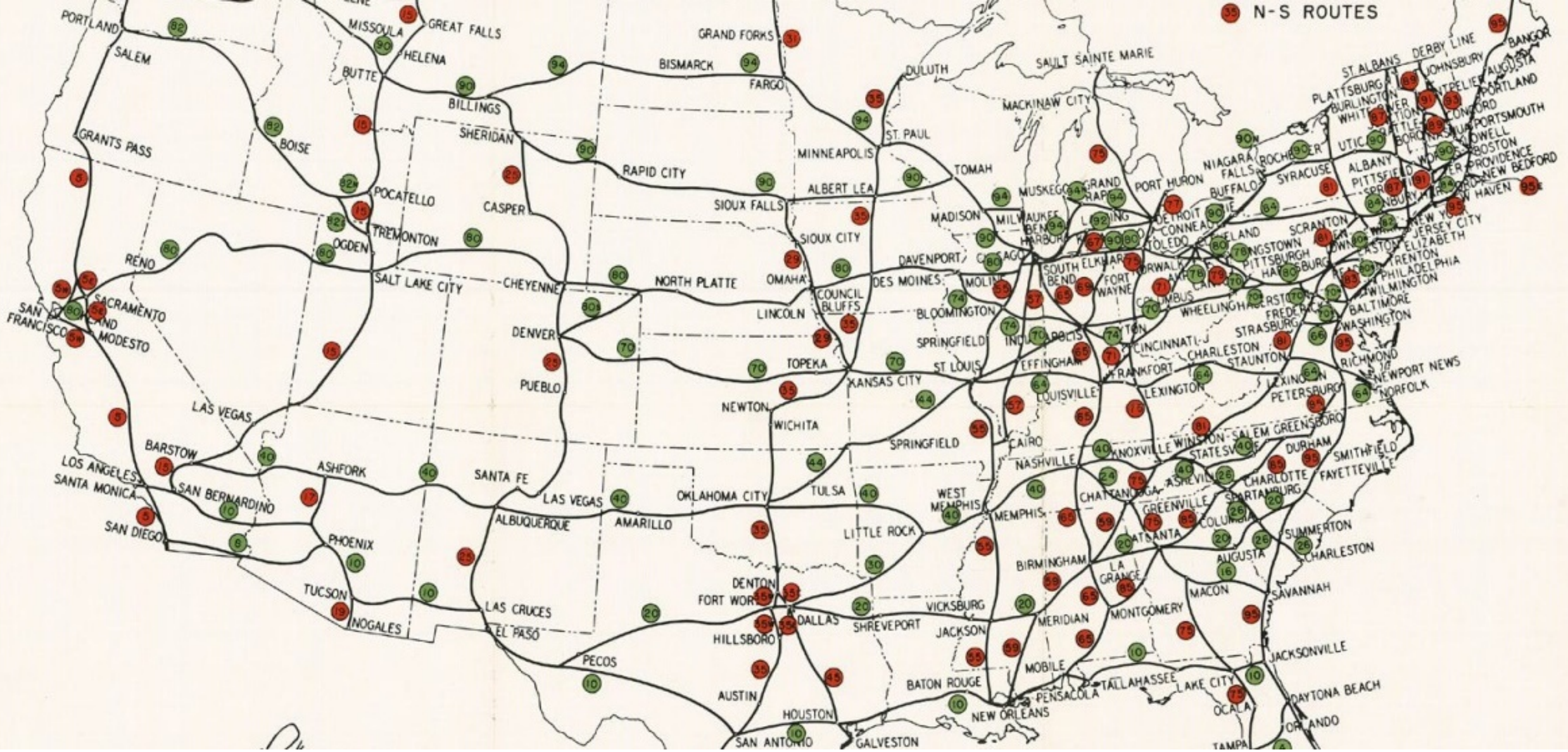
Historical Perspective

	POP.	AUTOS	AUTOS PER PERSON	VMT	FATALITIES	FATALS PER 100K PERSONS
1955	166M	52M	0.31	605B	37K	22.11
2021	333M	278M	0.83	3.2T	43K	12.89
CHANGE	x2	x5.3	x2.7	x5.3	x1.2	x0.6

Historical Perspective

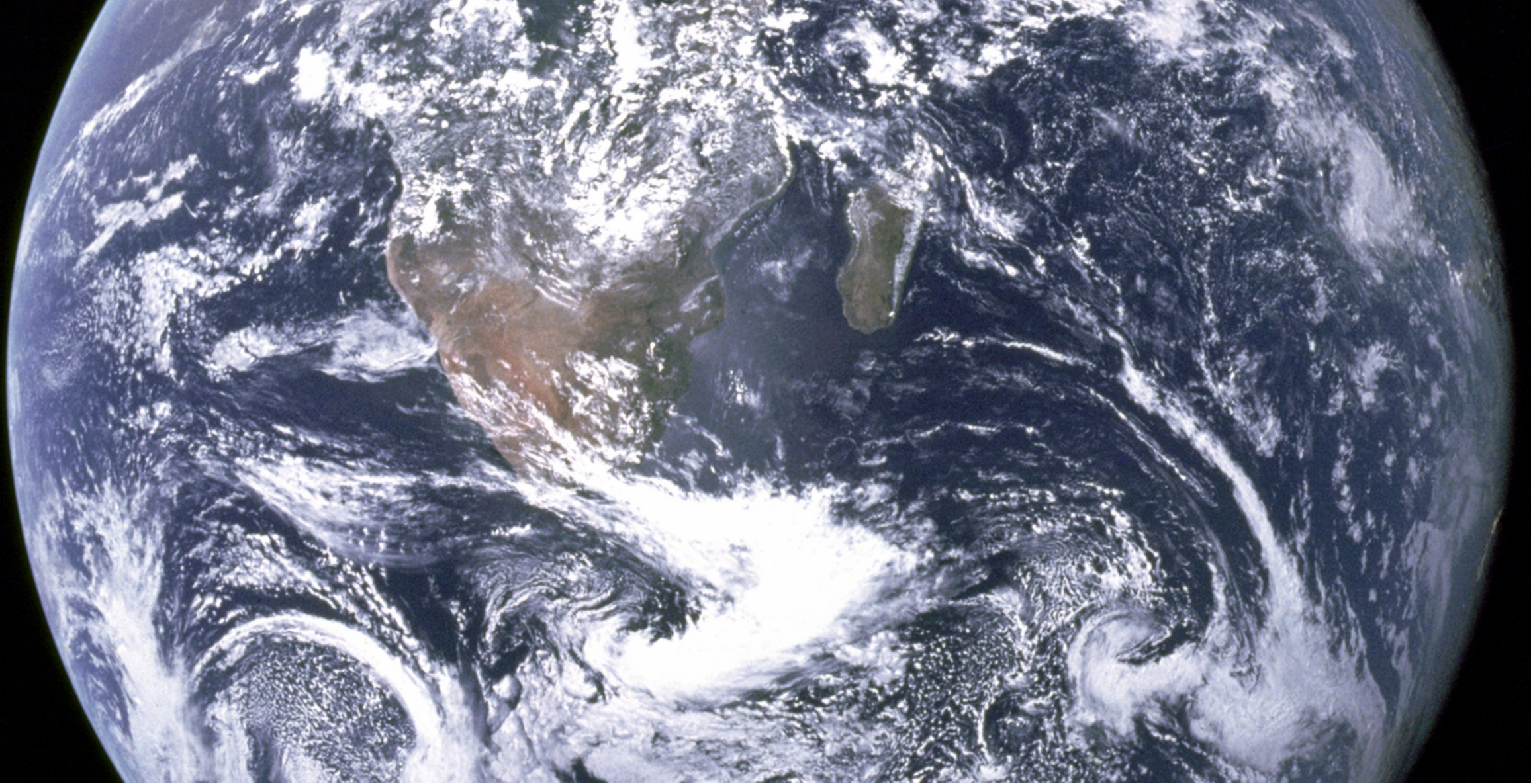
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2021	333M	278M	0.83	3.2T	43K	12.89
CHANGE	x2	x5.3	x2.7	x5.3	x1.2	x0.6

