

THE SECRET TO THRIVING COMMUNITIES

L C I M O B I L I T Y R E P O R T



The Surprising Connection Between
Fixing Traffic & Unlocking Housing
and how that builds Communities

BY LINDSAY STURMAN & SULLIVAN ISRAEL

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Who We Are

The Livable Communities Initiative (LCI) is a non-profit dedicated to research, education and advocacy for 15-minute neighborhoods. We are made up of a broad group of urbanists, architects, advocates and experts in housing and mobility who want to reimagine the Los Angeles region to address region with walkable neighborhoods where people can bike to jobs, errands, and school and transit is so reliable that living without a car is a broadly appealing option. The core vision for the LCI is Gentle Density of 3-5 stories of housing over small retail along our existing walkable streets near job centers and transit – while transforming the street for livability.

This Mobility Report is based on four years of research, interviews, and evaluation alongside research from hundreds of global experts, as well as community engagement with over 5,000 local stakeholders.

It lays out why our mobility is failing us and how to fix it, and why it's so important to housing, traffic, climate and quality of life.



The Authors

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Contributors

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Faiza Meah has a BA in Human Biology & Society and was an LCI Intern assisting with research, proofreading, and sourcing this report.

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Introduction

Why Mobility Matters

Los Angeles is at a crossroads. Traffic is increasing, and our current car-centric transportation system is reaching its physical and functional limits. Engineers have studied the math, and there is no way to add more cars -- more lanes actually slows traffic. If we want to prevent gridlock, meet climate goals, address air quality, and improve quality of life, we must make alternatives to driving a viable and inviting option for far more people. But mobility is even bigger: traffic and parking issues create cascading series of problems that can be directly linked to LA and CA's housing crisis. The good news is: solving mobility can create a path to solving housing.

This report focuses on how to scale up the three categories of non-car modes of travel: walking, biking/micro-mobility, and transit, which today in LA only make up 10% of trips. Each mode has distinct and unique challenges, but there is a common truth across all of them: the **quality** of the design determines the usage. When it's not high quality, people don't use it. People won't bike in high-speed car traffic, won't walk along loud, dangerous, busy roads, and won't wait for buses that feel like they may never come.

Nearly half of all trips in LA are under three miles—distances that could be covered by walking, biking, or transit. Yet, 90% of trips are still taken by car. The data shows that this disconnect is not about personal preference; it's about badly designed alternatives.

In this report, we examine how high-functioning cities around the world—particularly Dutch cities—have shifted away from car congestion to walkable, bikeable, transit-rich neighborhoods, by developing not just the necessary infrastructure, but by ensuring the quality of non-car modes of travel. We turn this lens on Los Angeles, identifying critical failure points in our own infrastructure and policy landscape, and offering clear, research-backed, simple, and inexpensive strategies to overcome them.



Mobility Changes Everything (Especially for Housing)

Access to a range of mobility options plays a **critical role in cost of living, quality of life, and housing that is high quality and affordable**. When we plan cities around cars, housing gets more expensive. On-site parking raises rents and the cost of construction, while also limiting architectural options and often distorting buildings to accommodate parking spaces that can take up more room than the units. Large bulky buildings and the traffic they bring are often vehemently opposed by neighbors, creating an adversarial public engagement process that further raises costs. Cities have responded with long delays, red tape, and lack of transparency. In Los Angeles, this combination has rendered most potential projects infeasible, paralyzing the production of housing, and creating a housing shortage in the region. Meanwhile, as the job market and demand to live in LA has continued to grow, rents for existing units have risen significantly, severely impacting cost of living, which polls show is the number one issue for voters.

Historically, to address the housing-jobs imbalance, the LA region continued to expand into the hinterlands, building housing further and further from job centers. This pattern of growth led to large freeways to be built and expanded to accommodate the growing demand from commuters. Today, LA experiences some of the worst traffic in the country and over 150,000 people are considered “super-commuters” -- workers who spend at least 3 hours per day commuting to and from work.

15-minute neighborhoods offer a way to reverse this trend by tackling mobility and land use together. This neighborhood typology makes it possible for residents to meet their daily and weekly needs—like groceries, schools, and errands—within a 15-minute walk, bike ride, or transit trip. Improving streets to support safe, efficient non-car travel and updating zoning to allow more housing near job centers and along commercial corridors are key to making this vision a reality.

In doing so, 15-minute neighborhoods also strengthen walkable retail, spur economic growth, and boost health and happiness. Ultimately, they unlock vibrant streets, neighborhood livability, and freedom from the financial and environmental costs of car dependency.

Fixing mobility in LA isn’t a fringe issue. It’s fundamental to a livable, high quality city.¹





Myths and Facts: Facts Lead to Better Mobility

There are assumptions about traffic and transportation that consistently lead us to the wrong policy fix, often doing more harm than good. If we understand these myths, we can move past what doesn't work and implement effective solutions.

Myth #1: We can solve traffic by widening roads

Fact: Every time LA has added capacity—like the \$2B I405 expansion—traffic has gotten worse. The amount of time per day the average Angeleno spends stuck in traffic has risen from ~1.6 hrs in 1997 to ~2.5 hrs by 2019. This is due to induced demand: more lanes lead to more drivers, not faster travel.

Myth #2: Everyone has to drive, or wants to drive

Fact: 30% of Americans can not or do not drive, and 40% would prefer to live in a walkable neighborhood and are willing to pay more to do so. Cities around the world have transformed car-centric streets using high quality design, and have seen walking and biking boom. In some cities, car trips are now less than 30% of trips. The issue isn't demand—it's design.

Myth #3: There's no space for non-car alternatives

Fact: LA has 28,000 lane miles of streets, but only 19.4 miles of protected bike lanes and 51 miles of bus priority lanes. It's not that there is no space—it feels like there isn't because in dense cities, cars fill whatever space is available. Reallocating more lane miles to bike lanes, transit, and better sidewalks could move more people more efficiently if done in a high quality way.

Myth #4: Alternatives to driving don't scale

Fact: They do—when they are high quality. In cities like Bogotá, Utrecht, and Seoul, over 60% of trips are made by transit, walking, or biking. In LA, these modes are often unsafe, unreliable, or unpleasant.

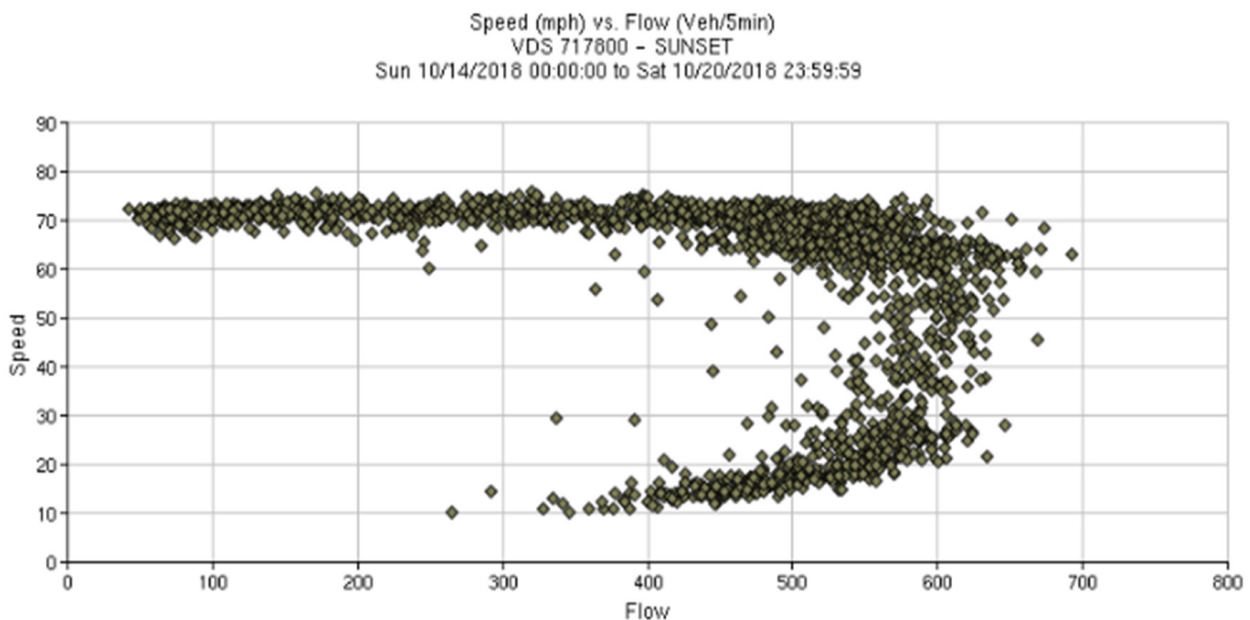
Myth #5: Electric vehicles will solve everything

Fact: EVs help with carbon emissions but not with traffic, parking, or street safety. And they won't replace gas cars

fast enough to meet climate deadlines (Paris Accords, etc), and they emit more particulate matter than ICE (internal combustion engine) cars.

