Safe Streets Training for Municipalities:
Applying Safe Systems Principles to Local Transportation Practice

American Planning Association
New York Upstate Chapter

The American Planning Association's
Professional Institute
American Institute
of Certified Planners

Creating Great Communities for All

- AICP recognizes that the New York Upstate (NYU) Chapter of APA has committed to meet CM criteria for length, subject matter, and instructors.
- AICP members can earn Certification Maintenance (CM) credits for this activity.
- AICP members must be in attendance for the duration of the event in order to receive CM Credit.
- For more information, please go to:
  - AICP Certification - https://www.planning.org/aicp/
  - CM Program - www.planning.org/cm
  - NYU APA Chapter - https://www.nyupstateplanning.org/

- The AICP credential assures clients, colleagues, and communities that your employees have the necessary expertise, knowledge, and commitment to ethics.

■ INDEPENDENT VERIFICATION

"AICP" is shorthand for education, experience, breadth of knowledge, ethical practice, and commitment to the planning profession. AICP-certified planners average 14–18 years of experience in the field.

■ CREDIBILITY

AICP Certification strengthens your recommendations to public officials, professional collaborators, and the public. Four out of five planning commissioners and elected officials agree that participation in certification demonstrates commitment to professionalism.

■ SUCCESSION PLANNING

Prioritizing and encouraging AICP Certification within your organization elevates your teams and prepares them for current and future planning challenges. 93 percent of certified members say that AICP meets or exceeds their expectations for helping them remain professionally current with changes and advances in the field.

■ RETENTION

Supporting professional development helps with retention and loyalty, saving your organization from costly turnover. Employees who feel they cannot grow in the company and fulfill their career goals are 12 times more likely to leave the company.[1]

Sources *1. https://www.ibm.com/blogs/ibm-training/building-skills-for-a-smarter-workforce/*

DESIGNING FOR HEALTHIER COMMUNITIES
Erie County, NY

Safe Streets Training for Towns and Villages

"Instead of simply designing per the standards, it's time to design with a healthier lifestyle for all in mind."

INSTRUCTOR: DAN BURDEN

This course is based on successfully built safe streets and vision zero solutions informed by:

- East Aurora
- Village of Hamburg
- Town of Hamburg
- Buffalo
- Olean
- Pottstown
- Rochester
- Pittsfield
- Chautauqua
- Toronto
- Hamilton

PART ONE

PURPOSE

VOCABULARY

HEALTHY STREETS

TOPICS

WHY THIS COURSE?

PART ONE

MAKING STREETS HEALTHY AND SAFE
- PURPOSE
- VOCABULARY
- ELEMENTS
- GEOMETRICS
- OPERATIONS
- MAINTENANCE

PART TWO

TOOLS

Thanks to Victor Dover and Kenneth Garcia
- SIDEWALKS, TRAILS
- TARGET SPEED AND SPEED CONTROL
- CROSSINGS
- INTERSECTIONS

PROCESS
- AGENCY COORDINATION
- ENGAGING THE PUBLIC
- MEASURING OUR SUCCESS

What We Value





The first activity in our work is to ask leaders
Taking part in what they value the most about life here.
The values that often emerge:

- Family-focused, quiet, friendly town.
- Rural and small-town lifestyle and feel,
- Ease of accessing recreation,
- Knowing everybody,

What We Build




If you plan cities for cars and traffic, you get cars and traffic.

If you plan cities for people and place, you get people and place.

Why do people Drive slow here?

It's all about visual cues

But not here?

Motorists that "read" go fast here will not respond to posted speeds or signs. The location of buildings, medians, on-street, parking and lane widths set the right visual cues for safe behavior.

Build for People First

1. Compact Lively Centers
2. **Well-Connected Streets and Trails**
3. Low Speed Streets
4. Accessible Schools and Parks
5. Inclusive, Lively Public Places
6. Convenient, Safe, Easy Crossings
7. Well-Designed Streets and Edges
8. Land Use and Transportation are Partners
9. Break Down the Silos
10. Beauty and Nature

Openly Hostile

Intolerant

Tolerant

Supportive

Place

Ensuring Safe, Accessible, Comfortable, Welcoming, Enjoyable Experiences

Vision Zero

Safe Streets

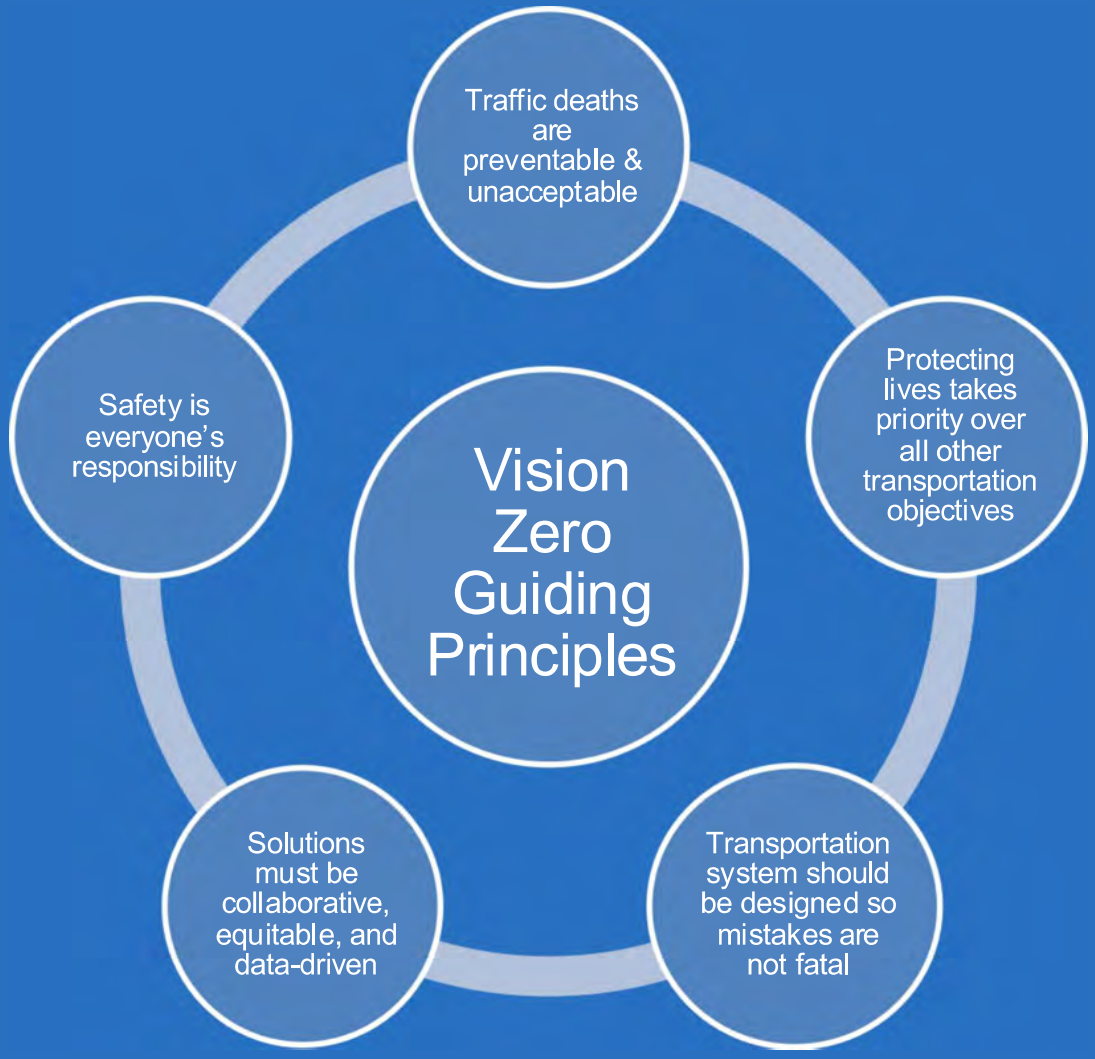
Multi-Modal

Traffic Calming

Target Speed

What is Vision Zero?

- Vision Zero is a goal to reduce & eliminate serious injuries and fatalities along our transportation network, while increasing safe, healthy, and equitable mobility for all.



From Raleigh North Carolina Vision Zero Program

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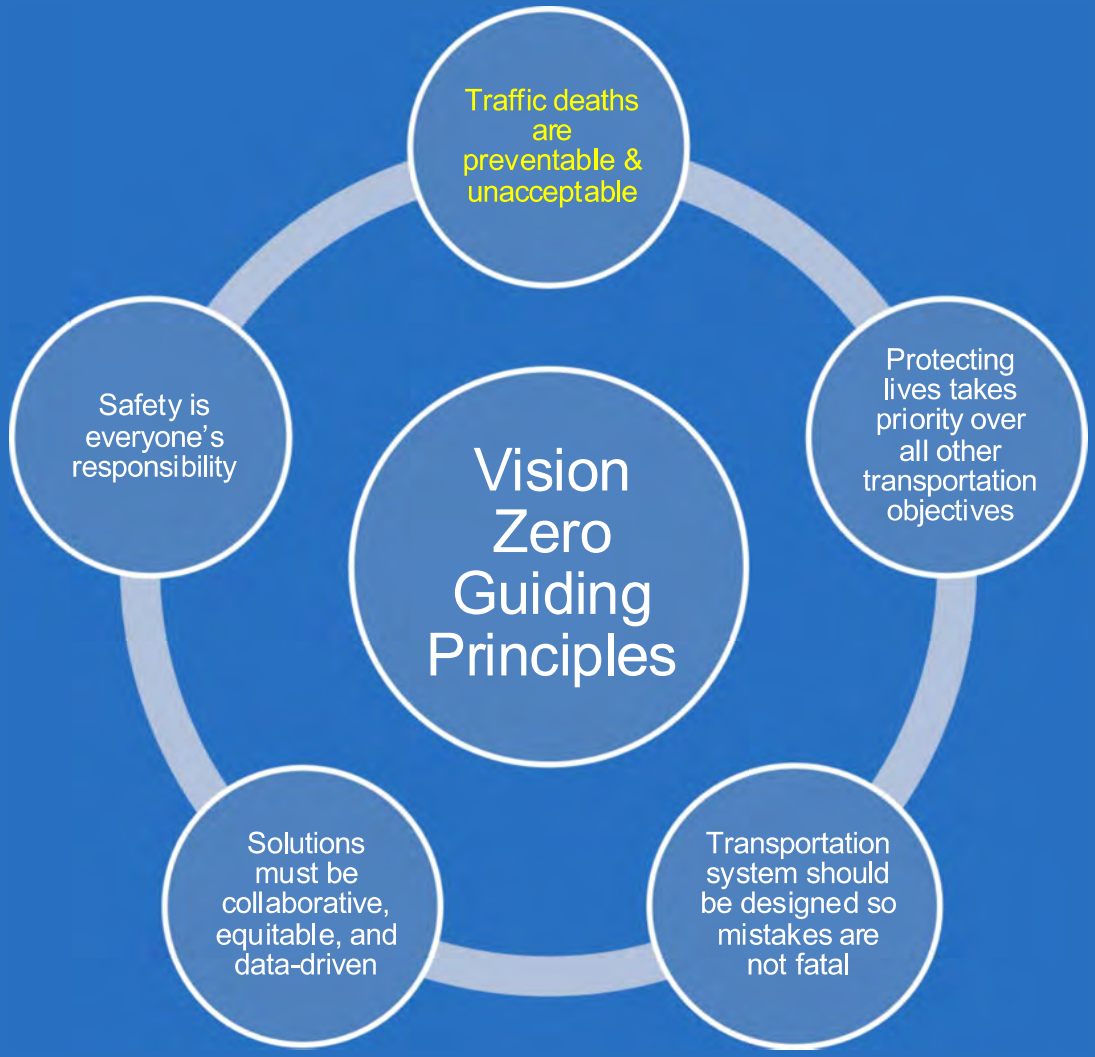

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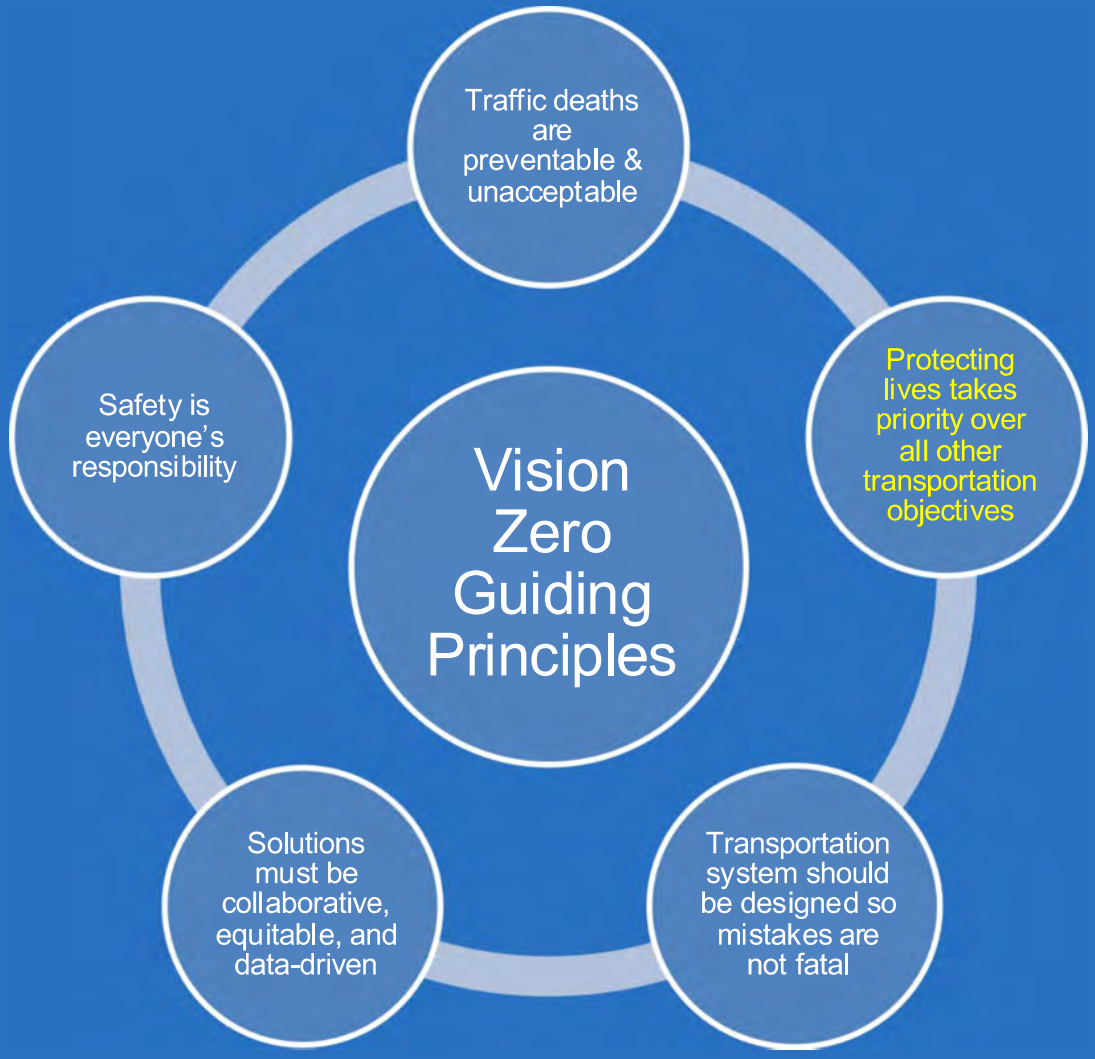