This does not diminish the danger on our roads today but rather recognizes that our nation has historically acknowledged dangerous conditions and proactively worked to reduce fatalities through design and infrastructure implementation.



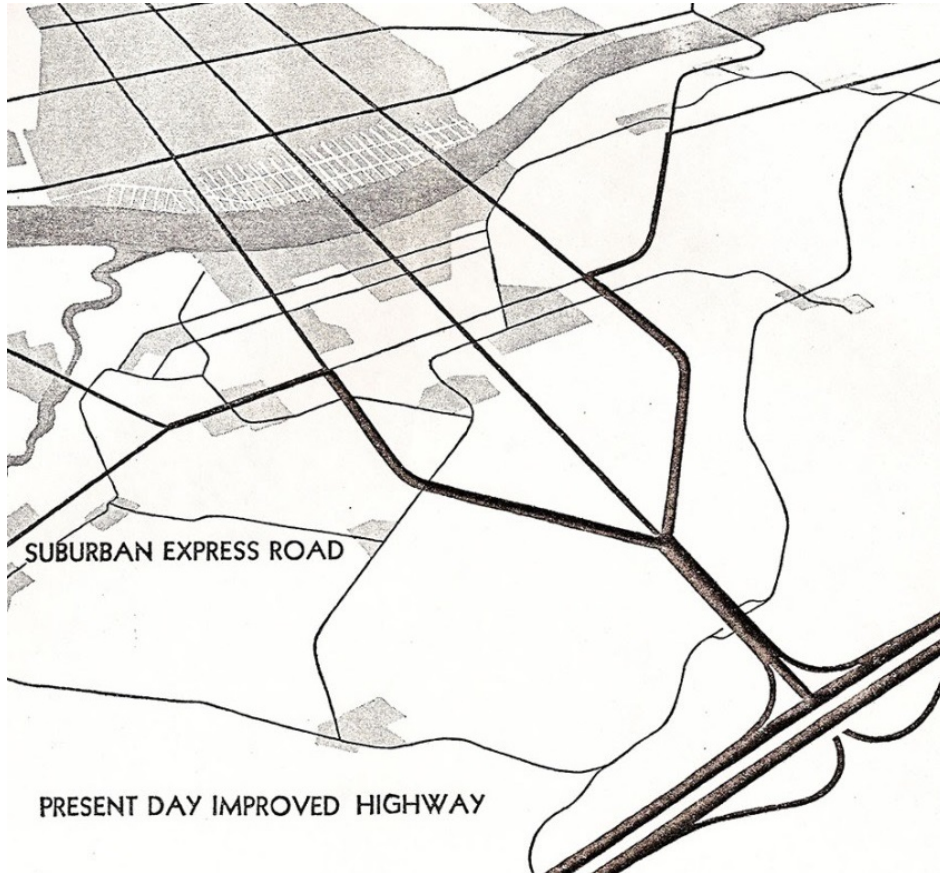
Interstate Highway System

We built 26,000 miles of highways in 15 years.