Myth #6: Higher speeds gets more cars through the system

Fact: While it seems logical that raising speeds improves how many cars can move through a road, the reality is more complex. The chart below illustrates that flow rates at 20 mph are the same as 70+ mph because drivers stagger more at higher speeds, instinctively and by law. Drivers need to follow the '2 second rule' or '3 second rule' and leave enough space between cars so they have enough time to stop within 2 or 3 seconds – and at faster speeds that means driving further behind the car in front of you. Therefore, raising speed limits does not increase road capacity.



Myth #7: All bike lanes are the same

Fact: The data shows that bike lanes have to be safe or people won't use them.

Myth #8: Adding transit infrastructure is all you need

Fact: High quality infrastructure is a piece of it, but people also need safe and pleasant access such as a walk or bike ride to the station or bus stop, along with frequency, and speed.



The Three Legs of Mobility (Non-Car)

There are three legs of the stool of non-car mobility:

- (1) Walking;
- (2) Biking and Micro Mobility including adaptive bikes, e-bikes, cargo bikes, scooters, skateboards, trikes, and electric scooters and
- (3) Transit - buses, Bus Rapid Transit (BRT), light rail, trolleys, trams, and heavy rail.

Outside of a few places in the United States like New York City, Washington DC, and San Francisco, most of the country lacks neighborhoods where people can comfortably live without a car. According to Dan Luscher, founder of the 15-Minute City Project, demand for living “smaller” in a walkable neighborhood outstrips supply by 4 to 1 (and possibly 7 to 1)¹. Despite decades of effort and trillions in expenditures, the U.S. has not been able to shift people out of cars, and vehicle miles traveled, or VMT, has steadily increased. This is because there are *critical failure points* for each of our non-car mobility options. On the positive side, there are straightforward, efficient, and reasonably inexpensive ways to create the ‘essential components’ that will address these failure points and make non-car mobility high quality. This in turn makes them popular and viable ways of getting around.



Essential Components

Walkability: Quality and Distance

The walk is pleasant, inviting, safe, and not too far.

Bikeability: Safety and Connectivity

Biking is so safe that it is an intuitive and relaxing way to do errands, and safe for children, and gets you exactly where you need to go.

Transit: Speed, Frequency, Reliability, and Connectivity

Transit gets you to your neighborhood, work, and errands quickly. It's on time and safe. It's inviting to walk or bike to the nearest transit stop.



① Walkability

1. Walkability

Essential Components: Quality and Distance

How do we create walkable streets? Numerous studies have shown that the vibrancy of a street greatly affects both the choice people make to walk or drive to their destination as well as how far they perceive the walk to actually be. This means that walk-friendly streets don't just make walking a more pleasant experience, but actually cause more people to walk along them.

Studies have shown that people like to walk along charming, leafy, vibrant, narrow, safe streets lined with small shops with awnings and displays, or front porches and stoops, and lots of people. They don't like to walk along streets that feel like freeways or deserted overpasses. They don't like to walk past low quality uses like parking lots, warehouses, big box stores, or curb cuts to underground parking structures. They don't like to walk along streets with no shade, loud traffic noise, or a three foot wide sidewalk with no protection from cars and buses going 50-70 mph.

A study from Canada found that people were willing to walk a mere 3 minutes across a parking lot to access big box stores – any further, and they would actually re-enter their car and drive to a different area of the large parking lot. However, on traditional main streets that are visually interesting and have amenities, they were willing to walk up to 15-minutes to reach destinations. Participants reported that the distances felt similar. In other words, the quality of the street – boring and bleak vs vibrant and inviting – has the ability to not only influence our travel behavior but also our very perception of time.





How far people will walk:

3 minutes on a low quality street - 0.2 miles (1,000 feet)

15 minutes on a high quality street – ¾ -1 mile:



What specifically makes a quality street where people want to shop, stroll and linger? What could tie these streets together to create a 15-minute neighborhood? There are three key elements to a walkable neighborhood:

1. Slow Cars or No Cars: Slowing or reducing cars is essential for the walking experience to be pleasant and safe. A street cannot function as both a high-speed freeway and a charming

pedestrian destination. Combining these functions creates a “stroad,” a blend of a street for destinations with a road for movement. Yet, a stroad fails at both. Streets can become more inviting by slowing cars to ideally under 15 mph, and minimally under 20 mph; reducing the number of lanes to one lane in each direction*, or one-way, or even fully pedestrianizing, like the Third Street Promenade or Pearl Street in Boulder.



* There are examples of walkable streets with more lanes – very wide boulevards very wide boulevards, like Paris with 50 foot sidewalks. with 50 foot wide sidewalks.

2. Trees and Amenities: A lush tree canopy is transformational, especially in warm climates like LA. A study conducted in 2023 found that “more shade and trees, higher levels of maintenance, and the presence of a buffer between the street

and sidewalk increase the likelihood of intuitively choosing a street for walking” and further research aligns with these findings. Along with trees, the city can also, encourage parklets, benches, street furniture, and al fresco dining.



3. Small shops and Neighborhood Serving Retail: Fine-grained retail, made up of narrow storefronts under 25 ft wide, is a key component of what makes a street walkable because the range of shops, awnings, and displays activates the street and draws people in. Greater Los Angeles is made up of hundreds historic main streets and villages, known for their neighborhood-serving retail, long-standing family businesses, and [Legacy Businesses](#).

Originally connected by streetcars, neighborhoods like Larchmont, Leimert Park, Westwood Village, Downtown Culver City, and Abbot Kinney retain the charm of local shops and a “small town feel” that invites people to walk, relax, and shop. A key part of their charm is that the shops are zero-lot-line or cheek-to-jowl, creating a continuous streetscape. This is in part because they were developed before zoning laws led

to off-street parking, so they lack curb curb cute, driveways, and side yard setbacks which would severely disrupt the pedestrian-friendly environment.

When the small storefronts and an array of small retail include coffee shops, restaurants, mail shops, pharmacies, and grocery stores, it allows local residents to do most or all of their daily and weekly errands by foot.

What does it take to turn an underutilized commercial corridor lined with partially vacant retail into a high quality, walkable street? Almost any street with fine grain retail spaces has the bones for a “15-minute street,” or what famous 20th century urbanist Jane Jacobs would call a “sticky” street. By this, Jacobs* meant streets so lively, safe, and engaging that people naturally want to stay, interact, and return—creating a self-sustaining loop of foot traffic and economic vitality.

* Jane Jacobs was a journalist and urban activist whose 1961 book *The Death and Life of Great American Cities* challenged conventional city planning by advocating for mixed-use neighborhoods, walkability, and the importance of local community knowledge. Her ideas reshaped urban planning by emphasizing the value of vibrant street life and opposing top-down redevelopment that disrupted existing communities. Most famously by organizing to successfully block New York City from putting a highway through Greenwich Village, which is now one of the most sought-after neighborhoods in the country.