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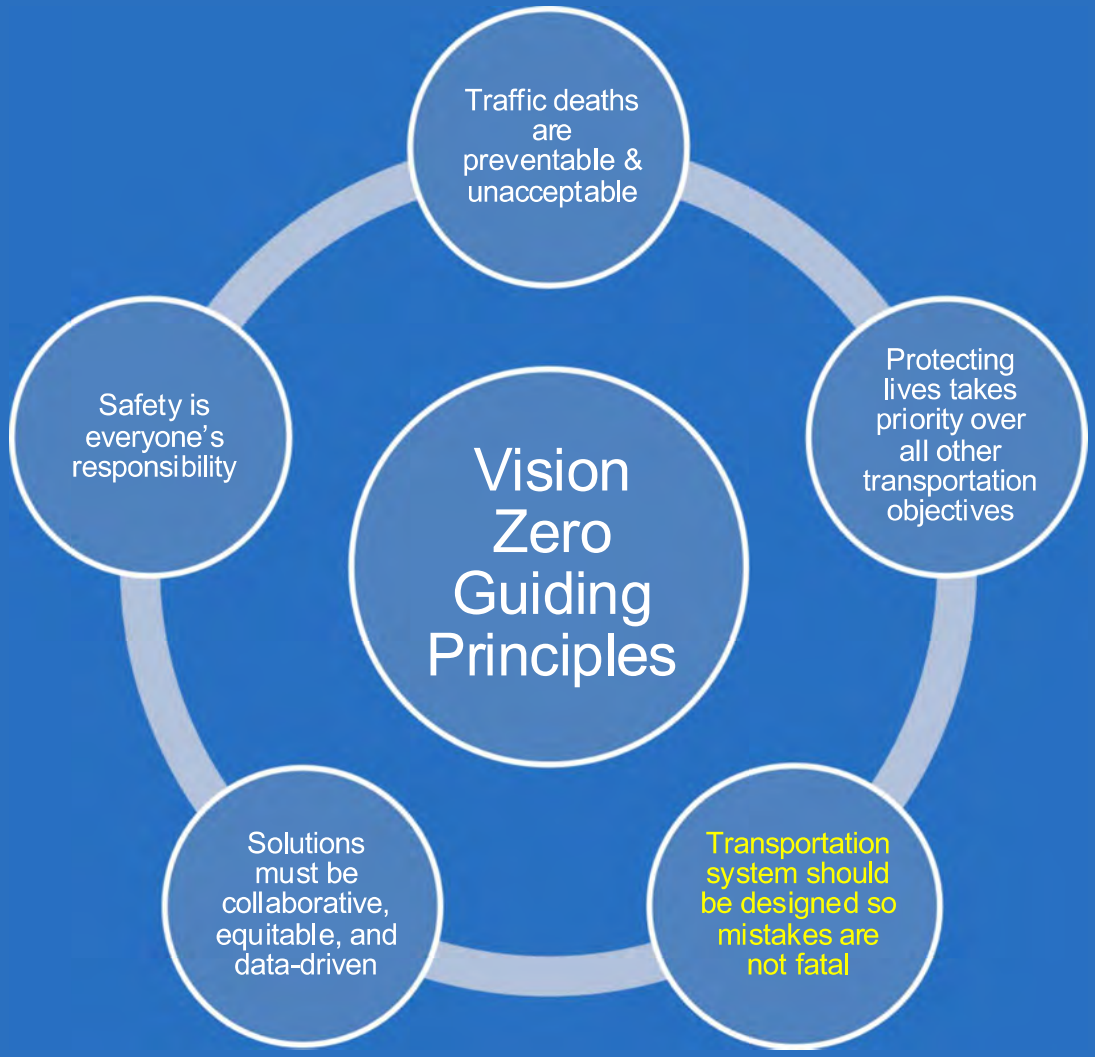

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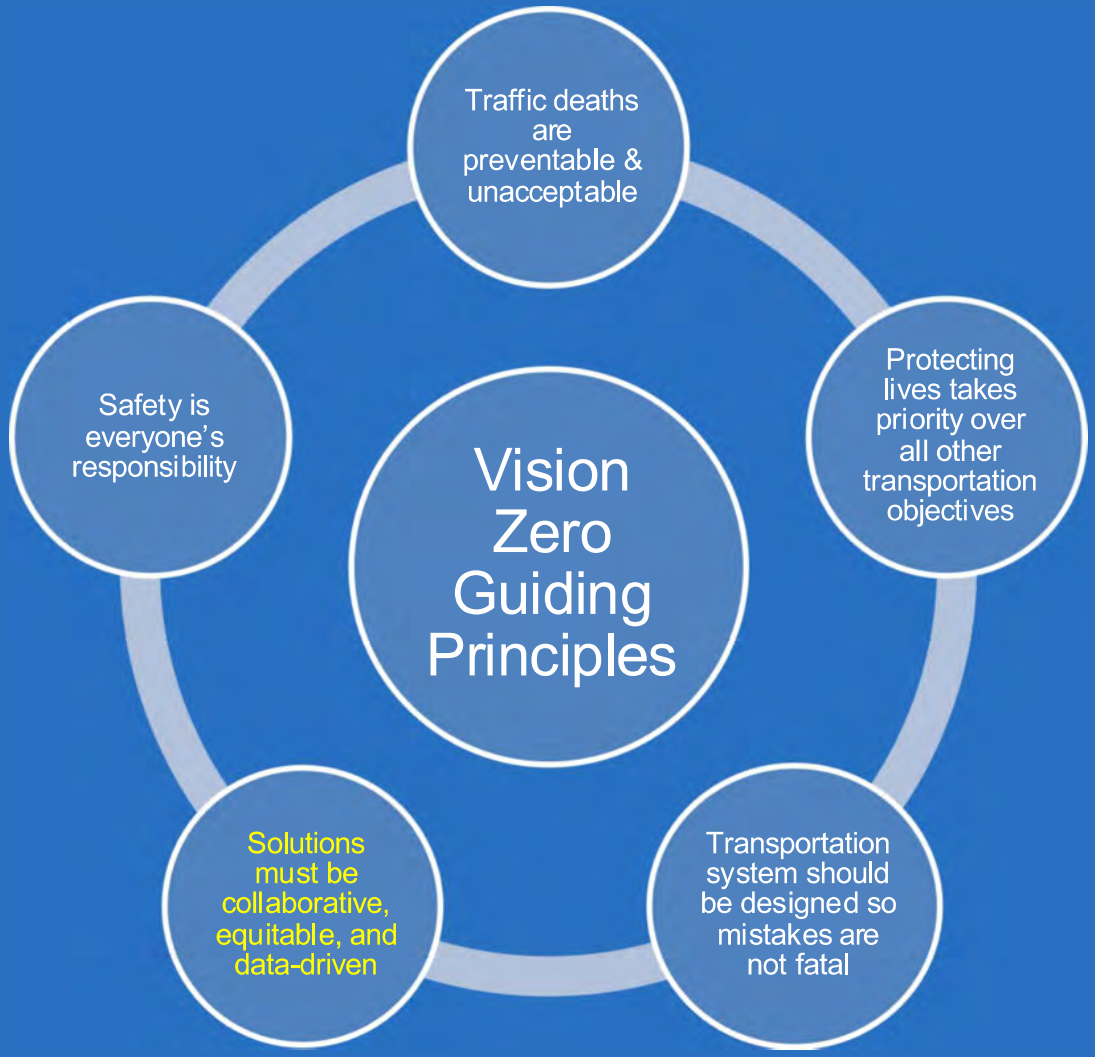

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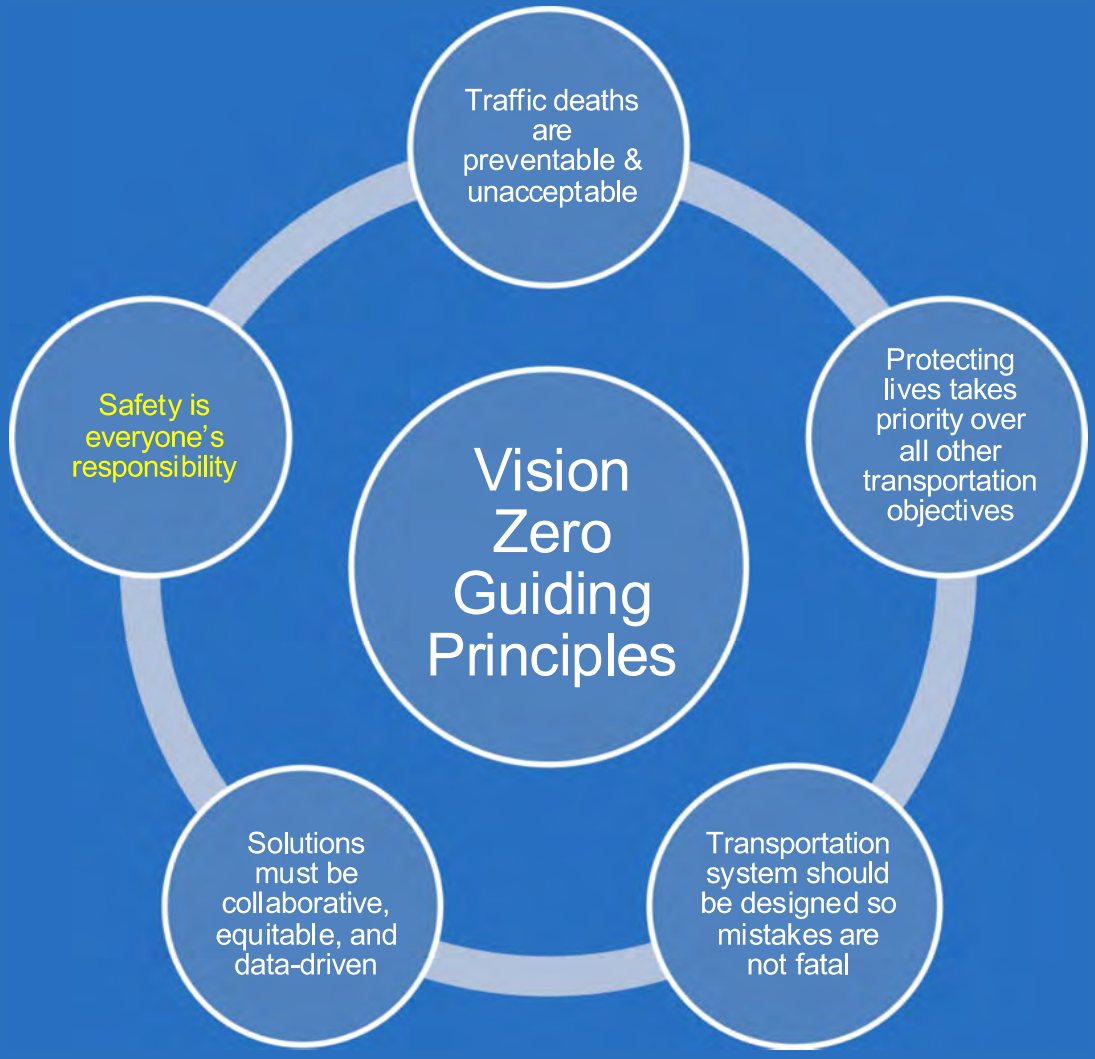


From Raleigh North Carolina Vision Zero Program

If Vision Zero – safe mobility for all – is our goal, then the Safe System approach is *how* we get there.