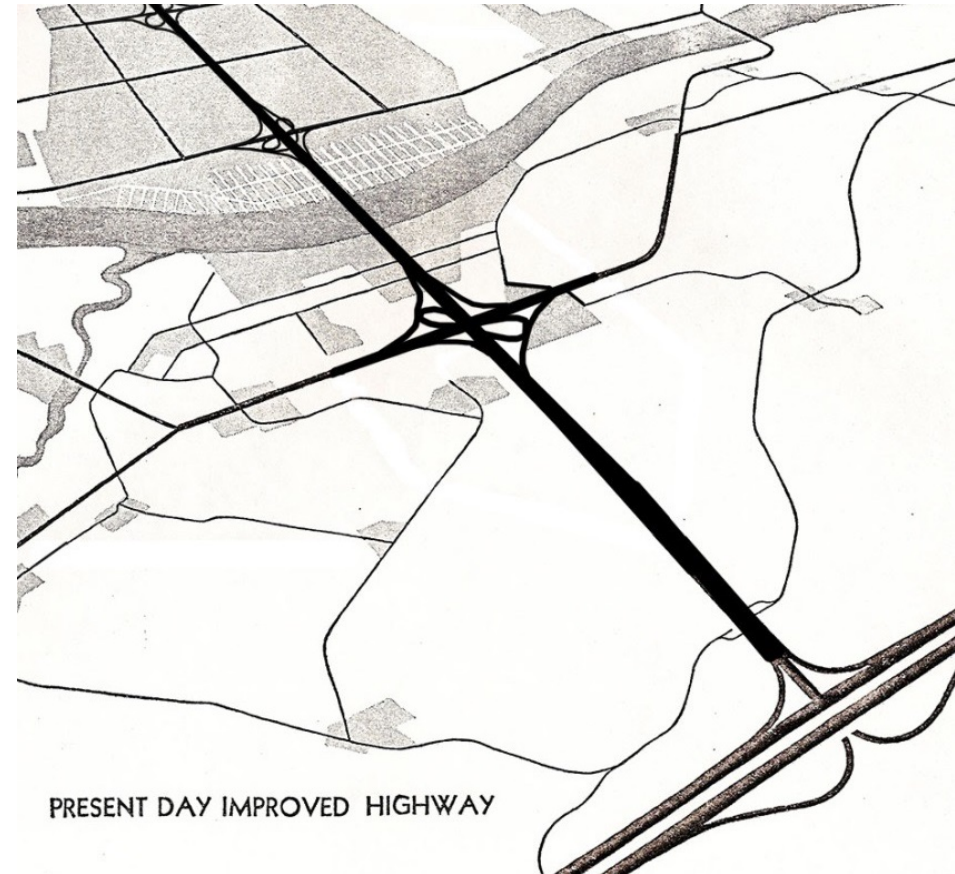
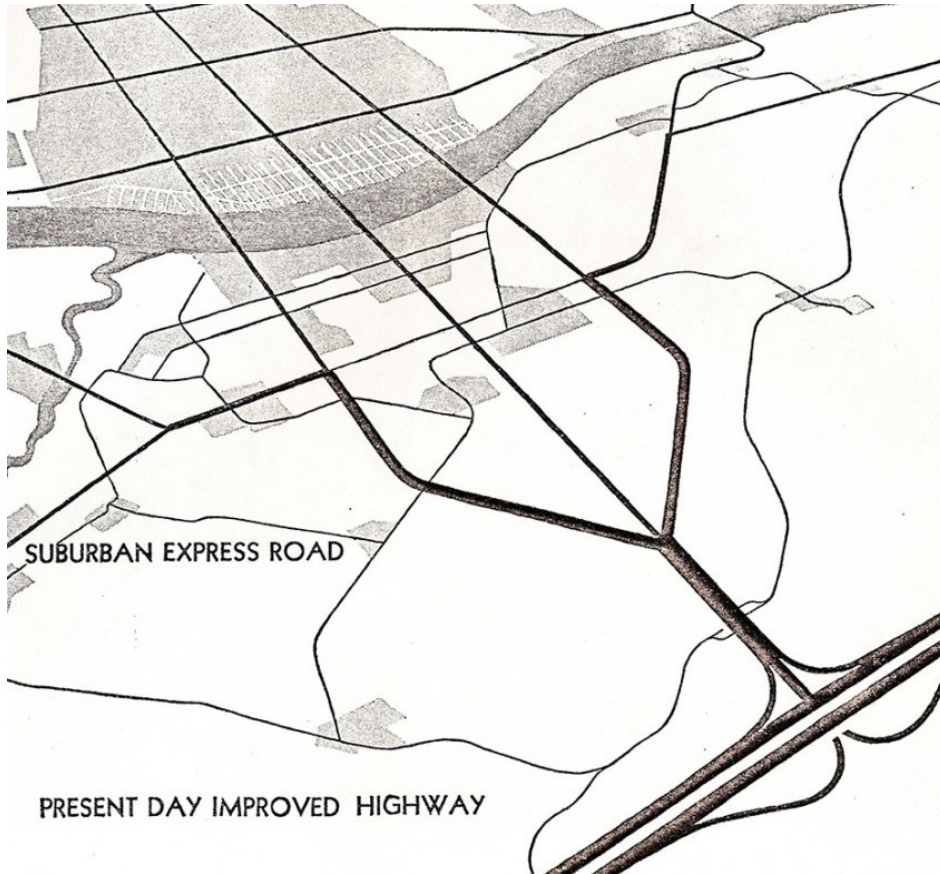


Interstate Highway System

We built 26,000 miles of highways in 15 years.
Enough to circle the Earth plus the distance from Minnesota to New York.

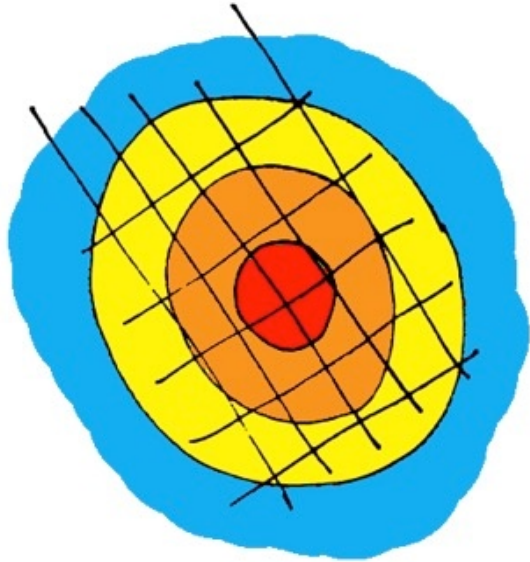


Highways as Intended
It was an important system



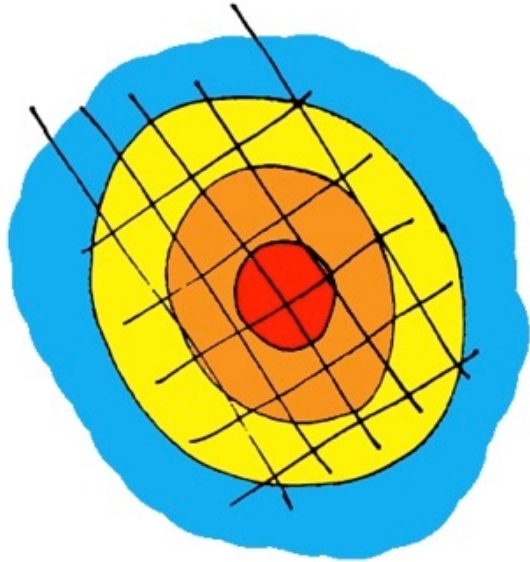
Highways as Intended

It was an important system but deviated from original intent.