The answer is twofold: street improvements, such as those described below, and adding small apartments above the local shops. Adding housing can revitalize struggling retail, which will benefit from a larger customer base. Parts of LA – including sought after job centers like Santa Monica, Hollywood and Beverly Hills – have retail vacancy rates of 9-25%, but much of this retail is in 1-story buildings with plenty of room to add housing above. Zoning programs like the LCI require the ground floor to be a high quality space with neighborhood-serving retail in order to serve local residents' daily and weekly needs, with a few stories of housing above. Proximity to amenities means the residents in the surrounding area will be more likely to walk rather than drive.



Daily and Weekly Needs		
Neighborhood-serving retail in a 15 minute neighborhood		
Retail / Amenity	Typical Use Frequency	Estimated Population to Support
Grocery Store	Daily to 2-3x/week	5,000-10,000
Coffee Shop	Daily	1,000-2,000
Pharmacy	Weekly to Monthly	4,000-7,000
Restaurants	2-4x/week	2,000-4,000
Jobs	Daily	
Public Transit Stop	Daily	
Mail Shop	1-2x/week	1,000-2,000
Credit Union / Bank	Weekly	
Hardware Store	Monthly to Occasionally	5,000-7,500
Dry Cleaner / Laundry	Weekly	
Hair Salon / Barber	Monthly to 6 weeks	
Bookstore	Weekly to Occasionally	3,000-5,000
Daycare / Preschool	Daily (for parents)	
Park and Playground	Daily to Weekly	1,000
Library	Weekly	5,000-10,000
Urgent Care Clinic	Occasionally (as needed)	5,000-8,000
Medical Offices	Monthly to Quarterly	5,000
Pet Supply Store	Monthly to Weekly	
Clothing Store	Monthly to Quarterly	4,000-6,000
Corner Bar	Weekly	2,000-4,000
Gym	3-5x/week	

Benefits of Walking

Walking is transformative for public health and urban life, offering benefits such as physical fitness. Studies show that **People who live in walkable neighborhoods weigh an average of 10 pounds less⁸⁴ than those in car-dependent areas**, and simply walking 30 minutes a day has been linked to a 19% reduction in heart disease⁸⁵, and lower risks of diabetes, stroke, and certain cancers. Walking also improves bone density, muscle strength, and joint flexibility, making it a critical activity for people of all ages, namely, older adults as they benefit from reduced fall risk and improved mobility.⁸⁶

Aside from physical health, walking has proven to enhance mental well-being and happiness. Walking reduces stress hormones like cortisol and simultaneously boosts serotonin and endorphin levels. These lead to improved mood and decreased anxiety and depression symptoms. Walkable neighborhoods also foster stronger social connections, as people are more likely to engage with their community, neighbors, and participate in local events when they can walk to destinations. People who live in walkable cities report higher levels of life satisfaction, reinforcing the idea that urban design directly impacts happiness. Walking is not just a mode of transportation—it is a tool for better health, stronger communities, and a higher quality of life.





The Parking Ramblas: a Break-Through Street Policy



- Westwood Blvd
- Upper Larchmont Boulevard
- Montana Boulevard
- Hollywood Boulevard

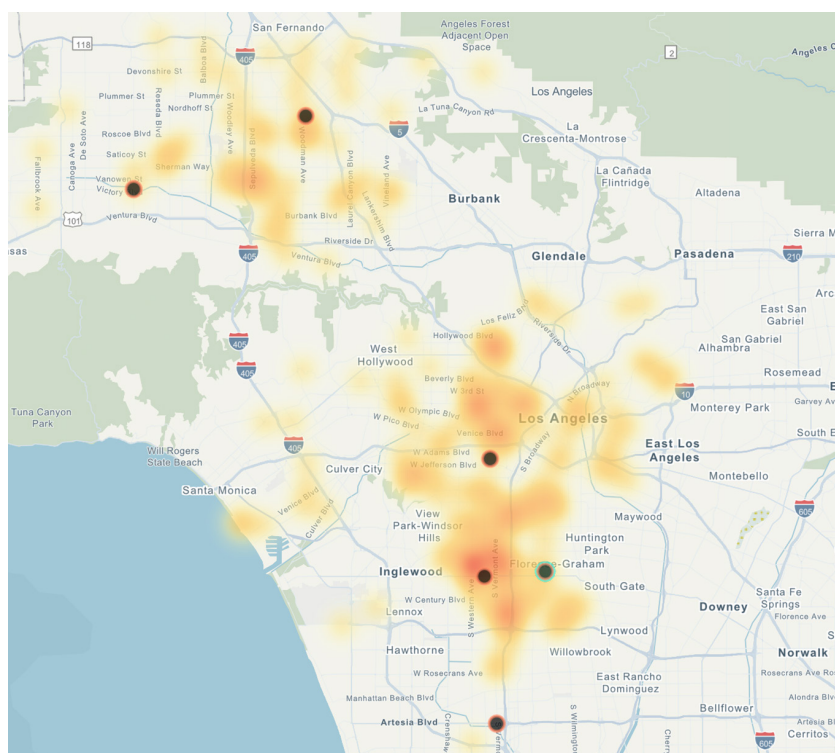
There is an innovative parking solution from a highly successful renovation of Lancaster Blvd in Lancaster, CA called a 'Parking Ramblas' that (1) adds a significant amount of parking to free up spaces for al fresco and parklets, and provides additional parking for shops and new residents, so affordable residential-over-retail buildings can be built without on-site parking. (2) It reduces car lanes and slows cars which makes the street more walkable without needing speed camera laws or speed enforcement. (2) It adds a significant amount of parking to free up spaces for al fresco and parklets, and provides additional parking for shops and new residents, so affordable residential-over-retail buildings can be built without on-site parking. (3) It adds trees and greenery, improving the street and making it more walkable. (4) By relieving concerns about parking, it builds broad political support for street changes. (5) It can create a significant economic boon and reinvestment into the street; in Lancaster, the post-Ramblas street has seen \$130 million in private investment and generated more than \$270 million in economic output.

This street design is appropriate in locations where the primary function of the boulevard isn't throughput, in which case a combination of bus rapid transit lanes, bike lanes, car lanes, and high quality of pedestrian infrastructure should be prioritized. Instead, a Parking Ramblas in LA should be implemented on streets that serve as commercial neighborhoods centers where people wish to linger, and on streets that dead-end or have viable alternatives for through-traffic. These could include:



Where are we? LA's Steps Towards a Pedestrian-Friendly City

Los Angeles has made commitments to enhance pedestrian accessibility, yet the city's slow implementation, neighborhood pushback, and persistent safety issues highlight a significant gap between policy and practice. The Vision Zero initiative, launched by the Los Angeles Department of Transportation (LADOT) in 2015, aims to eliminate traffic fatalities. Vision Zero is a policy framework that treats all traffic deaths as preventable and seeks to redesign streets to prioritize safety over speed. However, a disproportionate number of severe and fatal collisions continue to occur on a small number of streets. This subset of streets, known as the High-Injury Network (HIN), comprises just 6% of city streets but accounts for nearly 70% of all deaths and serious injuries involving pedestrians. A map of these streets is shown below.



Additionally, the implementation of Measure HLA has introduced a new level of accountability and explicit voter support for pedestrian improvements. Approved by voters in 2024, Measure HLA requires LA to incorporate street enhancements from the Mobility Plan 2035 whenever a street undergoes significant modifications. This measure targets the development of the Pedestrian Enhanced Network, which

encompasses 560 miles of streets for designated pedestrian improvements. Planned enhancements include street trees, pedestrian-scale lighting, enhanced crosswalks, automatic pedestrian signals, and more.