- Death and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

Shifts focus from speeding to speeds

U.S. Department of Transportation

Safe System Approach Web page

Traditional street design approach versus Safe System/Vision Zero

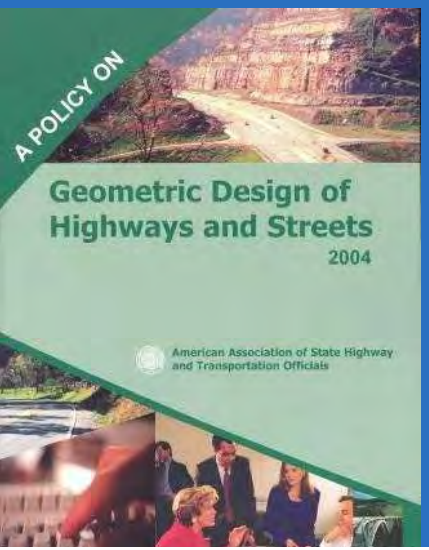
Safe Systems Approach changes how we design road

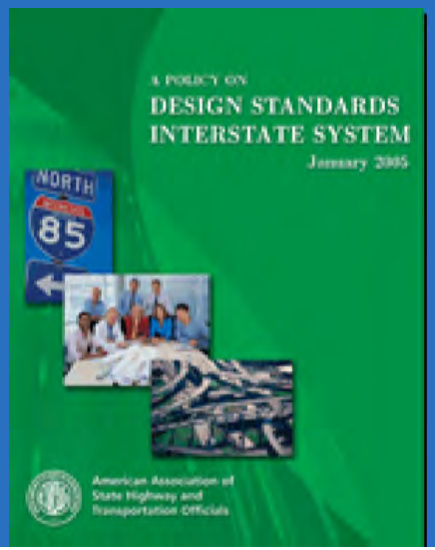
NOMINAL SAFETY

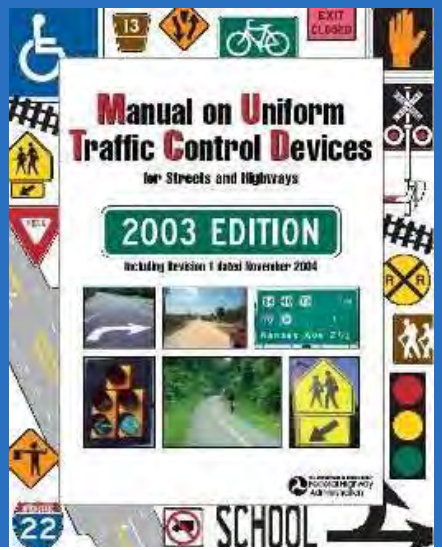
Follow the books no matter what!

SUBSTANTIVE SAFETY

Puts the engineering back into engineers

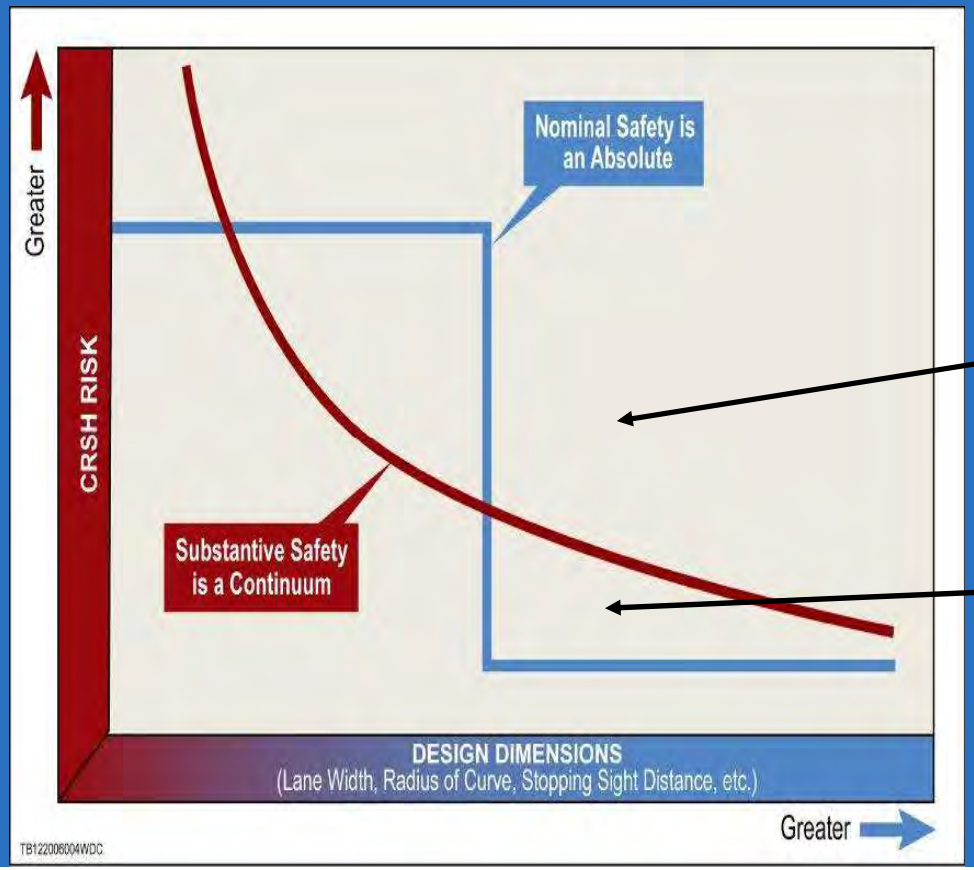







From FHWA Contextsenstivesolutions.org

Traditional Approach: "Follow the Book"
Safe Systems Approach: "Put the engineering back into street engineering"



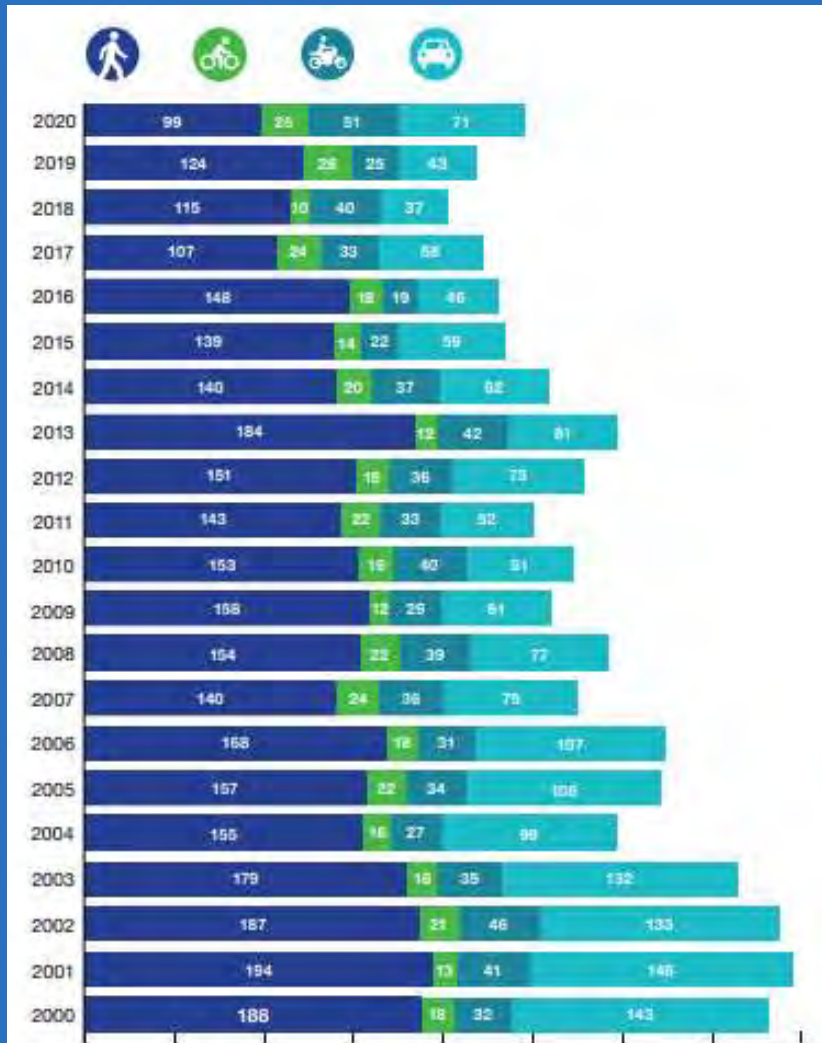
Traditional approach: The standards tell me when the road is safe

Safe System Approach: My analysis tells me when the road is safe

From FHWA Contextsenstivesolutions.org

Vision Zero works: New York City

On Queens Blvd, NYC DOT added pedestrian islands, widened crosswalks, protected bike lanes, and extended medians. As a result, the roadway on which 18 pedestrians died in 1997 saw zero pedestrian fatalities between 2014 and 2017.



Vision Zero works: New York City

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Many communities have reduced traffic deaths and severe injuries since they began implementing Vision Zero changes:

- **Orlando** reduced traffic fatalities by nearly 40 percent between 2020 and 2024.
- Hoboken has gone *eight consecutive years* without a traffic death.
- **New York City** reduced pedestrian deaths by 45 percent and overall traffic deaths by 12 percent between 2013 and 2023.
- And the "20 Is Plenty" campaign in **Madison,** Wisc. has helped cut traffic deaths citywide by more than half.
- **Austin** has reduced serious and fatal crashes by 86 percent at sites where the city invested in traffic-calmed improvements, by 15 percent on arterials where the speed limit was lowered, and by 42 percent where officials added protected intersections.

ORLANDO, FLORIDA, Edgewater Drive Lane Conversion

- 4 to 3 lane conversion, 1.6 miles
- Added bike lanes, center turn lane, wider on street parking
- **Crash rate cut in half, injuries fell 71%**
- 77 net new businesses and 560 new jobs since 2008
- Property value along Edgewater Drive has risen 80%, and 70% within a half mile

In a rare health and safety alignment, the Hawaii Department of Health, the Hawaii Public Health Institute and Blue Zones teamed together to build the most hands-on learning transportation safety initiative ever offered in North America. Special thanks to Senator Chris Lee for taking the initiative to build such a strong partnership.

BLUE ZONES®
live better, longer™

HAWAI'I PUBLIC HEALTH INSTITUTE

HAWAII STATE DEPARTMENT OF HEALTH

PDH Credit Question #1

How does the Safe System Approach differ from traditional transportation engineering, and what are the five key elements that support safer streets for all users?

Answer:

Traditional transportation engineering often prioritizes moving vehicles quickly. The Safe System Approach accepts that people make mistakes and focuses on reducing the severity of crashes. The five elements are:

- **Safer Roads**
- **Safer Speeds**
- **Safer Road Users**
- **Safer Vehicles**
- **Post-Crash Care**

Vision Zero

Safe Streets

Multi-Modal

Traffic Calming

Target Speed

WHAT ARE SAFE STREETS?

New York is considered a SAFE Streets state. The New York State Complete Streets Act was signed in 2011, requiring that state, county, and local transportation projects receiving federal or state funding consider all users—including pedestrians, bicyclists, and public transit passengers—in their design.

WHAT ARE SAFE STREETS?

Key aspects of New York's Complete Streets approach include:

- **Legislative Mandate:** The 2011 Act requires safe access for all users during the planning, design, reconstruction, and rehabilitation of roads.

- **Design Standards:** The NYSDOT incorporates 13 complete street features into design standards, such as sidewalks, bike lanes, crosswalks, and road diets.

- **Local Adoption:** In addition to the state law, numerous counties, cities, and towns in New York have adopted their own formal Complete Streets policies.

- **Continuous Updates:** New York continues to strengthen these laws, with additional legislation signed in recent years aimed at improving implementation.

WHAT IS A SAFE STREET?

What is a SAFE Street?

A SAFE Street is a roadway planned and designed to consider the safe, convenient access and mobility of all roadway users of all ages and abilities. This includes pedestrians, bicyclists, public transportation riders, freight (including farm equipment) and motorists; it includes children, the elderly, and persons with disabilities.

SAFE Street roadway design features include sidewalks, lane striping, bicycle lanes, paved shoulders suitable for use by bicyclists, signage, crosswalks, pedestrian control signals, bus pull-outs, curb cuts, raised crosswalks, ramps and traffic calming measures. (NYSDOT)

Stated Goal: The goal of the built environment policies, plans and programs is to promote natural movement, social connectedness, economic vitality, and overall well-being through transportation and land-use policies.

What Are SAFE Streets?

The New York State Complete Streets Act was signed into law on August 15, 2011 and requires state, county and local agencies to consider the convenience and mobility of all users when developing transportation projects that receive state and federal funding.

The designs on the right and left sides are different. The left side land uses are industrial. The bike lane buffers the sidewalk. The right side land uses are residential, so the sidewalk is set back, on-street parking creates a buffer. Both designs fit the context.

Vision Zero

SAFE Streets

Multi-Modal

Traffic Calming

Target Speed

Multi-Modal Communities

Complete Streets are a design approach creating safe, accessible roads for all users (pedestrians, cyclists, transit, drivers). **Multimodal** communities are the broader outcome, creating land-use and transportation systems that offer diverse, interconnected travel choices beyond private vehicles.

Complete Streets build the infrastructure; multimodal communities are the result

This intersection backup is caused by not having an adequate multimodal system of support. Only one way to travel is supported.

What Are Multimodal Communities?