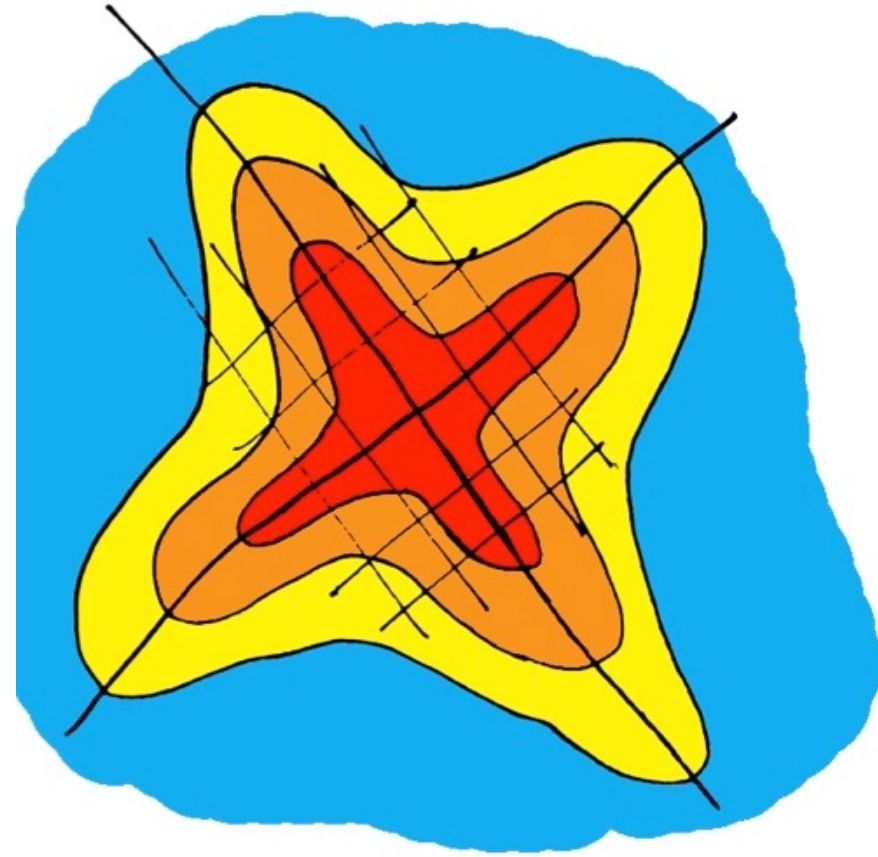


Traditional City

Value = fn (proximity to center)



Traditional City
Value = fn (proximity to center)



Conventional Theory
Value = fn (travel time to center)

Modern Values

Reward Long Trips

Automobile Focus

Speed is Important

The Fabric Doesn't Matter

Congestion is Bad

Single Use Land Use

Dendritic Street Hierarchy

Modern Values

Reward Long Trips

Automobile Focus

Speed is Important

The Fabric Doesn't Matter

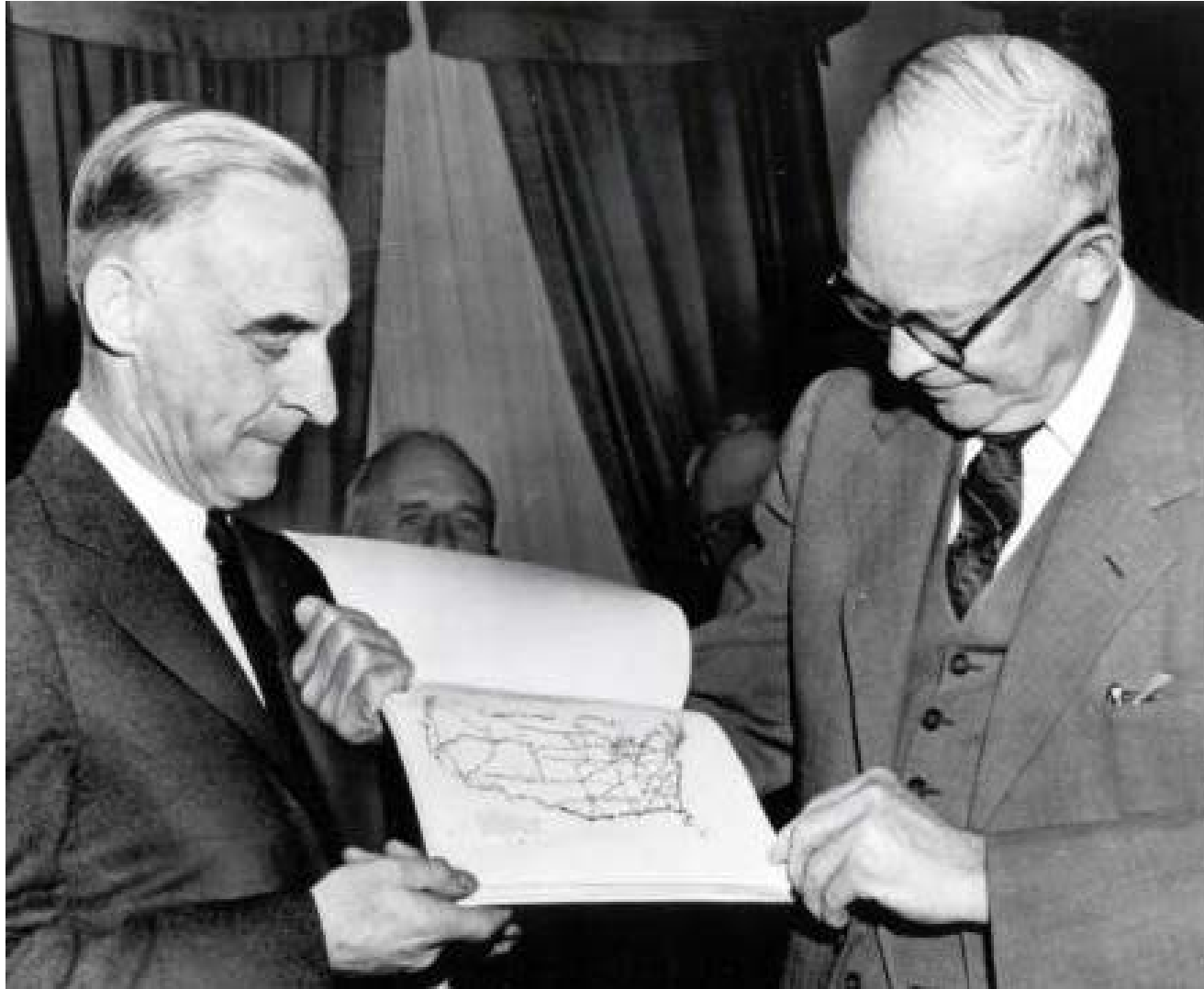
Congestion is Bad

Single Use Land Use

Dendritic Street Hierarchy

**Level of Service
for Motorists**

What Happened?