Despite these initiatives, only 5% of the Mobility Plan has been implemented since its adoption in 2015. This slow implementation has significant safety implications, with more than half of fatal or severe crashes occurring on streets where the proposed safety improvements have not been implemented.



Recommendations: Tools to Creating Streets for People

There are tools cities can use to make walking a safe, reliable, and attractive transportation option. The following options can address the key factors that influence walkability and support walkable neighborhoods:

1. **Slowing cars and reducing their number - As**

laid out above, – Walkable streets ideally have a maximum of one lane in each direction for both the volume of cars, and because stop signs only work with one lane. Slowing cars to under 15 mph (20 mph maximum) invites walkability. In CA, State law such as the 85th* percentile rule severely inhibits a city and community's ability to reduce speed limits. State law also severely restricts the use of speed cameras. Changing these State laws could have a significant effect on creating walkable streets and therefore lowering VMT.



2. **A Citywide Street Tree Program** – LA Mayor Antonio Villaraigosa created a program called Million Trees LA and succeeded in planting 400,000 trees, and progress has continued. As part of his LA Green New Deal, Mayor Eric Garcetti launched a program to plant and maintain 90,000 trees by 2021 and despite COVID-related delays, succeeded in planting over 65,000. A city-led initiative similar to Portland's "Friends of Trees" program could incentivize planting and maintaining trees along key pedestrian corridors. Well-shaded streets encourage walking, due to reduced heat exposure and enhanced neighborhood aesthetics.

* The rule dictates that speed limits must be set within 5 mph of the speed that 85% of drivers travel at or below
<https://www.calbike.org/what-is-the-85th-percentile-rule/>

3. Unlocking and Encouraging Residential Development Above Commercial Spaces

– One of the most powerful ways to create walkability is to add housing to a street with the bones of a walkable neighborhood. LA recently adopted a plan created by the LCI to align mobility changes to upzoning for housing to create 15-minute communities located near jobs and transit. There are several reforms necessary to allow this housing typology known as residential over retail, and to streamline it so it makes financial sense to build. Best Practices include urban planning the block for height and typology, single staircase reform, eliminating parking requirements (already in place in most of LA), by-right zoning, pre-entitled Standard Plans, fast tracking and wholesale change in attitude where the city supports the housing the community and the city wants, rather than delaying, inconveniencing, and punishing it. Public realm improvements to go along with the zoning changes include: expanding the sidewalks, Bistro lighting, and adding trees.

4. Bulb-Outs⁸⁹ (Curb Extensions)

– Extending sidewalks at intersections shortens crossing distances, improves visibility, and slows down vehicles, making streets safer for pedestrians. Cities like San Francisco and New York have successfully implemented bulb-outs to reduce pedestrian fatalities.

5. Raised Crosswalks

– Raised crosswalks serve as a traffic-calming measure,

slowing down vehicles and raising pedestrian visibility while symbolizing how pedestrians have priority in key walking corridors.

6. Widened Sidewalks

– Many existing LA streets have narrow, obstructed sidewalks that discourage walking. Expanding sidewalks, particularly in commercial areas and near transit stations, would provide more space for pedestrians, outdoor seating, and street-level retail.

7. Allowing Commercial Uses in Residential Zones

– Expanding zoning small-scale commercial uses like corner stores, cafés, and local retail in residential areas allows more people to access daily necessities by foot. This supports the concept of 15-minute neighborhoods, where residents can easily reach essential services without driving.





2 Bikeability

2. Biking and Micro-Mobility

Essential Components: Safety and Connectivity

The second leg of the stool of mobility is bikes and micro-mobility, including adaptive bikes, e-bikes, cargo bikes, scooters, skate boards, and trikes.



Importance

Bikes and micro-mobility are transformative for cities as they bridge the gap between walking and driving in a way that buses and trains cannot. They are far more spatially efficient than cars, moving more people while using less space. Bikes can be used for everyday activities and come in many shapes and sizes; regular bikes can quickly get a commuter to work while cargo bikes have space for groceries, bulky items, and transporting children. Bikes have social benefits as well: children can gain independence by biking themselves to school without adult supervision, as seen in the Netherlands, where 75% of students bike to school. Biking can replace a car which can also save families up to \$20,000 annually.



Biking and micro-mobility has obvious health benefits too. Regular bike usage has been shown to significantly reduce risks of heart disease (by 50%), cancer (45%), obesity (28%), and overall risk of mortality (40%), as well as decreasing cholesterol and blood pressure levels while increasing cognitive function.



Biking and micro-mobility expands mobility for those who cannot or choose not to drive, accounting for 30% of the population in America. According to AARP, on average, drivers lose their ability to drive for the last 7-10 years of life, leaving seniors trapped at home.



Finally, biking and micro-mobility is also critical for “First Mile/Last Mile” transit connections. If people can bike to a transit station, the station’s usership radius grows from about a half mile walk to a three mile bike ride, which each translate to a roughly 15 minute journey. Without either a walking or biking connection, even top quality transit systems such as LA Metro can struggle with low ridership.

In cities with high quality bike infrastructure, people bike for 30-50% of trips. Given its popularity, there is untapped potential for bikes as 52% of all daily trips made in America are 3 miles or less. Biking is efficient, convenient, and free.

Implementation

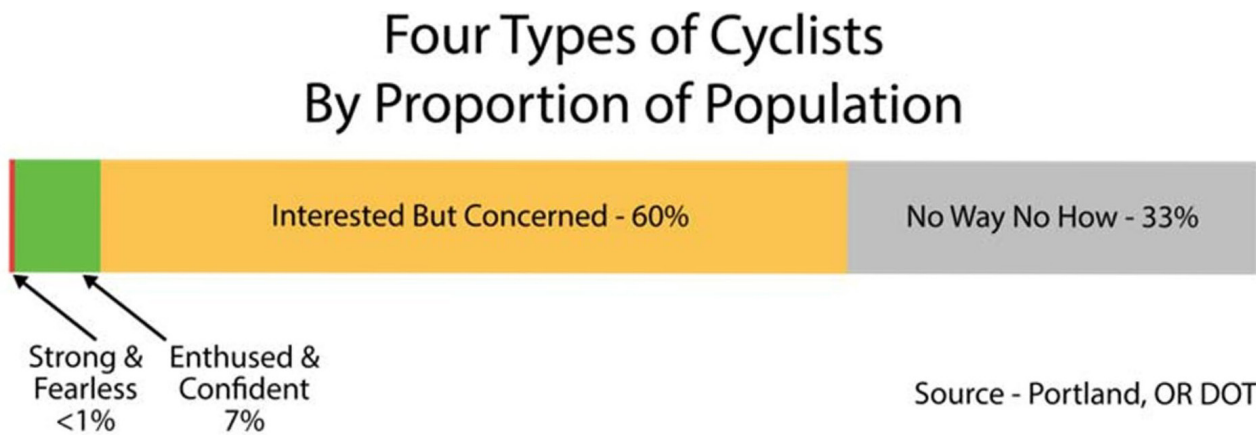
If biking is so great, why don’t more people bike? According to Vignesh Swaminathan, a civil engineer working in the Bay Area who has designed over 100 high quality bike lanes and intersections, the key is **continuous safety and land use** – that the

bikeways are continuous and safe and that they connect destinations that people want to go to. In short: safety and connectivity.

Level of Stress

Nearly every city in California has a Bike Master Plan, and most of these plans include a “Level of Bike Stress Map.” These maps generally show the areas where people are most and least willing to cycle, which strongly correlates to the presence and speed of cars. But where does this terminology come from?