Multimodal communities and multimodal transportation maximize the choice in ways to get around, places to live, equity, accommodation and affordability

Multi-Modal Transportation

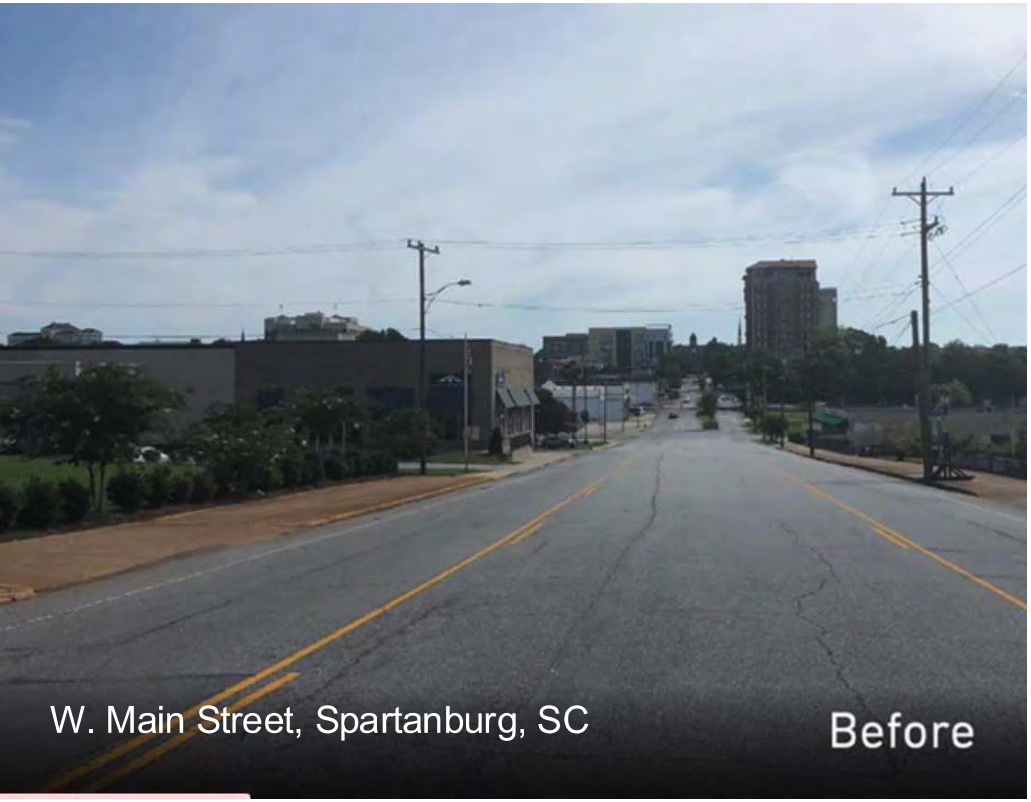
- Multimodal transportation includes walking, biking, transit, rail, cars and trucks.
- It means more connections and more choices.
- Multimodal transportation is designed to be affordable and efficient.
- Multimodal transportation opportunities provide more freedom in how people get around, especially for people who cannot or choose not to drive a car.

Level of Traffic Stress

To increase the journey from origin to destination for those walking or cycling requires links that do not exceed a person's tolerance for traffic stress.

In a 2016 study, Peter Furth, Maaza C. Mekuria and Hilary Nixon worked in San Jose, California, separating bicycling high stress streets from bicycling low stress streets. The high stress streets dropped out, leaving these neighborhood islands or fragmented pods. Note that walking and bicycling are limited to small places. Only the most confident bicyclists feel comfortable escaping these islands.

ECONOMIC LIFT



"We believe that our communities are at the core of the economic turnaround, and that 'place' is the huge economic driver.

The disheartening facts are that we continue to lose our college graduates at an alarming rate because we don't offer the kinds of places where they want to live. Almost half of them leave the state, and two thirds of those who do leave choose where to live first and then find a job. A recent internet posting reveals that nearly 40 percent of college graduates flee the state. It is time to reverse this trend, an by building to its town values, Lowell will re-anchor and grow key jobs.

It's time to say, 'enough is enough,' and focus on what really matters: creating dynamic, walkable, sustainable communities and regions where people want to live. It's time to start talking about the importance of place as the economic development strategy that will create a positive, dynamic future for Michigan."
Michigan Municipal League (MML)

The Economics of Place:

The Value of Building Communities Around People

ECONOMICS

YIELD PER ACRE

Re-direct commercial and residential growth to downtown. Incentivize the investment of lofts above main street, and all infill within two blocks of downtown.
— Joe Minicozzi, Urban3

"…The best return on investment for the public coffers comes when smart and sustainable development occurs downtown. Suburban power centers give back little to the town; and they generate massive amounts of traffic that must be dealt with."

Joe reports that Asheville, NC gets an 800 percent greater return on downtown mixed-use development on a per acre basis compared to when ground is broken near the city limits for a large single-use development like a Super Walmart.

1996

Before

2020

After

Applying walkability principles, strategies and approach helps communities transition from places designed for the car to those centered on people and place. The road rebuild came first. **Land value appreciated 800%.**

University Place, Washington


CROSSWALK


KINETIC
NO PARKING
THURSDAYS
END

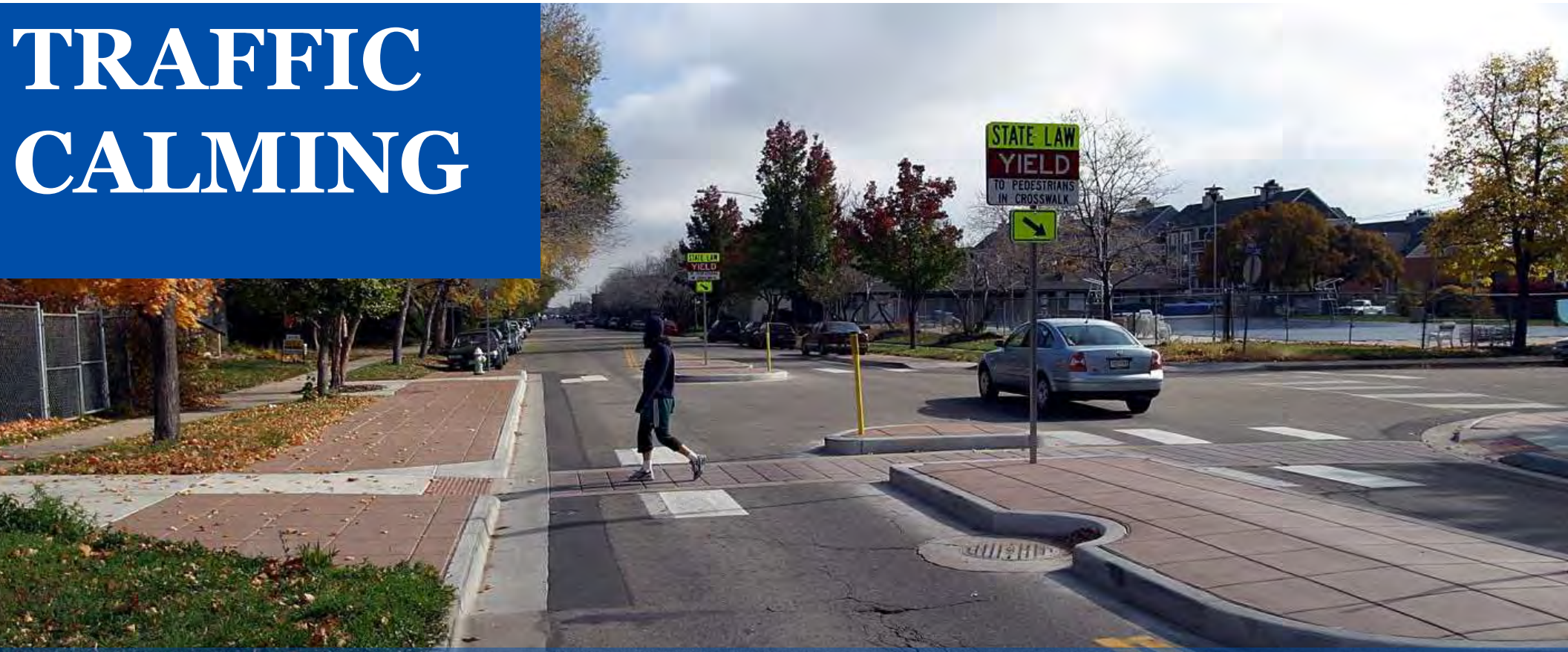
PDH Credit Question #2

Name five benefits of designing streets for people first, including impacts on public health, local business activity, safety, mobility, and community life.

Answer:

- **Improved physical, social, and mental health**
- **Fewer and less severe traffic injuries and fatalities**
- **Stronger local businesses and economic activity**
- **More transportation choices for all ages and abilities**
- **Greater social connection and community pride**

TRAFFIC CALMING



Traffic Calming supports the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. (FHWA)

Vision Zero
SAFE Streets
Multi-Modal
Traffic Calming
Target Speed

How Does Traffic Calming Work?

- Design local streets that respect their context and encourage safety, livability and choice in transportation.
- Street types that benefit most from traffic calming treatments are residential streets with housing, neighborhood collector streets that connect residential to commercial areas, and low traffic volume arterial streets with destinations that encourage pedestrian movement.
- Traffic calming addresses the desire to keep speeds low and uses design features that work in tandem. The image at right includes curb extensions, a mini-circle, ground cover and trees to slow traffic and establish place.

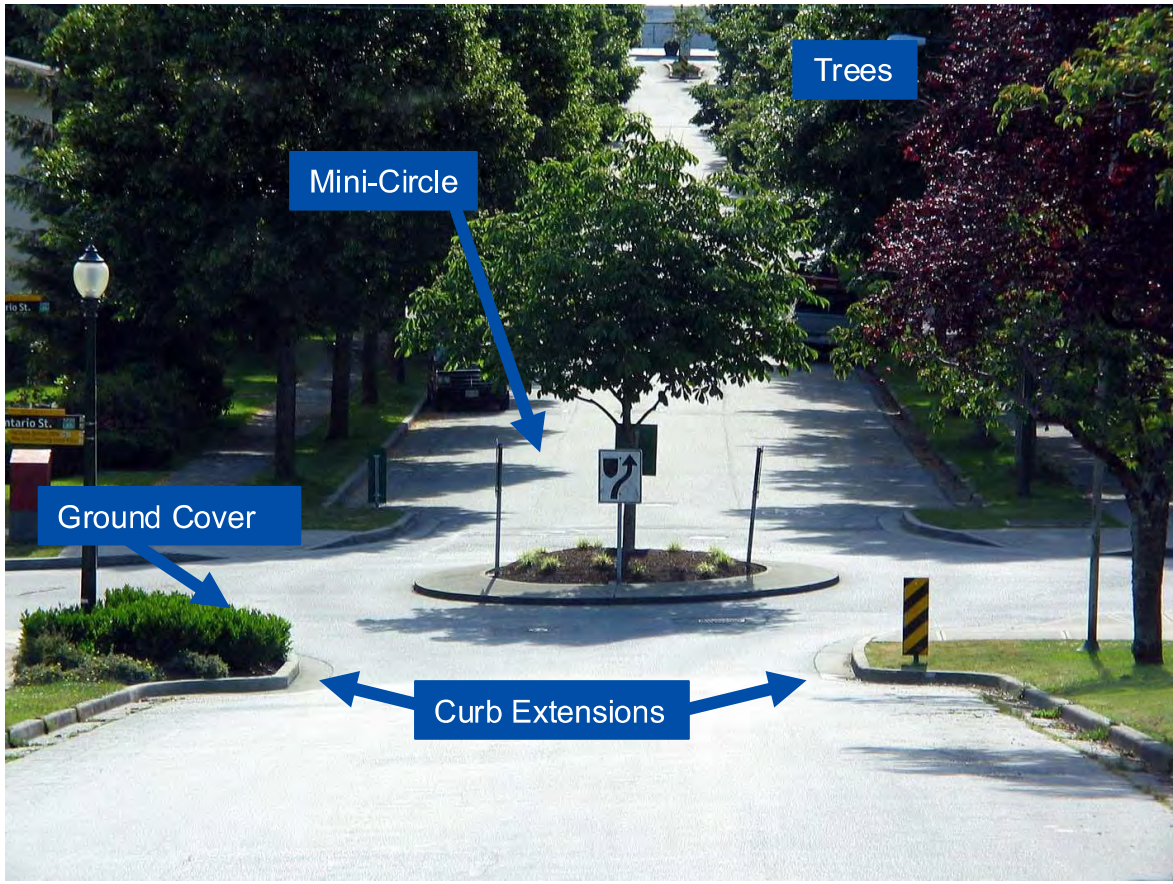
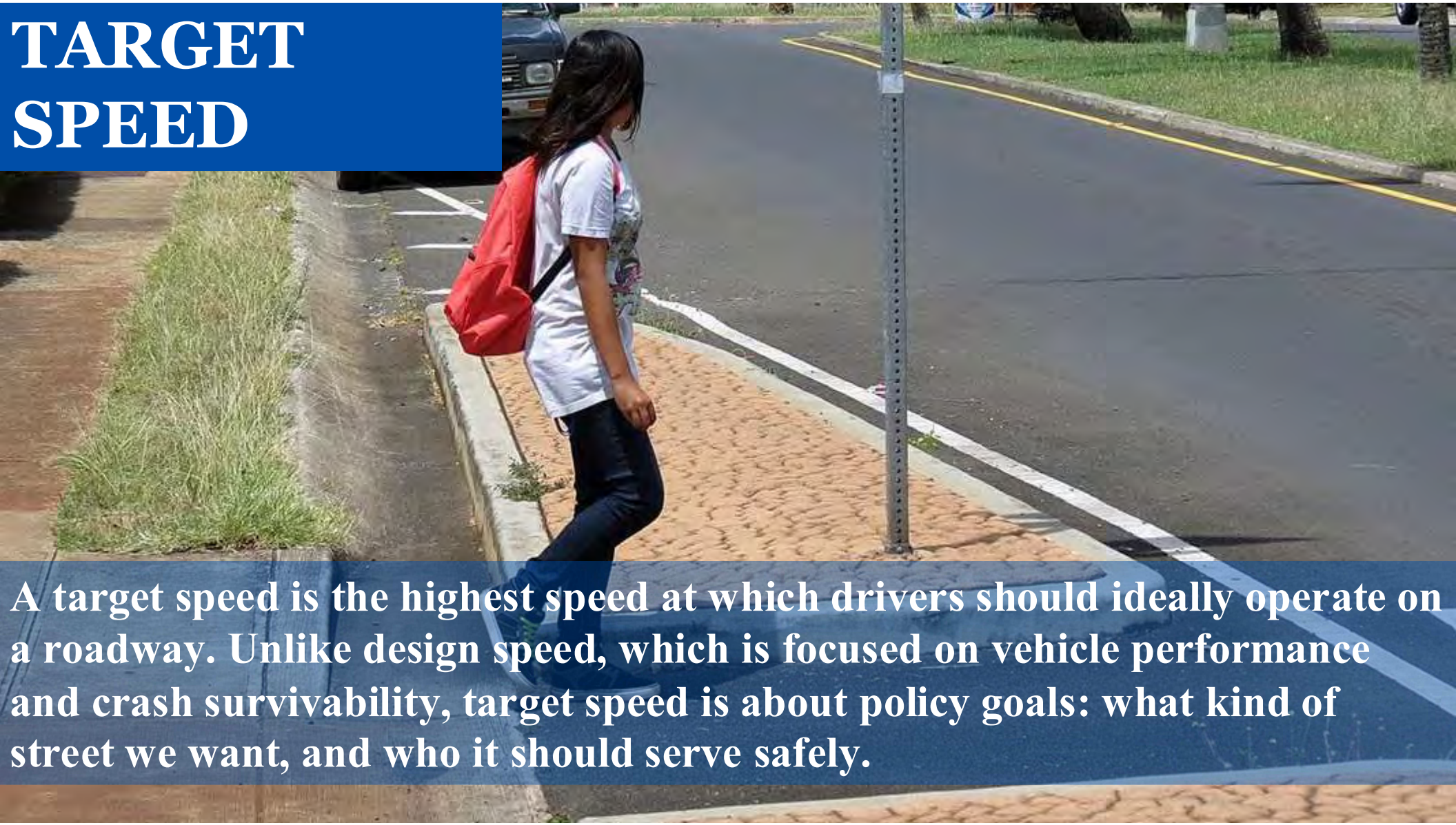