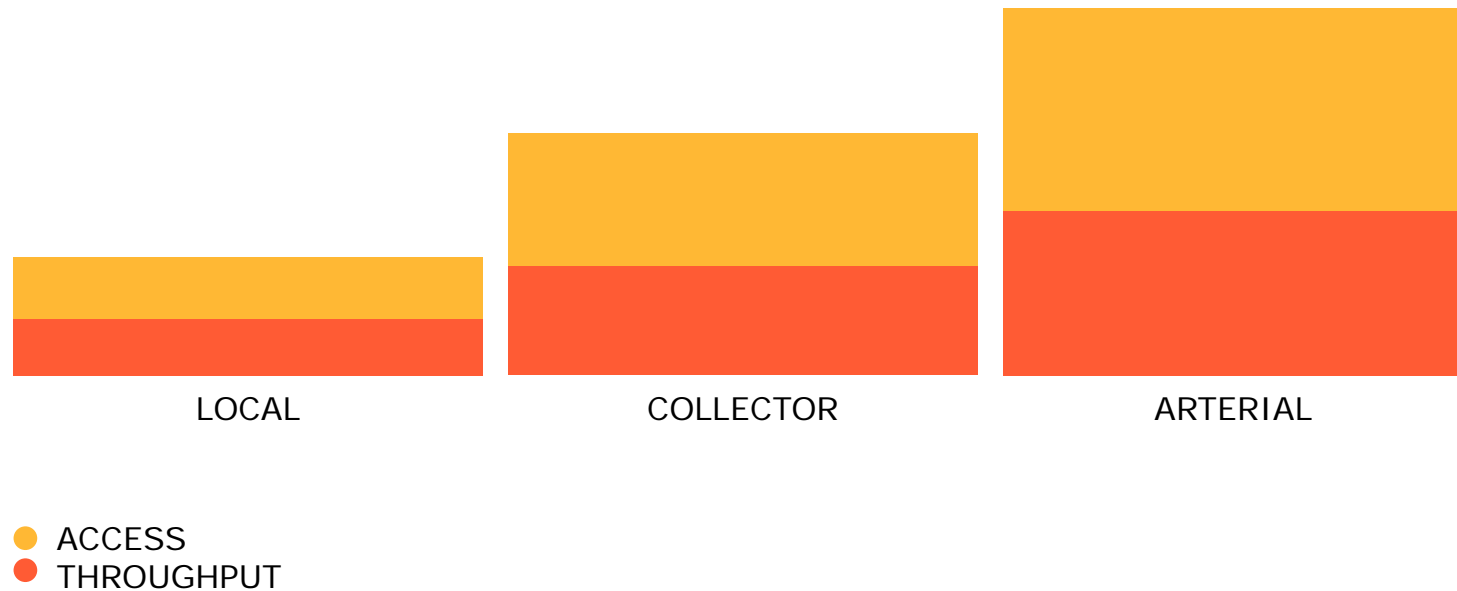


President Eisenhower went on to say that the matter of running Interstate routes through the congested parts of the cities was entirely against his original concept and wishes.

Source: Memorandum of a 1960 meeting in the Oval Office.

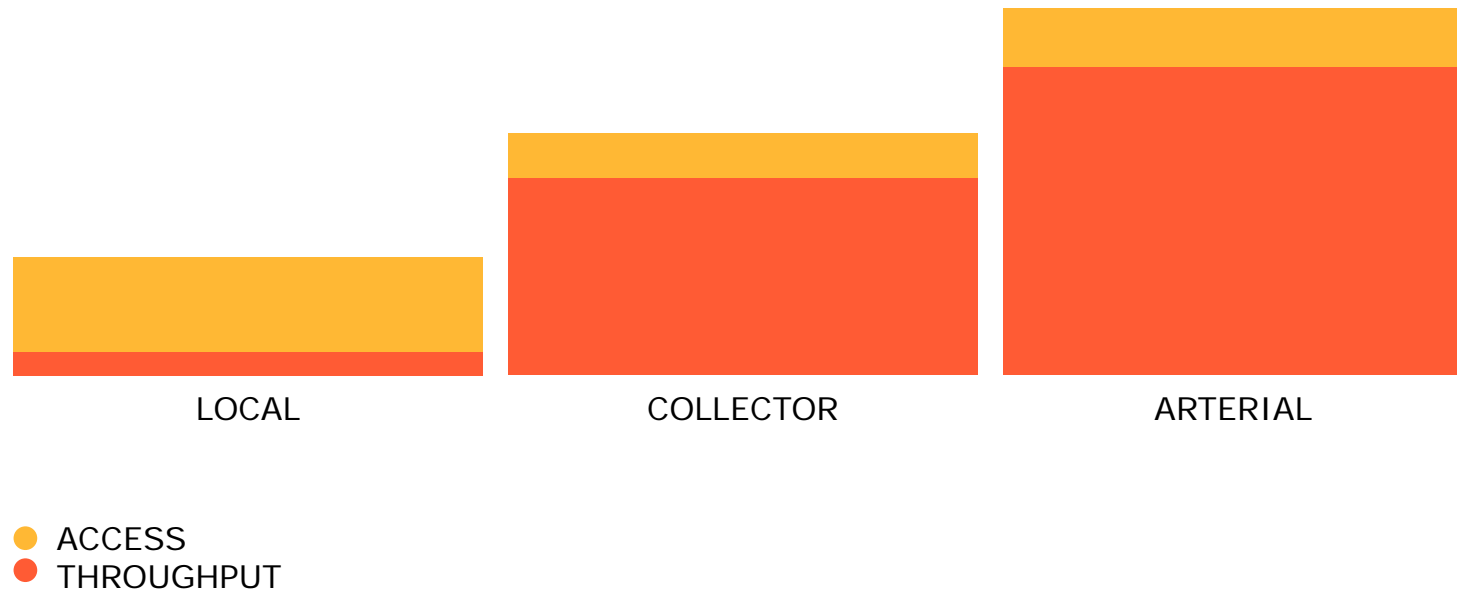
Traditional Conception of the Purpose of Streets