In 2006, Portland Oregon’s Bicycle Coordinator, Roger Geller, released a study titled “Four Types of Cyclists” in which he broke down the population into four distinct groups. These categories and their estimated percentages in the population were as follows: Strong and Fearless, 1%; Enthused and Confident, 8%; Interested but Concerned, 60%; and No Way No How, 33%.*



* In 2011, Jennifer Dill, of Portland State University, was interested in finding if these estimates held true. Dill28 writes that she and her team “conducted a random phone survey in Portland to help validate the typology and understand the types better. We found that the distribution was remarkably close to Geller’s estimate: 60% of adults in the city and 56% in the region fell into the “Interested but Concerned” category. In 2015, we replicated the survey, though using an abbreviated version, in a sample of adults in the 50 largest metro regions in the U.S. The results were pretty similar.” The results of her survey are shown below.



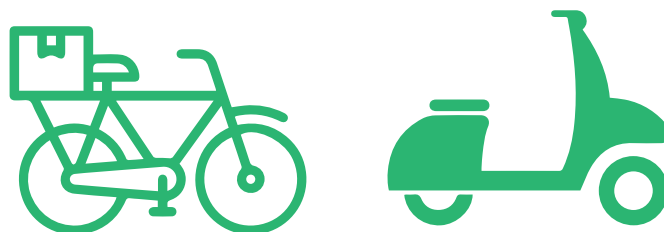
As these categories of cyclists seem to hold true across populations within the US, it is important to understand what characterizes them. They can be described as follows:

Strong and Fearless (1%): These are the types of cyclists who will ride just about anywhere, and can confidently navigate around cars. Locally, you might see them riding up the PCH or down the center of a major boulevard. This group is made up almost entirely of men¹⁰.

Enthused and Confident (8%): These are riders who feel comfortable cycling in protected bike lanes that have unprotected intersections. They may also bike where there are painted lanes or arrows that give limited protection but at least make drivers aware of where bikes might be. These are the cyclists who ride in the Class II lanes alongside moving traffic. This group also skews largely toward men¹⁰.

Interested but Concerned (60%): This group makes up the vast majority of the population. They are interested in cycling, but are not willing to risk injury or death by biking near moving vehicles. They are aware of the serious danger caused by fast moving vehicles and the potential for collisions when they cross paths with cars, particularly at intersections. The majority of the population is risk-averse which generally keeps them from cycling anywhere except separated Class IV or Class I lanes, like those on the Venice Beach path or Ballona Creek Trail. In this group is where you will find most seniors, women, parents, and children¹⁰.

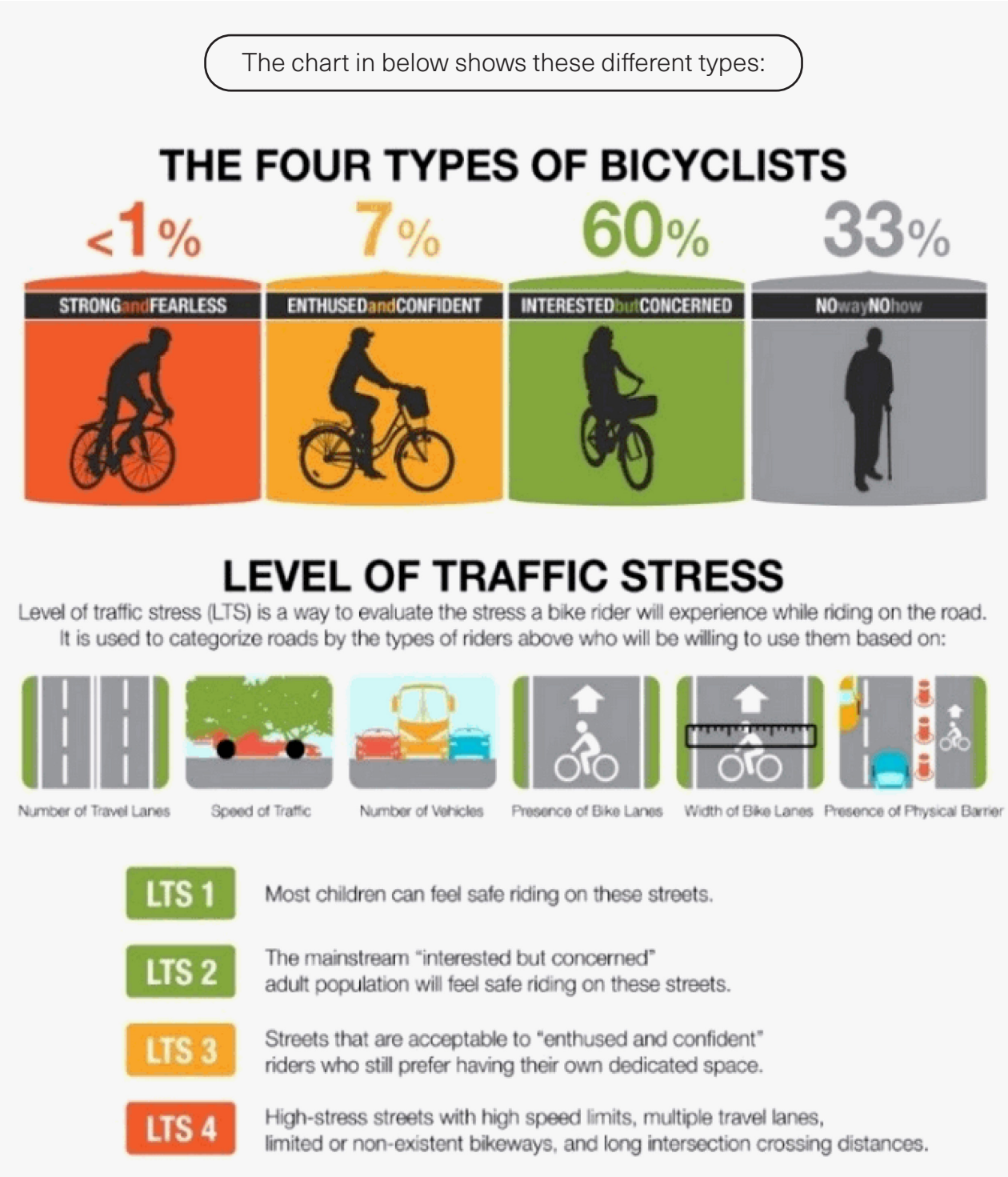
No Way No How: as the name suggests, these are people who will never, or can never, use cycling as a mode of transport. This group includes the very old and the very young, as well as people who are simply unwilling to get on a bike.



This data makes intuitive sense: some people, such as young people, athletic individuals, and men, are more likely to be risk-takers and risk-tolerant, while the majority of the population (85-90%) are cautious and avoid high-risk activities. This data can be seen elsewhere: an estimated 7% of the population will engage in extreme sports. When urban cycling feels

more like an extreme sport than a mode of transportation, biking is limited to the “fit and the brave”.

The Portland-Geller framework reveals why bike lane usage in U.S. cities often stagnates and why even the most “bike-friendly” cities achieve only modest mode shares. In the Netherlands, cities like Utrecht demonstrate





that 80% to 90% of the population will bike when infrastructure is designed to meet the needs of all users. In contrast, some cities in the U.S. typically see bike mode share rise to around 6%–8% before plateauing, even after significant investments in infrastructure like Class IV lanes. This stagnation occurs because cities build Class IV lanes in isolation from one another, or fail to connect them with protected intersections. This creates an incomplete network where there is no safety guarantee for a journey end-to-end. Meanwhile, most U.S. bike networks continue to be tailored to the “Enthusiased and Confident” cyclists (8%) rather than the much larger group of “Interested but Concerned” (60%) potential riders. Dutch cities succeed because their networks consistently address the safety and comfort concerns of this broader group, enabling widespread adoption of cycling as a primary mode of transportation. Some cities, like Utrecht, have achieved 51% bike mode share and reached 90% of the population biking on a regular basis.

“This mixing of bikes and cars on a busy street does not work and it hasn’t worked in the 25 years they’ve been doing this... so we need to figure out a way to officially wrap up these conversations about ‘how do we mix bikes and cars?’ It’s like we don’t mix sidewalks and cars.”