Image: Vancouver British Columbia


JERVIS

Vision Zero
SAFE Streets
Multi-Modal
Traffic Calming
Target Speed

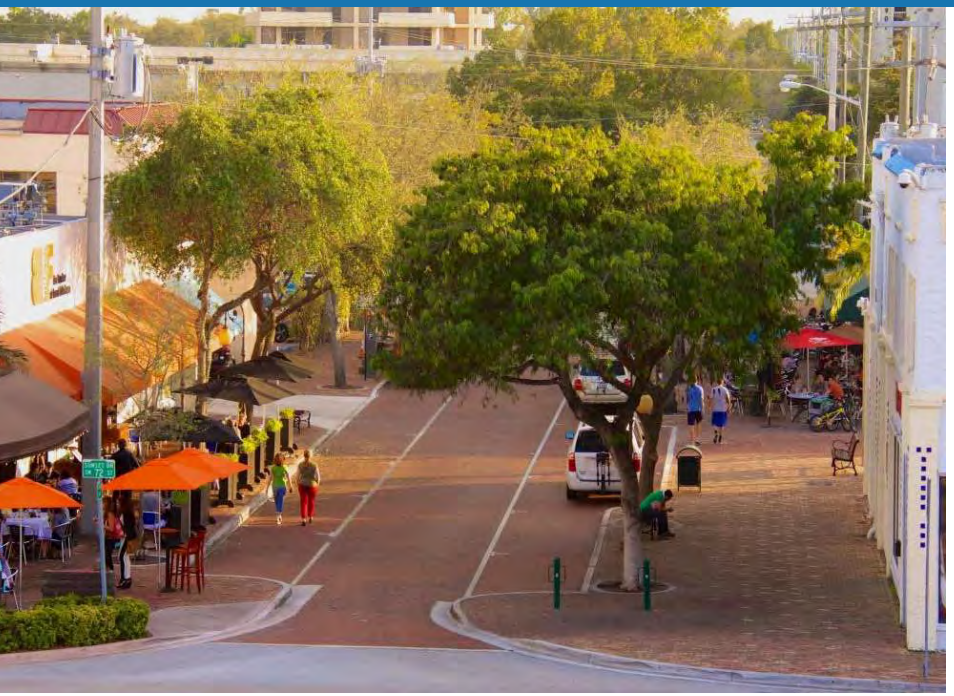
TARGET SPEED



A target speed is the highest speed at which drivers should ideally operate on a roadway. Unlike design speed, which is focused on vehicle performance and crash survivability, target speed is about policy goals: what kind of street we want, and who it should serve safely.

Pedestrians are over-powered and often overlooked. Throughout the region autos have exerted their needs, often dominating transportation funding and creating unsafe condition. Due to overly high speeds, many people feel comfortable or at high-risk when walking or bicycling.

WALKABLE



NOT WALKABLE

WHY THIS COURSE?

What are the key differences in these two scenes? What makes one street more desirable for walking, shopping, living and building economic, community and personal health?

DESIGN FOR PEOPLE AND PLACE

Durango, CO

WHAT IS MISSING?

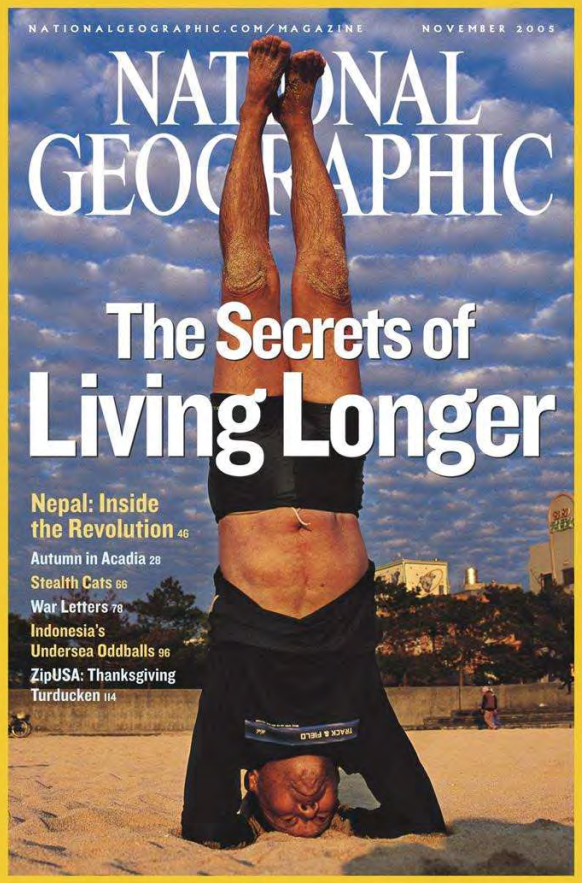
Imagine a person stopping here to photograph if the parking lot was out in front.

Apply a mix of land use elements to achieve a car-lite, people-connected lifestyle. This neighborhood works well for people of all abilities.

TRANSPARENCY AND SECURITY

HEALTH AND

HEALTHY STREETS

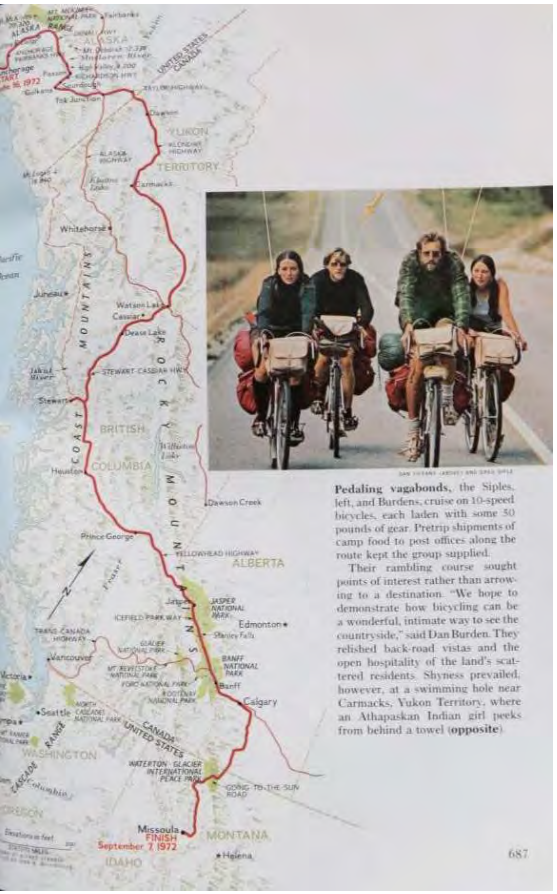


DAN BUETTNER, A MIAMI BEACH RESIDENT, IS A NATIONAL GEOGRAPHIC FELLOW. HE HAS 5 HEALTH RELATED COVER STORIES WITH NATIONAL GEOGRAPHIC, AND HE IS WORKING ON HIS 6th

DAN HAS HIS OWNB NETWORKS SERIES, WITH MORE ON THE WAY.

DAN ALSO HOLDS 4 GUINNESS WORLD RECORDS IN LONG DISTANCE ADVENTURE CYCLING

GUINNESS WORLD RECORDS™



Streets make up 30-50% of public open spaces. If streets are poorly designed only to move vehicular traffic, they fail Orchard Park's broader social and economic needs.

Oddly enough, even the ad agencies focusing on auto-focused drive thrus make it appear that your real desire, to bump into people, can happen in the comfort of your car.

These marketing folks are wrong; it takes real buildings and streets, properly designed and placed, to create real, lasting and meaningful exchange.

Our Purpose

To empower everyone, everywhere to live better, longer.

Why Walkability Matters

What is the first thing an infant wants to do and the last thing an older person wants to give up?

Walking is the exercise that does not need a gym. It is the prescription without medicine, the weight control without diet, and the cosmetic that cannot be found at a chemist. It is the tranquilizer without a pill, the therapy without a psychoanalyst, and the holiday that does not cost a penny.

Streets Impact Our Elders

Small features often make the most difference for livability. High curbs, poor drainage, dog fouling and broken sidewalks are cited as physical hazards that keep elders from venturing out.

Image Left: Moiliili Neighborhood

In contrast, shade trees, benches, and sit-walls are highly valued micro features that enable elders to enjoy neighborhood walks and easily run errands on foot. Well-designed crossings (former 5-lane road) remove barriers, rather than create them.

Image Right: College Street, Asheville, North Carolina

We Shape Our Towns and Cities and They Shape Us

- Auto-centric street and land-use practices (sprawl) have led to many unintended and negative effects on both individual and community health, economic vitality, social connectedness, affordable lifestyles and overall well-being.

- Community infrastructures like trails, streets, sidewalks, bike lanes, parks and other public spaces affect our ability to move naturally, connect socially and perform activities of daily living.

What Designing for People Looks like

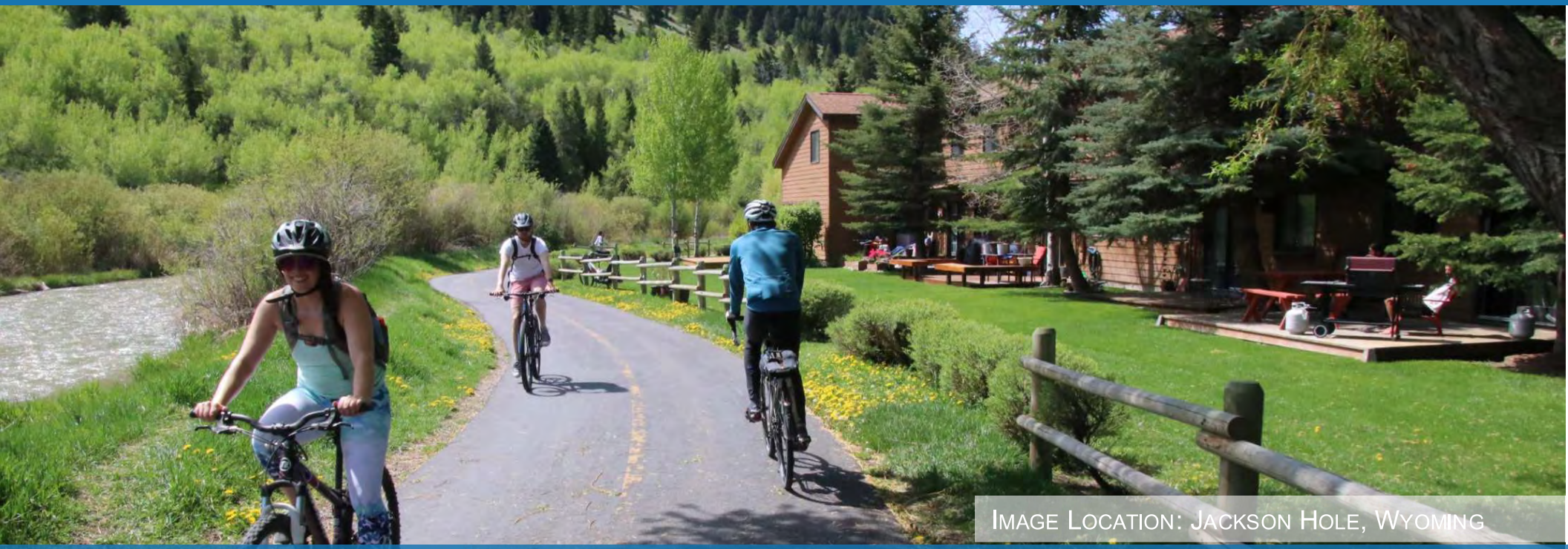
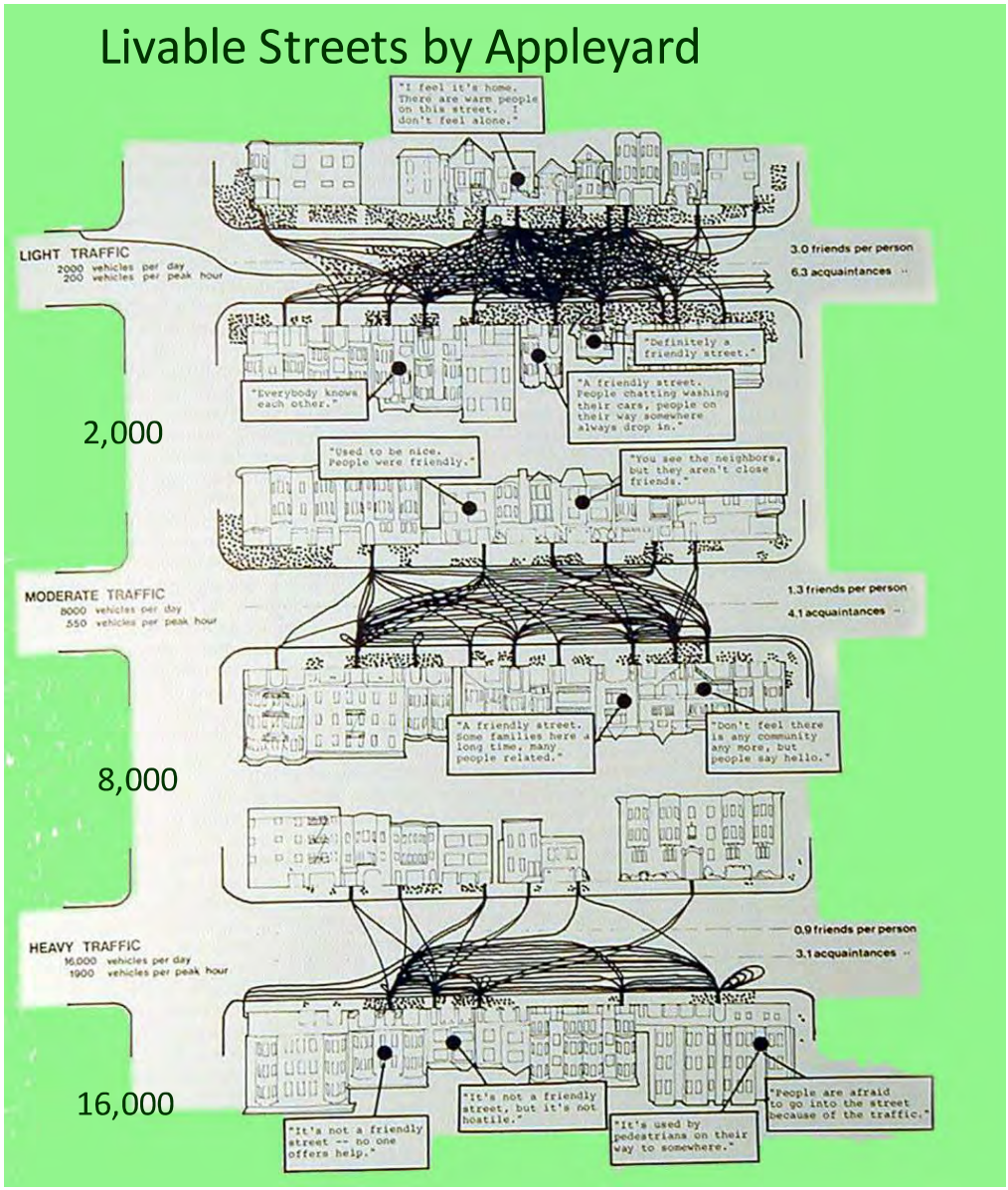