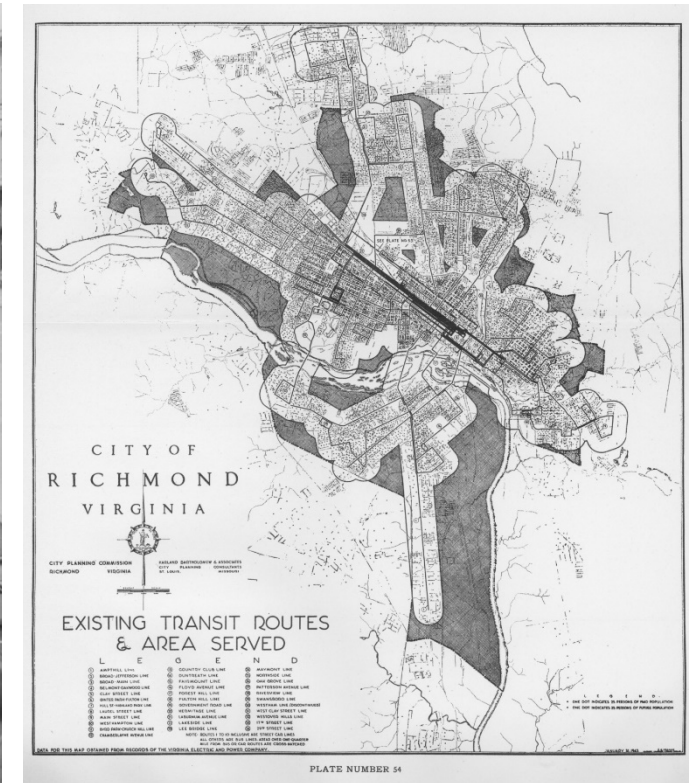
Access to goods and services was a key function on arterials



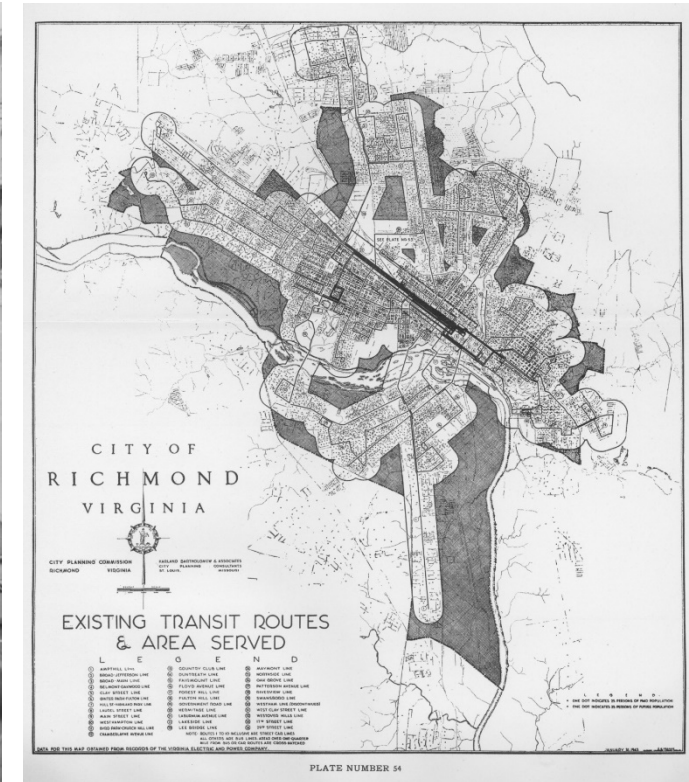
Modern Conception of the Purpose of Streets

Arterials started to serve more of a throughput function





Historically Arterial Streets in American Cities were about Access and Social and Economic Exchange



Historically Arterial Streets in American Cities were about Access and Social and Economic Exchange

Until 1949 when Modern Values prevailed

Richmond, VA

Life on the street
circa 1920



Richmond, VA

Today
Level of Service A



Spartanburg, SC

Life on the street
circa 1940s



Source: Herald-Journal

Spartanburg, SC

Today
Level of Service B



Audience Poll #6

What is your definition of "mobility"?

37 responses

Freedom of choice for movement

Moving from point A to point B

The ability to move freely

The ability to move from one location to another

The ability for people to get to destinations they need to access

The movement of goods and people.

The ability to move around a place

Ability to move from one location to another

Access to move

What is your definition of "mobility"?

37 responses

Ease of travel

Moving from place to place

Being able to move where you want

Ability to move

ability to get around your city town

Ability for all to move as they need

Being able to move around

Means of movement from one location to another

Ease of travel through multiple modes

What is your definition of "mobility"?

37 responses

Ability to get from one point to another

Ease of moving from one point to another

Movement by any use from one location to another

Being able to move from place to place

Ease and ability to move freely from one place to another

Able to move freely

Freedom of movement and choice of transport.

Being able to travel from one place to another.

Ability for transient movement and access

What is your definition of "mobility"?

37 responses

Flexibility in movement

The ability to go from one spot to another.

Access to life

Ability to move

Getting around without a lot of interference

Ease of movements for all modes from place to place

Ability to travel to where you want to go.

Ease of travel through multiple modes

Getting from one place to the other

What is your definition of "mobility"?

37 responses

Getting from one place to the other

Mobility – The movement of people and goods



Assumption

Faster, farther, and in greater numbers = societal progress

Mobility – The movement of people and goods



Assumption

Faster, farther, and in greater numbers = societal progress

Mobility – The movement of people and goods



Reality

A population's capabilities and strategies to move in order to access what they need to **live within and be** a community

HOW DO WE SHIFT THE PARADIGM?



What can YOU do to shift the transportation paradigm?

39 responses

Walk or bike more

Support multiple modes more

Not much

Try to find solutions to work effectively with SCDOT.

Increase density at nodes to create demand transit options

Promote a culture of multimodal transportation

Always be honest and plan with the communities best interest in mind

Focus on shopping locally.

Educate decision makers and the next generation that new ideas can work.

What can YOU do to shift the transportation paradigm?

39 responses

Change my travel behavior and encourage other to

change habits ..

Advocate to change state policy, choose to live close to amenities

Plan for more trails that people will use

Vote for public transportation initiatives and multimodal uses

Insist on complete streets policies and construction in comp plans

Use other forms of transportation

Work and live in a community that has high walkability.

Focus on multimodal connectivity

What can YOU do to shift the transportation paradigm?

39 responses

Encourage developers to provide walking and biking trails

Live near work

Better Consider transportation issues in land use planning and regs

Buy an EV.

Teach students to look at transportation anew

Be example to my kids so they will find their own way to make a change

Mitigate the number of vehicles on the road driven by teens.

Maybe let the users experience different settings / locations

Use alternate forms of transportation

What can YOU do to shift the transportation paradigm?

39 responses

Multimodal support

Walk more and utilize public transportation.

waking school bus

Move to a community where I can safely access mobility options.

Give more incentives to people who use alternative modes of transportation, other than a car.