- Dave Campbell former Advocacy Director for East Bay Bike

Creating Real Safety

When biking feels safe it’s because it is safe. As mentioned before, level of stress is a measurement of the public’s reaction to cycling in various scenarios, mostly relating to how close cars are to the bike lane and how fast they are going. For a cyclist on a roadway, the speed of cars around them primarily determines safety, and as speed

increases, an impact’s deadliness grows exponentially. Chris Bruntlett of the Dutch Cycling Embassy shared: “Something that Dutch cities figured out a long time ago is speed is everything.” The Netherlands dropped their speed limits across most of the country to 18 mph (30km/h), which is “the speed at which the research shows is basically survivable when it comes to a car-human collision.... And once you get above 30 kilometers an hour, that survival rate drops significantly.”

The intuitive aversion to biking adjacent to fast-moving vehicles expressed by most people in Level of Stress studies is validated by safety studies and data. High speeds narrow the field of vision and reduce reaction time for drivers. This makes crashes difficult to avoid. Yet, the biggest concern is physics: force, determined by mass (weight) and speed, increases exponentially and escalates lethality.

Under 18mph - fatalities are rare

20mph – 10% chance of fatality

30mph – 50% chance of fatality

40mph – 90% chance of fatality

There is a growing movement called “20 is plenty” prompting an important question: How fast should a car go if it hits someone – a child, parent, elder, or a loved one? The preferred answer is usually “0 mph,” as no one desires anyone to be struck by a car, much less suffer a fatality.



Connectivity

In many cities across the U.S., Class IV* lanes have been built. However, these projects are often constructed in isolation, lacking connectivity to other safe bike infrastructure, or key destinations like job centers, universities, transit stops, popular shopping districts, and populous neighborhoods. A great example of this are the lanes on LA's new Sixth Street Viaduct, which simply vanish at a busy intersection.



Even along many high-quality paths, the bike accommodation at intersections is lacking. Incomplete bike networks like this create near-miss incidents involving vehicles that often trigger a physiological reaction characterized by a surge of fear and adrenaline. Even if the lanes themselves cater to the “Interested but Concerned” but the intersections do not, that group will choose not to bike. As a result, these cities remain “stuck” at an 8% biking rate.

* A Class IV bike lane, also known as a protected bike lane, uses a physical barrier to separate cyclists from motorized traffic. Common barriers include concrete curbs, plastic bollards, planters, or parking.





Research underscores the transformative impact of connected bike networks on ridership and safety. A landmark study in Seville, Spain, revealed that the city achieved a tenfold increase in bike ridership after constructing a cohesive network of protected bike lanes. This effort not only boosted cycling rates but also improved overall road safety by reducing conflicts between cyclists and motor vehicles. Similarly, research from Portland State University highlights that a well-connected bike network is greater than the sum of its parts, as seamless connections between routes encourage more people to bike and create a safe environment along the length of a journey. The study found that isolated infrastructure, no matter how well-

designed, fails to deliver these benefits without integration into a larger, cohesive system. Additional studies reinforce that safety and connectivity are interdependent; continuous, accessible, and protected networks ensure that potential cyclists feel safe enough to ride, particularly among the “Interested but Concerned” demographic. Thus, achieving a high bike mode share in cities requires prioritizing both safety and connectivity in bicycle infrastructure planning. This need also points to a potential tactic for cities who wish to increase bike mode share: create pilot corridors of safe, high quality bike lanes between key destinations such as a university and a Metro stop, such as UCLA and the E Line.

What Does Safe Infrastructure Look Like?

One standard the Dutch use is “if we build for children, we build for everyone.” The Netherlands engineer their bikeways to protect the bikers, including children and seniors – “ages 8 to 80” – and to be safe without a helmet.* They also understand that different streets have different uses, thus, have created three zones – A, B, C:

A Zone - child safe zone for walking and biking: In an A Zone or Woonerf, the public space prioritizes pedestrians, cyclists and children as cars are limited to under 9 mph, reducing impact force. Features like narrow travel lanes (8-9 ft), bollards, cobblestones, ample stop signs, and speed bumps passively slow traffic with no active enforcement needed, making separated bike lanes unnecessary and streets safe enough for children’s leisure/play time.



* We would never advocate not wearing a helmet, but the conventional wisdom is that when everyone bikes it's so safe no one needs one.

B Zone - cars and bike lanes: In a B Zone, safety and comfort for cyclists are achieved through thoughtful design elements that prioritize physical separation and speed control. Barriers, such as three-foot buffers between parked cars and bike lanes protect cyclists from being “car doored.” Bikeways are fully protected from car intrusion using parked cars, planters, curbs, or level-separated lanes, avoiding the use

of temporary and flimsy measures like plastic posts. Only Dutch-style protected intersections* are implemented, eliminating unsafe scenarios involving bikes and turning cars. Instead, phased traffic lights for bikes known as dedicated signals give priority to cyclists, reducing potential conflicts and delays. Vehicle speeds are kept under 18 mph through both design and enforcement measures, such as speed bumps, raised



* Left-Turn Bike Lanes: bike lanes that allow cyclists to merge into left-turning traffic, often placing them in conflict with cars turning left at intersections. This design can be dangerous, as cyclists must navigate across lanes of moving vehicles.

Car Right-Turn Lanes: Bikes Must Cross into Traffic – cyclists and right-turning cars share space, forcing cyclists to merge across a lane of turning vehicles. This setup creates potential conflict points, increasing the risk of right-hook crashes (where a car turns right across a cyclist’s path).



crossings, speed tables and speed cameras. These elements collectively ensure that the “Interested but Concerned” feel safe enough to choose to bike.

C Zone - Streets that prioritize cars: In rural areas or very low-density suburbs, some streets are arterials that prioritize the efficient movement of cars and trucks. Here, protected bike lanes are often bi-directional. Intersections are few and far between, and are often roundabouts with protected bike lanes or grade-separated infrastructure:



LA's Current Plans

The LA Mobility Plan: Ambition Without Action

Los Angeles is not lacking when it comes to having adopted bike plans. Los Angeles adopted the Mobility Plan 2035 to reshape the city's streets, prioritizing biking, transit, and pedestrian infrastructure over car dependency. The plan envisions a connected, multimodal city where bike lanes, and pedestrian-friendly streets pave the way for an equitable and sustainable transportation system. Yet, nearly a decade after its approval, the reality on the ground paints a different image: unfulfilled promises, bureaucratic inaction, and political resistance that have stalled LA's transportation progress.

The Necessity of Measure HLA

LA's inability to implement the Mobility Plan led to the creation of Measure HLA by the advocacy group Streets For All, a 2022 ballot initiative designed to enforce safer streets for Angelinos. The measure aims to hold city officials accountable via legal requirements of building planned bus and bike networks. This prevents elected leaders from postponing projects due to political pressure, neighborhood opposition, or car-centric priorities. Proponents of HLA argued that without binding legal obligations, LA's transportation projects suffer from lengthy delays, unstandardized designs, and cancellations—often to cater to car drivers and business owners opposed to reallocating street space. In April 2024, the measure passed with a majority, becoming law. As of July 2025, it has been approved by both the city council and mayor, and went into effect August 18.





But the city continues to drag its feet. Despite recent progress and the commitment of elected officials and city staff, bike lanes are built in isolation and are disconnected from one another, forcing riders to navigate unsafe roadways. LA's intersections remain the most dangerous areas for cyclists and pedestrians without sufficient investment in protected crossings or speed-reducing measures such as speed cameras, which are barred by state law with a few exceptions. The new infrastructure tends to be compromised from the get-go – designed to minimize disruption to drivers instead of maximizing safety for transit users, pedestrians, and cyclists. A February, 2025 Streetsblog article found that “According to the city Transportation Department (LADOT), three-fourths of a year into Measure HLA, only three streets (totaling less than three miles) triggered HLA upgrades: Hollywood Boulevard (announced before HLA), Manchester Boulevard, and Reseda Boulevard.”