Image Location: Jackson Hole, Wyoming

20%	20%	50%	10%
GENETICS	ENVIRONMENT	HEALTHY BEHAVIORS	ACCESS TO CARE

Health Focus


Garant



Low traffic, many associations on each side:
3.0 friends
6.3 acquaintances

Moderate traffic, reduced use of public space:
1.3 friends
4.1 acquaintances

Heavy traffic few associations.
Few friends across street:
.09 friends
3.1 acquaintances

The Benefits of Designing Streets for People

- Increases physical activity rates
- Reduces obesity
- Encourages social connectedness
- Catalyzes small business development
- Increases property values
- Improves access and safety for all
- Encourages social equity
- Advances resiliency and sustainability
- Reduces pollution and run-off
- Provides safe routes to school
- Makes the healthy choice the easy choice

PDH Credit Question #3

What is one core principle of designing walkable towns and villages, and why does it matter for long-term community health, safety, and economic vitality?

Answer:

Walking should be the easiest, most natural option for travel. By designing places where daily needs can be reached safely, conveniently, and comfortably on foot, more people will walk. Walkable communities support physical activity, reduce crashes for everyone, strengthen local businesses, increase social connections, and improve overall quality of life.

STREET TYPES

ARTERIALS

WHY CHOOSE AN ARTERIAL?

- GREATEST REDUCTION IN CRASHES
- NEED FOR ALL MODES TO WORK
- GREATEST LAND VALUE INCREASE
- COMMUNITY AND FUNDING PRIORITY

Medians & Greening

Image Left: Boulder, Colorado
Image Right: Lake Oswego, Oregon

Use Native, Low Growth Plants and Keep Ground Cover to 2’

Keep Large Calliper Trees Back 15 - 150’ and Under-Trim Trees to 7’

Add Color to the Nose and Use Nightime Feature Lighting

COLLECTORS

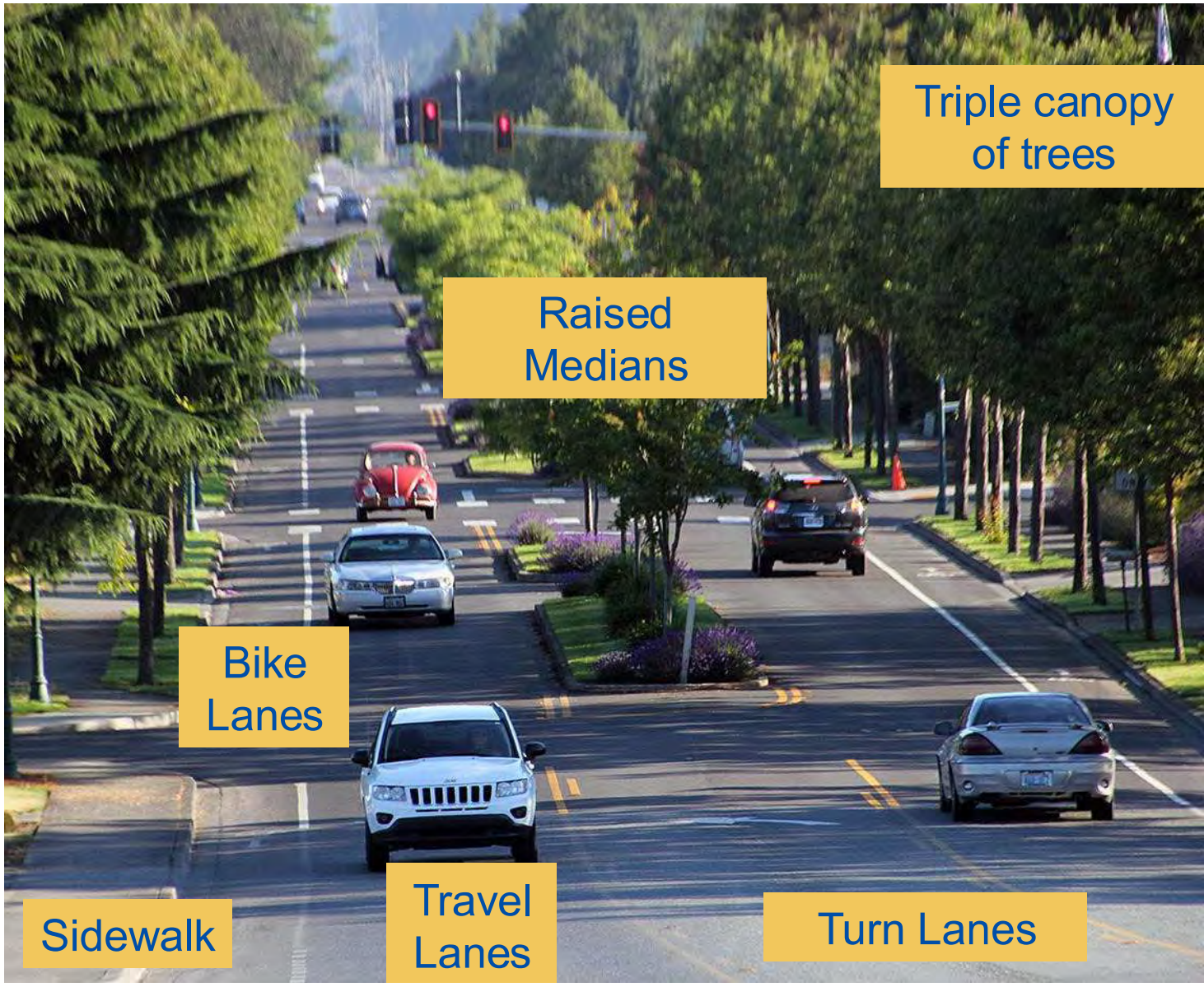
COLLECTORS

Park and University Avenues

Street Parts

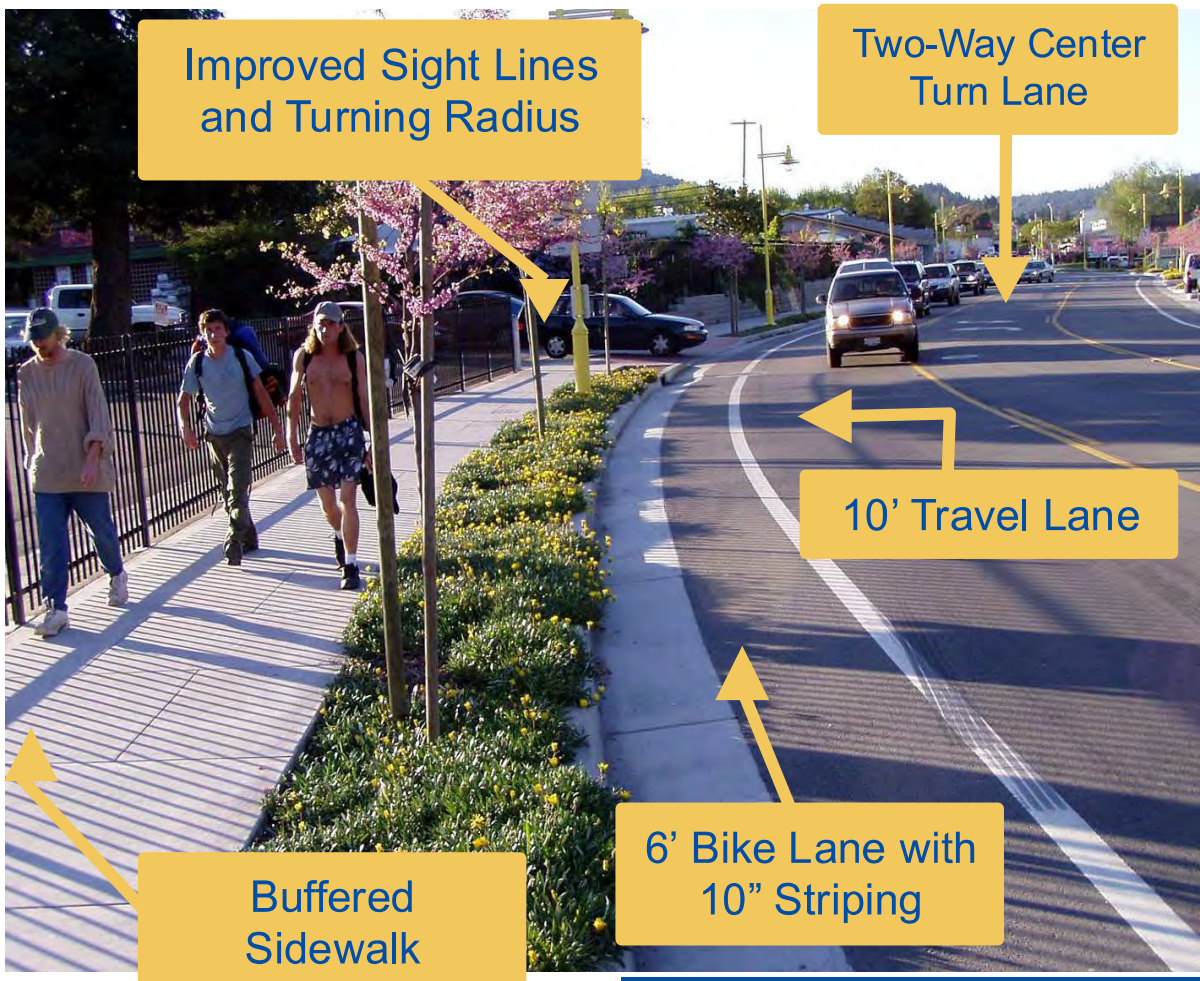
The functions of a street are spelled out in its various parts. This street has two high quality walkways - one on each side. Note the attached and detached sidewalks. Which is more comfortable for pedestrians? The travel lanes shown here are 10 feet wide, the bike lanes are six feet wide.