Embrace new modes of commuting

Consider human needs and what can give them a better, safer community. Allow them to be part of the place without needing anything but their foot

Educate the next generation.

Never leave my house

What can YOU do to shift the transportation paradigm?

39 responses

Better consider transportation issues in land use planning and regulations

Advocate for new ideas

Work from home

DESIGN FOR PEOPLE

In fact, put people first



Streets ...

... are typically the largest area of public real estate in our communities.

... are typically the least “designed” parts of our communities.

Streets ...

... communicate the values and priorities of our communities.

... are the first impression of visitors to our communities.

Streets ...

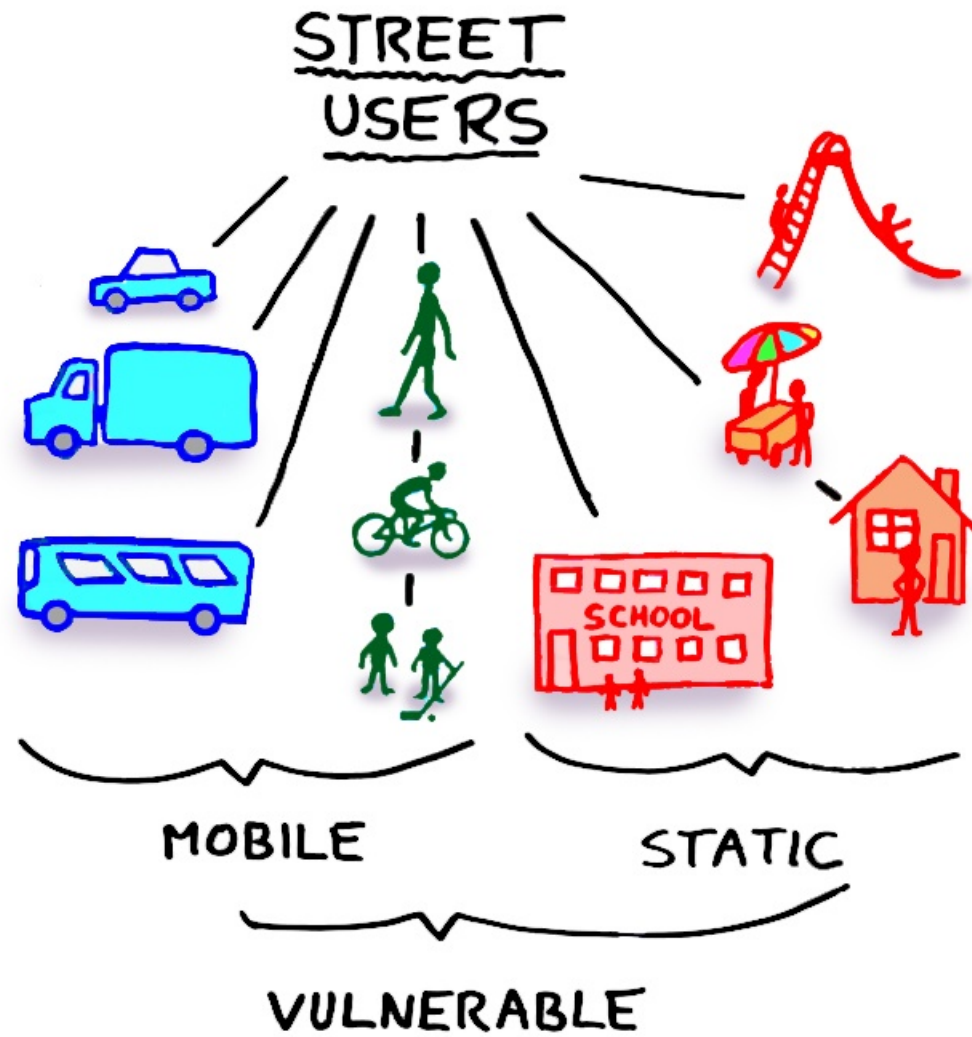
... should be more than a conduit for cars.

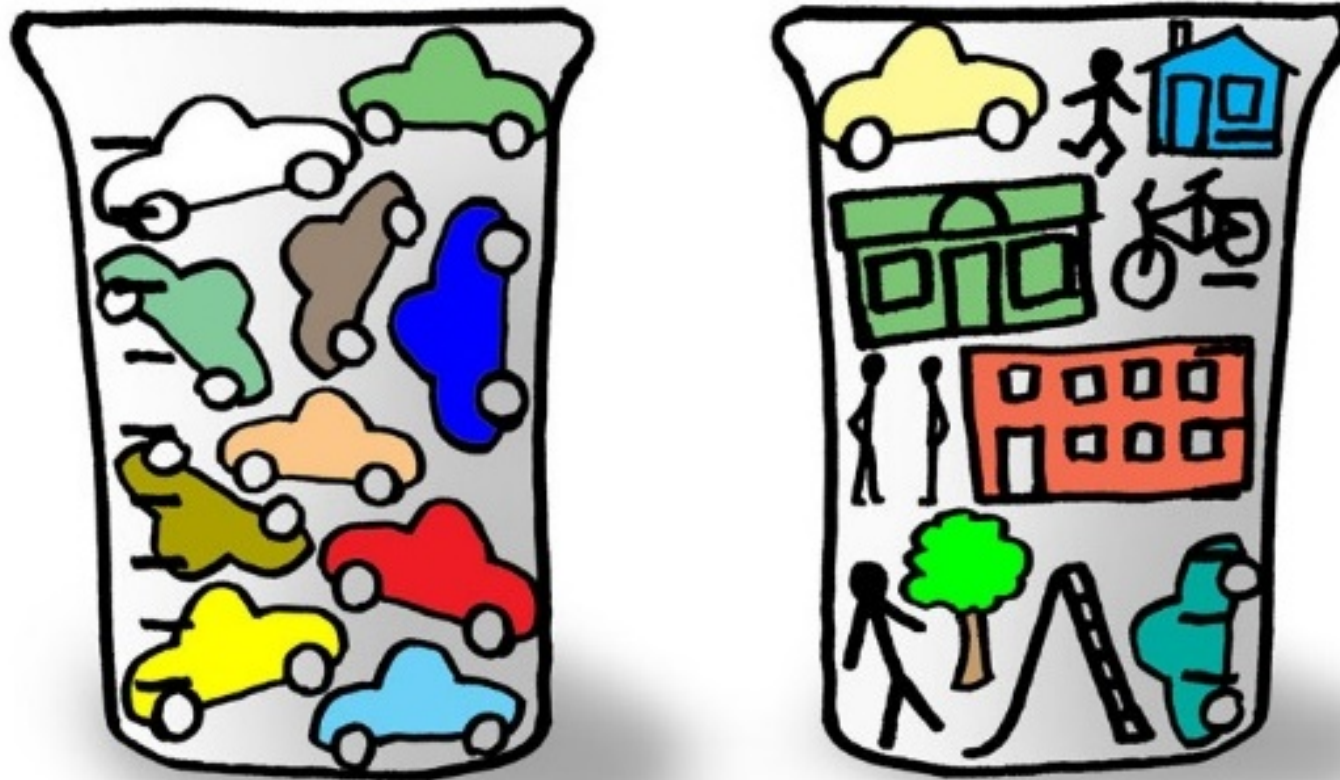
... should be where people meet and converge.