Recommendations for creating a bikeable LA:

It is widely believed that Los Angeles could be the bike capital of the world – the city is mostly flat, has year round great weather, wide streets, and biking goes well with the relaxed, SoCal lifestyle. LA has the ability to create a world-renowned bike and micro-mobility transportation network. It already has the plans and studies to back it. Voter-approved funding from Measure M and HLA, and the continued popularity of car-free Ciclavia events displays the appetite the public has for increased bike mobility.

At the end of the day, people can sense when a bike lane is safe or not. That is why perceived safety and real safety align so well; a street with cars moving over 20 mph feels unsafe—because it is. In other words, it's not the public's fault for “feeling unsafe” but actually engineers' fault for making them unsafe. This is why tailoring bike infrastructure to the “Interested but Concerned” doesn't just raise the

perception of safety, but actually makes cycling safer. If cycling were safe, and held up to the same standard as airbags or airplanes, people would instantly recognize this change and relax. Cycling would become a much more obvious choice as well as being an enjoyable and calming experience.

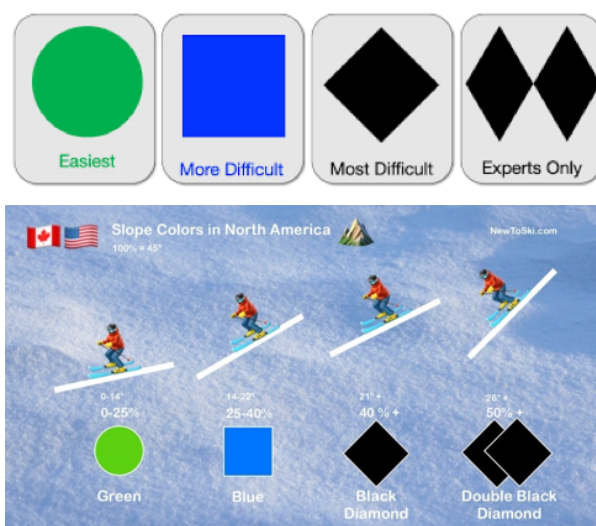
Safe bike lanes and intersections between where people live, work, and play could translate to 80% of a city's population partaking in biking for some journeys, rather than the current 1-2% willing to take the risk today. In cities with safe infrastructure, 30-50% of trips are by bike.

Key recommendations to achieve high bike mode share include:

Move from LTS to Real Safety: One of the only infrastructures that asks users to decide if they “feel safe” enough to use it

without any guidance on the actual safety is bike lanes. An equivalent can be found in the sports of Mountain Biking and Downhill Skiing, which are recreational activities that people choose to opt-into, not a form of transportation. People knowingly assume a significant amount of risk when participating, but still the user is informed of the risk level. For example, Downhill Skiing labels each trail by ability level: beginner (green square); intermediate (blue circle); expert (black diamond). This system requires the user to decide their level, 'and' crucially it gives them the necessary information to make an informed decision.

In the absence of a high quality protected bike lane network governments should inform users what the safety level is along existing bike routes. A possible set of guidelines can roughly correlate to Geller's framework: Expert (Class II, painted lanes), Intermediate (Class IV lanes with exposed intersections), and Beginner (Class IV lanes with end-to-end safety). Another possible framing could be: Expert, Adults, Child-safe; or the Dutch lettering system of A (child-safe), B (adults), and C (experts only).



With these guidelines, cyclists could choose their route based on how confident they are as cyclists and who they are traveling with; those with children would choose beginner routes. However, it is important to stress that this is an interim solution; in an ideal world, no bike lane in any city should be known to be dangerous or unprotected where cars are going more than 20mph.

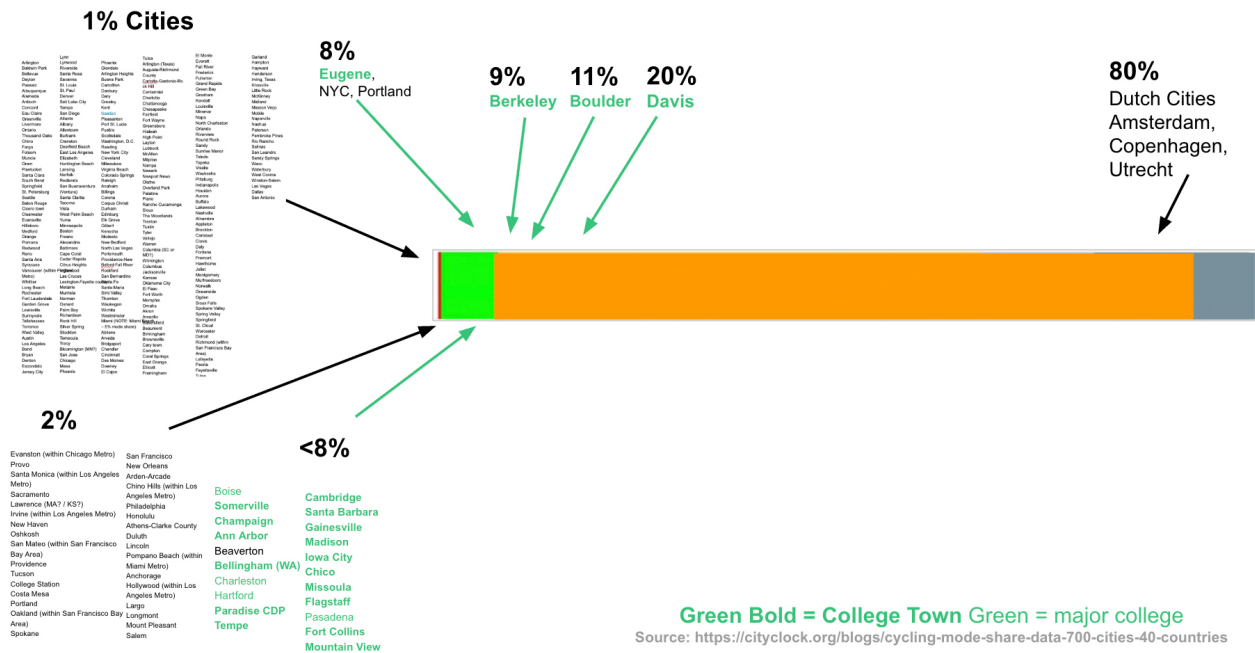
Focus on Universities: The majority of bike-friendly cities in the U.S. often share one trait: their first major bike infrastructure efforts were built on or near universities. In places like Davis, Berkeley, Eugene, Cambridge, and Boulder, protected bike lanes, traffic-calmed streets, and connected networks first emerged around campuses—creating a safe and familiar starting point for cycling that helped normalize the practice across broader populations. College campuses are walkable, mostly car-free/car-light, and built so students do not need to own a car.

When analyzing cities with the highest mode share of biking – over 8% Bike Mode Share – in 4 out of 6 of them the biking infrastructure began around or is strongly anchored by a large college campus. Among cities with 2–8% Bike Mode Share, in 75% of the cases, biking originated from university-area networks. Colleges, especially College Towns, appear to serve as incubators for biking, which then expands into the surrounding communities.