Sequim, Washington



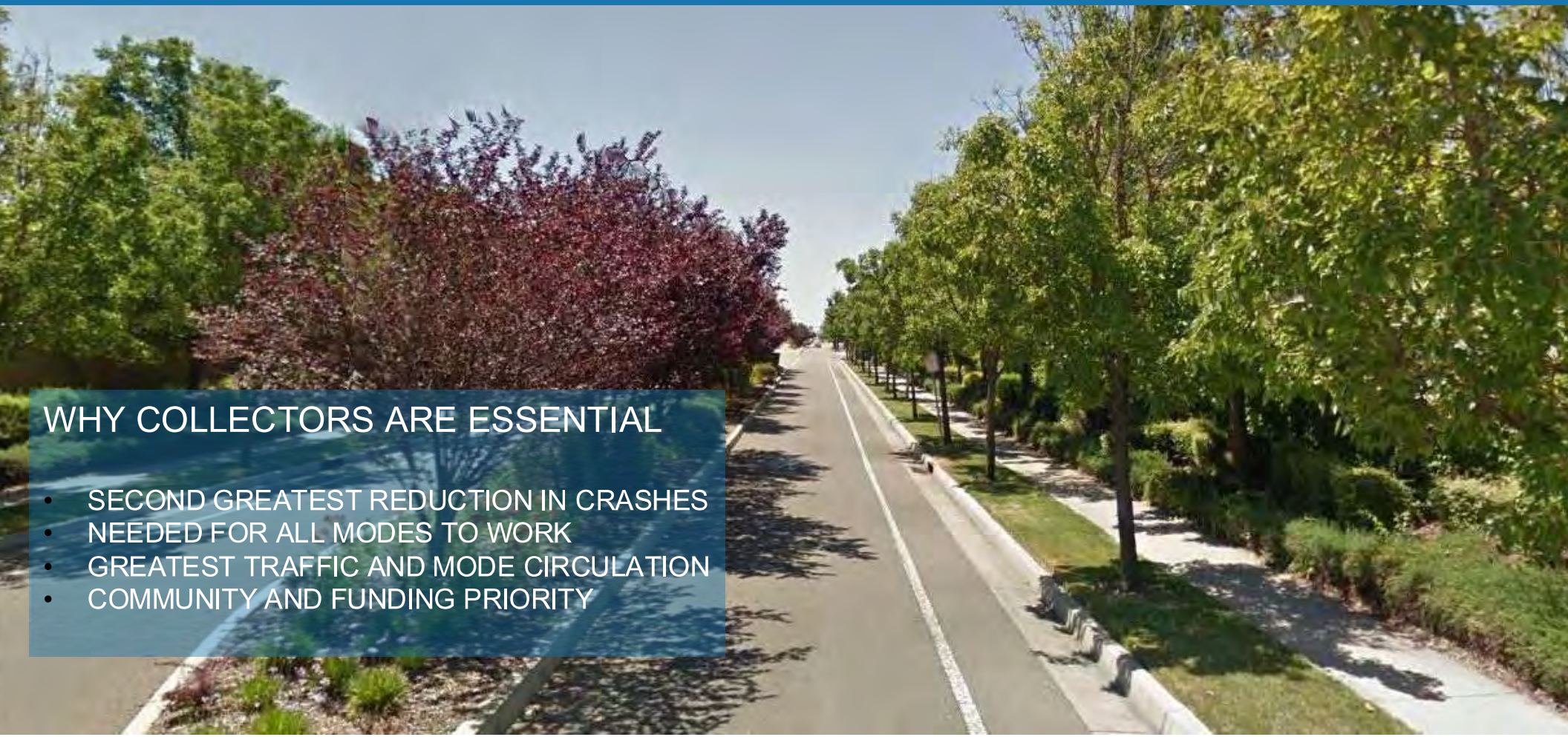
SAFEST COLLECTOR

- This former 4-lane road transformed into a 2-lane road, plus a center turn lane with bike lanes.
- The bike lanes create an added buffer to the sidewalk, allow a greater turning radius, and opening up sight lines.
- Motorists benefit from less speeding and an overall crash reduction of 19-78%.
- Crossing islands can be added, providing pedestrian refuge.



Santa Cruz, California

COLLECTORS



WHY COLLECTORS ARE ESSENTIAL

- SECOND GREATEST REDUCTION IN CRASHES
- NEEDED FOR ALL MODES TO WORK
- GREATEST TRAFFIC AND MODE CIRCULATION
- COMMUNITY AND FUNDING PRIORITY

MAIN STREETS

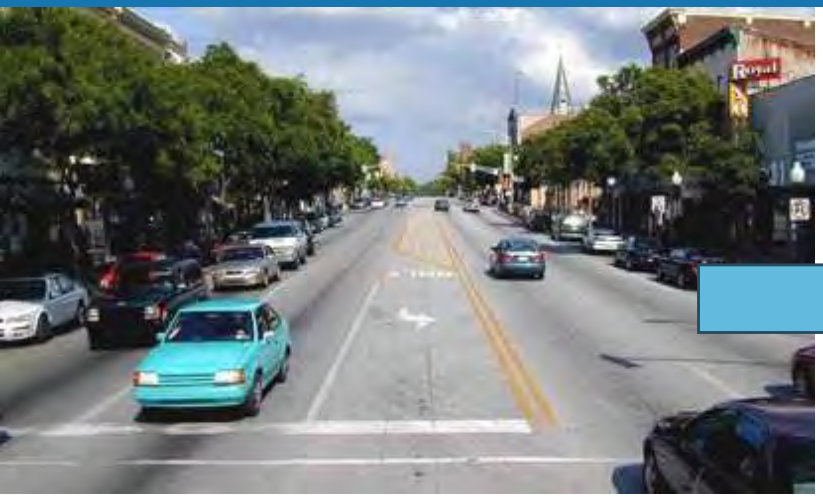
MAIN STREETS ARE THE DESTINATION,
THEY PROVIDE COMMUNITY IDENTITY,
THEY ARE THE STOREHOUSE OF MEMORIES
THEY PROVIDE THE GREATEST LOCATION FOR YIELD PER ACRE

East Aurora, NY

WEST LANCASTER BLVD, LANCASTER, CA LANE CONVERSION

- 9 blocks of West Lancaster Boulevard: 4 TO 2 lanes
- Tree-lined median
- Widen sidewalks/landscaping
- $11.6 million public investment
- $125 million in private investment
- More than $273 million in total economic output, including 48 businesses and 1,902 new jobs
- In 2012, sales tax revenue was 96 percent greater than 2007
- Collisions fell by nearly 1/3
- Injuries by 2/3

MAIN STREETS



Pottstown PA

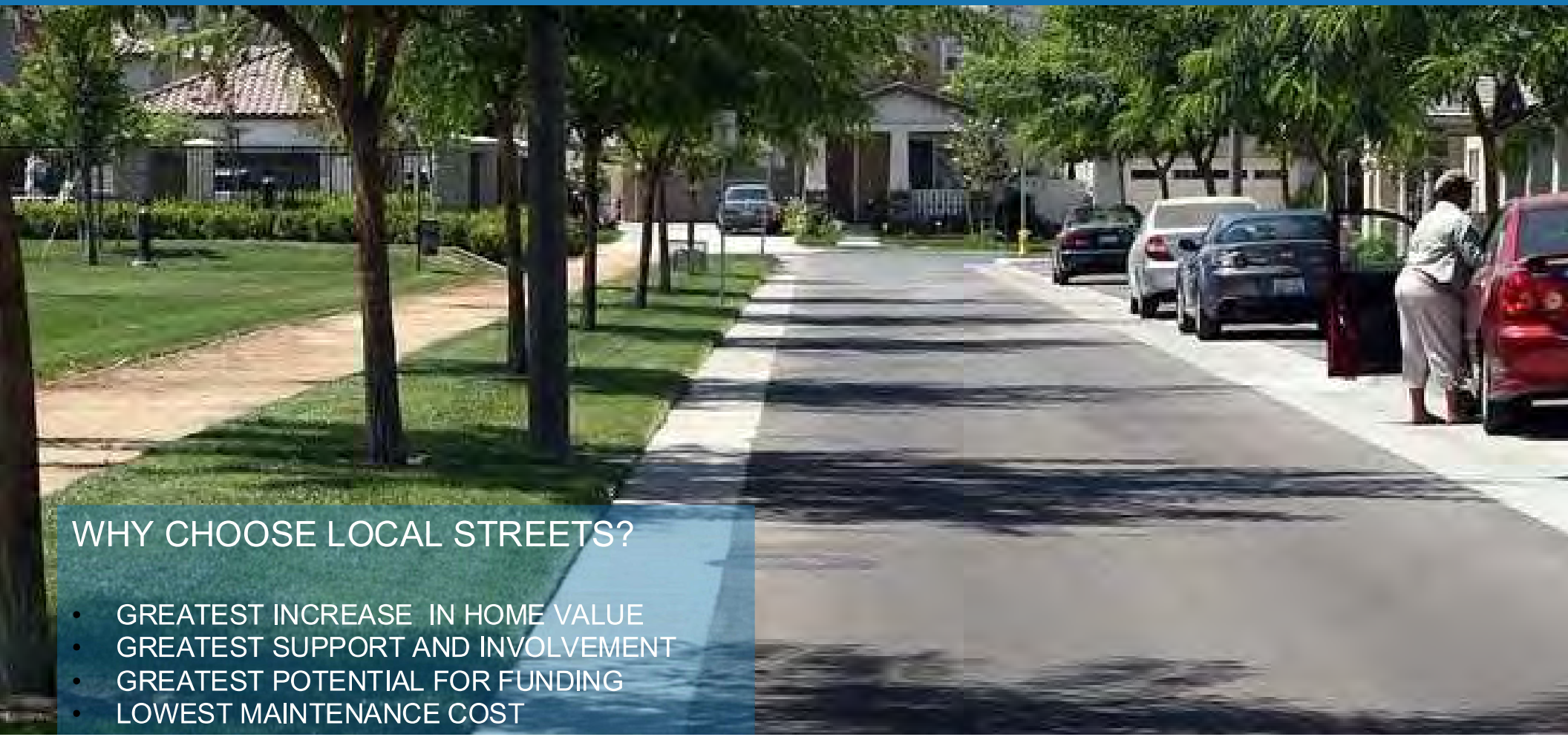
The Parts of a 15 mph Street

SAFE ROUTES TO SCHOOLS AND PARKS

SAFE ROUTES TO SCHOOLS AND PARKS

BOULDER, CO

LOCAL STREETS



WHY CHOOSE LOCAL STREETS?

- GREATEST INCREASE IN HOME VALUE
- GREATEST SUPPORT AND INVOLVEMENT
- GREATEST POTENTIAL FOR FUNDING
- LOWEST MAINTENANCE COST

ADOPT A 20 MPH IS PLENTY Policy

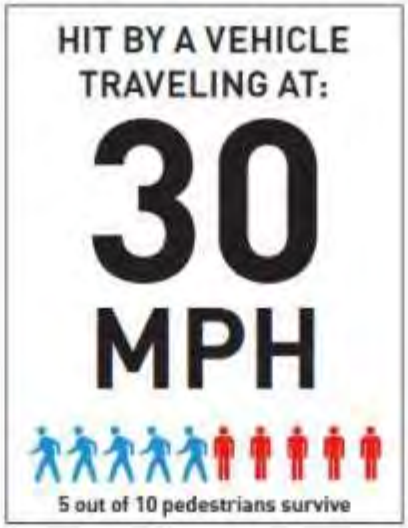
Port Townsend, WA, keeps speeds low by sharing spaces (Yield Street)

RURAL ROADS

RURAL ROADS

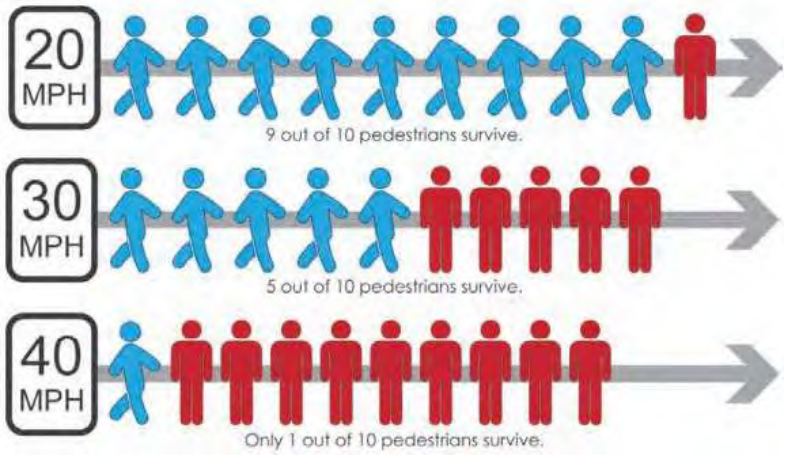
TARGET SPEED

USE 15-20 MPH TARGET SPEEDS IN DOWNTOWNS AND NEIGHBORHOODS



Higher speeds increase the likelihood and severity of crashes while lower speeds improve safety and comfort for everyone, especially people walking and cycling. Survival for pedestrians and bicyclists is directly tied to vehicular speed. Why would we want motorists to put themselves and others in danger when we know the impacts of inducing higher speeds through outdated design practices?