... define our communities.

*“Do you want your streets to **go through** your community, or do you want your streets to **be part of** your community?”*

- Ernie Boughman





"Capacity" of a Street

Lockwood

Great Streets Approach

People as priority

People who drive cars, trucks, walk, bike, ride transit, and live and work along/near the street

Quality of design

Quality of service for transportation

Quality of life for residents and users

***Make the trip as enjoyable
as the destination***



COMMUNICATE

Use language that helps both professionals
and the public understand





“Words. The clothes that thoughts wear.”

- Samuel Beckett

Communication isn't Semantics



The terminology we use matters and affects understanding.

Communication isn't Semantics

Improvement

Upgrade

Traffic Demand

Efficient

Accidents

Capacity

Level of Service

Delay

Functional Classification

Right-of-Way

Preservation

Freeway

Capacity Deficiencies

Conflict Points

Access Management

Reliability



Words

Solidify ideas



Words

Set priorities



Words

Have consequences

Shifting Language

From:  **To:**

Alternative Transportation

Improvements

Demand

Efficient

Upgrade

Delay

Walking, Biking, Transit (be specific)

Modification or Change

Use or Expected Use

Increase Speeds/Faster

Expansion or Reconstruction

Travel Time

Clear Communication is Critical



COMMUNITY DRIVEN DESIGN

Engage technical experts with local experts



LOVE YOUR
NEIGHBOUR



Community Driven Design



Access and quality, not throughput.

Community Driven Design



Modes can coexist. It's a matter of priorities.

Community Driven Design



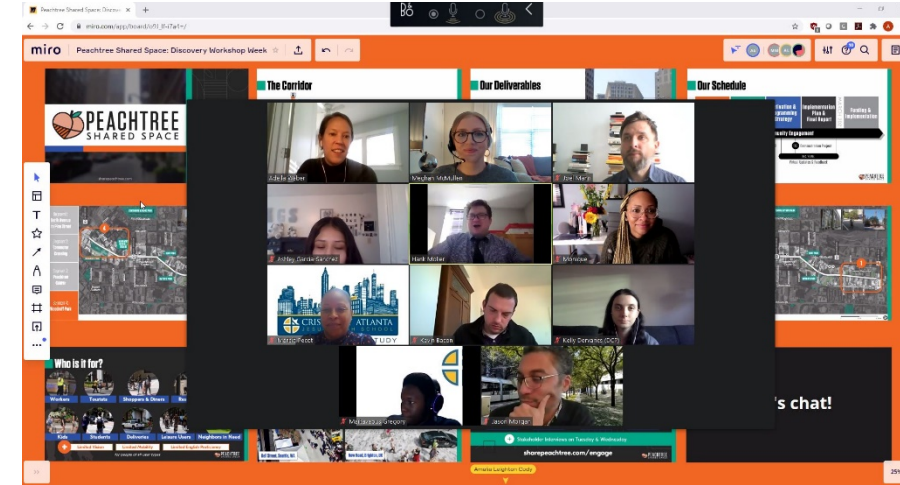
Create spaces for all ages and abilities.

Community Driven Design



Multiple voices at the table from the beginning.

Convene Community and Technical Experts



Convene Community and Technical Experts

URBANIZE
ATLANTA

NEIGHBORHOODS ▼ CITIES ▼ ADVERTISE

DOWNTOWN

City plans to remove people-friendly project on Peachtree Street

Downtown shared lanes experiment was supposed to signal "beginning of a cultural shift"

MARCH 10, 2022, 11:29AM JOSH GREEN 108 COMMENTS



3/15/22, 12:59 PM

Atlanta advocates protest removal of bike lanes on Peachtree Street



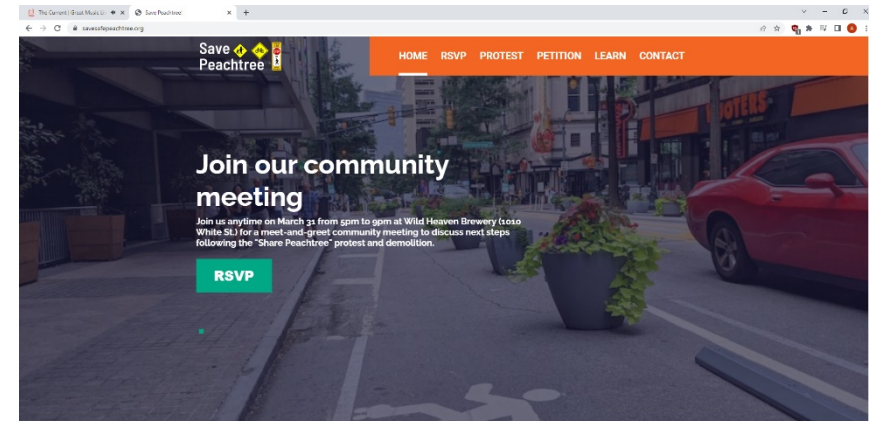
The Atlanta
Journal-Constitution

Advocates protest removal of project to protect lanes on Peachtree St.

Letters show downtown heavyweights support shared Peachtree lanes

Westin Peachtree Plaza, AmericasMart, office tower owners put support in writing

MARCH 11, 2022, 11:35AM JOSH GREEN 25 COMMENTS



RSVP for Meet and Greet Community Meeting

AXIOS Atlanta

Latest stories

Membership

Jobs

Mar 14, 2022 - News

Atlanta's Peachtree Street traffic program to shut down



Thomas Wheatley

Convene Community and Technical Experts





Thank you!

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“Trust every quote you find on the internet.”
- Abraham Lincoln