Prevent exposure to large crash forces



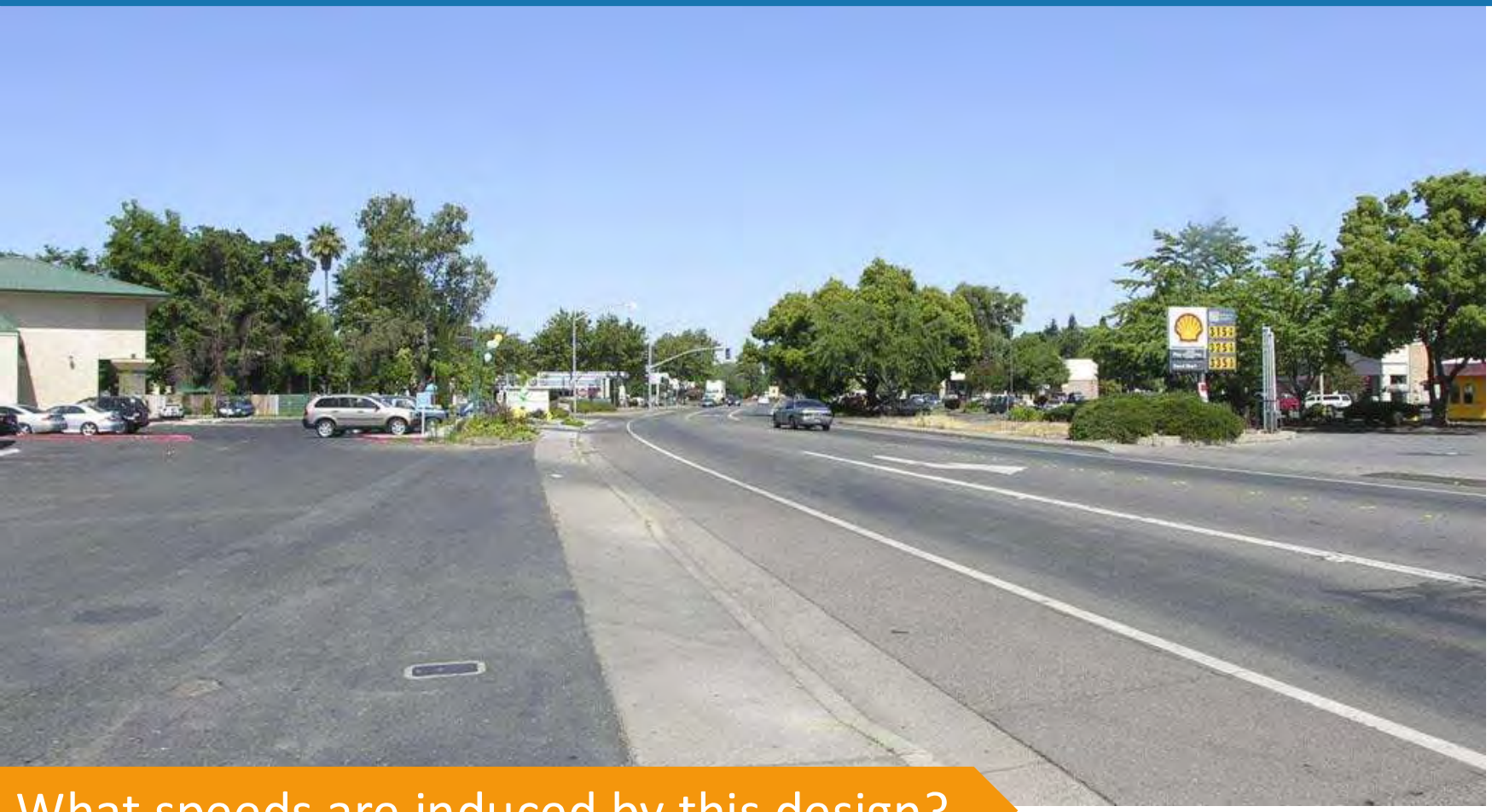
Source: Target Zero 2019

Target Speed

Wider lane widths, and more lanes than needed not only add to urban heat gain, exacerbate drainage issues and costs, they contribute to speeding and crashes.
Once the safe and appropriate Target Speed is set, lane widths can help achieve safe speeds.

TARGET SPEED is the operating speed that the designer intends for drivers to use.

What is the Target Speed of This Street?



What speeds are induced by this design?

Image Location:
Nord Avenue
Chico,
California

What is the Target Speed of This Street?

What speeds are induced by this design?

What is the Target Speed of This Street?

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What speeds are induced by this design?

What is the Target Speed of This Street?

The Parts of the Street

Narrow Lanes and Safety

"Narrow travel lanes, which benefit walkable cities because they provide more room for pedestrians, bicyclists, and landscaping, also do not contribute to automobile crashes.

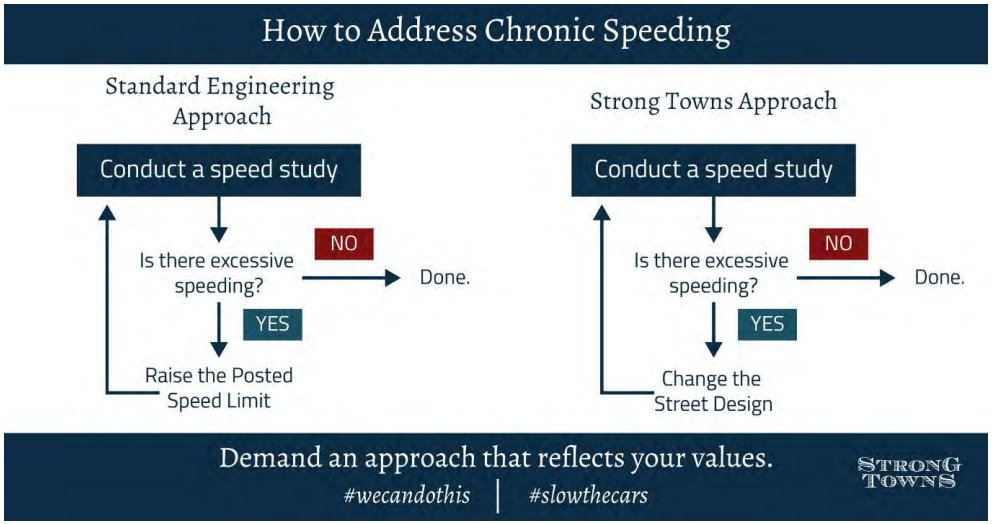
"We found that the number of crashes does not significantly change in streets with a lane width of 9 feet compared to streets with lane widths of 10 feet or 11 feet, after controlling for cross-sectional and street design confounding factors such as posted speed limit, traffic volume, on-street parking, median type, number of lanes, bus stops, and similar sense of visual motions, most likely because the difference in lane width is not noticeable to drivers."

Johns Hopkins Bloomberg School of Public Health."

20 mph is Plenty (Schools, parks, downtowns, local streets)

Engineers have over-designed urban streets for speed for decades. European, Canadian, Australian and now American cities are saying *20 mph is Plenty for downtowns and most for all local streets*. Designing and posting downtown and neighborhood streets for lower speeds can be a community policy. Shown here, Portland, Oregon has achieved 19 mph speeds throughout their downtown through a series of measures, especially by setting a 19-mph progression speed for their signals.

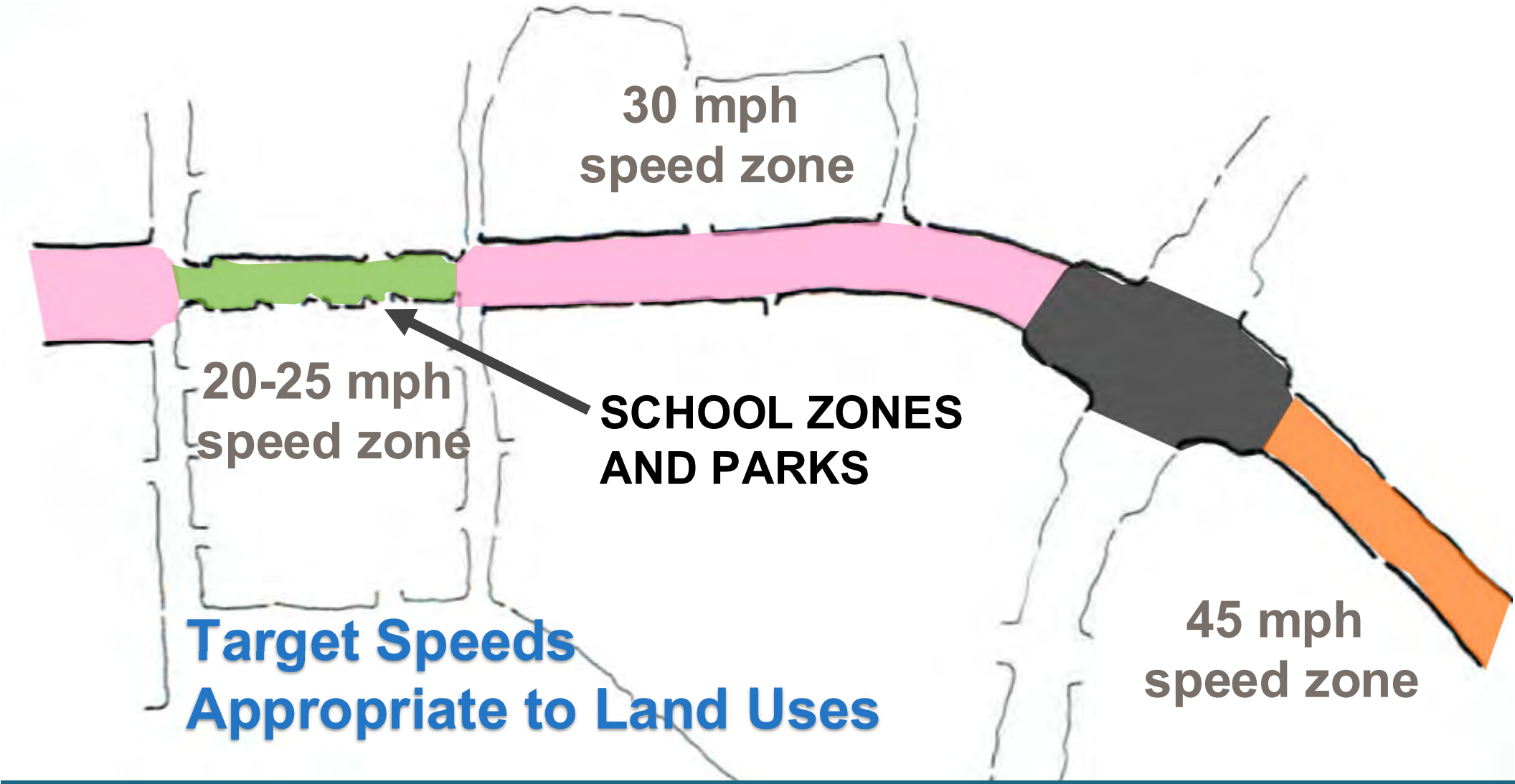
The 85th Percentile



The 85th Percentile idea, based on the 1964 "Solomon Curve," says speed limits should be set at what 85 percent of drivers think is healthy.

It was created back when the highway system was still young, cars didn't approach speeds as quickly as they do today, and we didn't have the sort of statistics and research on traffic dangers we do today.

"Revise traditional speed-setting standards to balance 85 percentile approaches with safe systems approach that better incorporates crash history, safety of pedestrians, bicyclists."



Target Speeds Appropriate to Land Uses

TARGET SPEEDS SHOULD BE SET BASED ON THE ADJACENT LAND USES

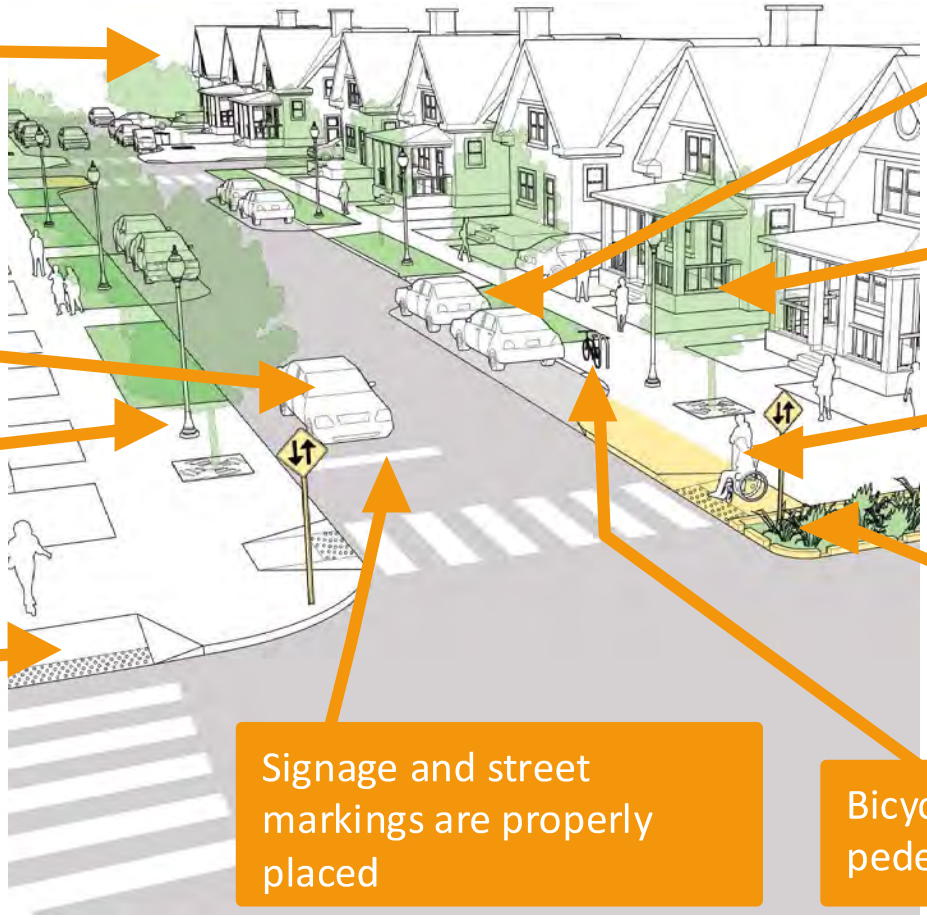
Designing for Appropriate Speed in Residential Areas

Buildings watch over the street

Narrow 10’ travel lanes reduce speeding and improve yielding behaviors

Pedestrian scaled street lighting is used

Curb extensions reduce crossing distances for pedestrians and reduce the turning speeds of vehicles, improving safety



On-street parking creates a buffer to the sidewalk

Street trees define the edge

Curb extensions and ramps advance accessibility

Rain gardens filter water and reduce run-off

Signage and street markings are properly placed

Bicycle parking keeps the pedestrian zone clutter-free

Image Source: National Association of City Transportation Officials (NACTO)

"Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users."

Institute of Traffic Engineers

Traffic Calming is a self-enforcing traffic management approach that forces motorists to alter their speed or direction of travel. Decreasing the speed and possibly volume of motor vehicles, contributes to the goals of Vision Zero and Complete Streets.

PDH Credit Question #4

Why does vehicle speed matter so significantly in pedestrian safety outcomes, and how do survival rates change at 20 mph, 30 mph, and 40 mph?
Answer: Higher speeds exponentially increase the risk of serious injury or death for pedestrians.

Answer:

Higher speeds exponentially increase the risk of serious injury or death for pedestrians.

A person hit at:

- 20 mph has a high chance of survival
- 30 mph faces a much greater risk of severe injury or death
- 40 mph is unlikely to survive

Even small reductions in speed save lives.