Top 100 U.S. Cities for Biking College Towns

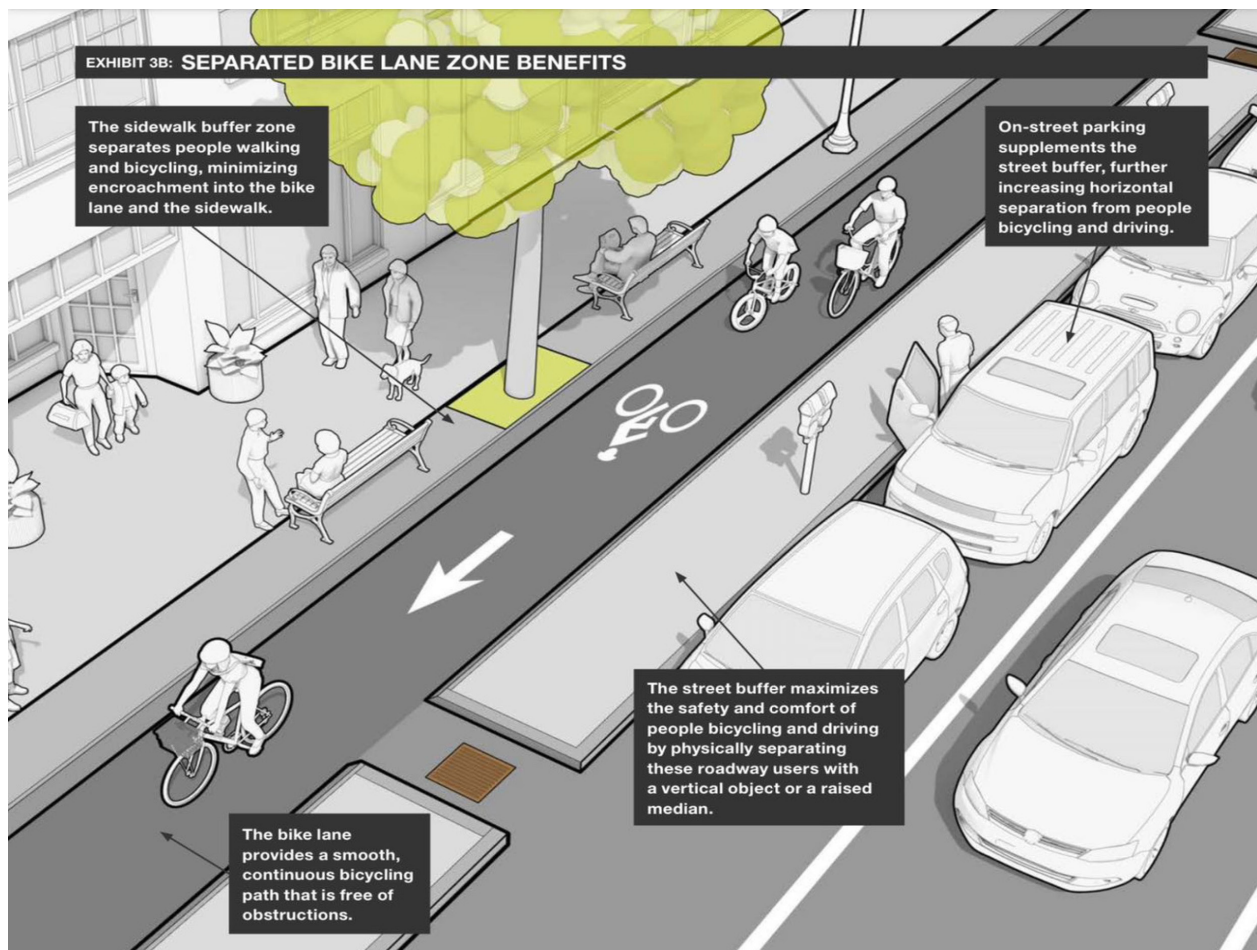


City	College Town	College	Biking started on campus	Mode share
Davis, CA	Yes	UC Davis	Yes	20%
Boulder, CO	Yes	Boulder	Yes	11%
Berkeley, CA	Yes	UC Berkeley	Yes	9%
Eugene, OR	Yes	Yes	Yes	8%
Portland, OR	Yes	U of Oregon	No - city initiative	6%
New York City	No		No - city initiative	8%

LA is the home of three major universities (UCLA, USC and LMU) and eight smaller colleges. Each of these could become intentional incubators for biking, and build child-safe high quality bike lanes spoking off the campuses and connecting to key destinations. [Westwood Connected](#) is already a plan in motion.

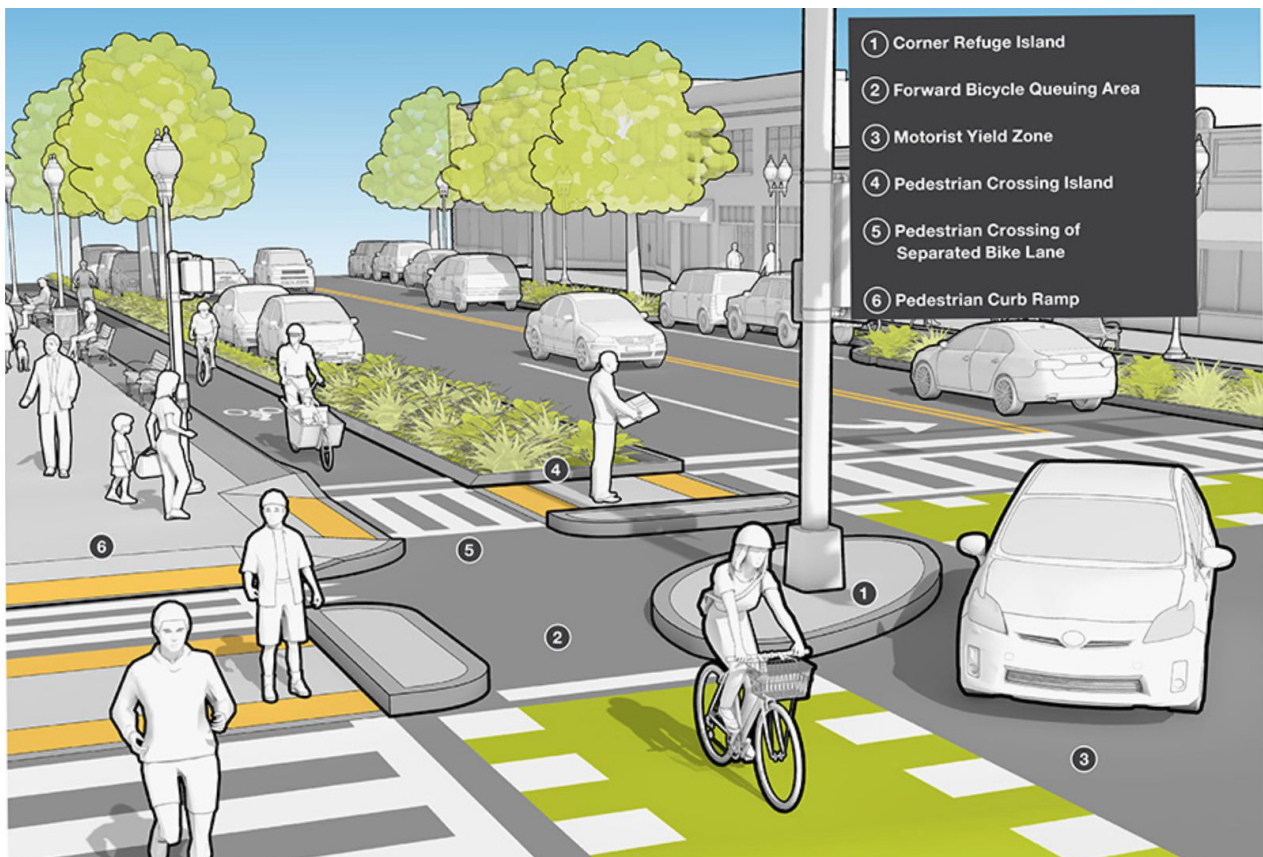
Focus on Class IV lanes: Rather than build bike lanes that scare and frustrate the majority of the population, LA can strive for key routes that are Amsterdam-level. Here are the specifications for a Class IV (highest rated) bike lanes:

Fully separated: On any street with vehicle traffic moving faster than 20 mph, cyclists should be fully separated from vehicles. The separation should be permanent, hard infrastructure like concrete, medians with trees, planters, or parked cars, not bollards and paint. A diagram of this type of bike lane, taken from the Massachusetts Separated Bike Lane Planning & Design Guide is shown here:



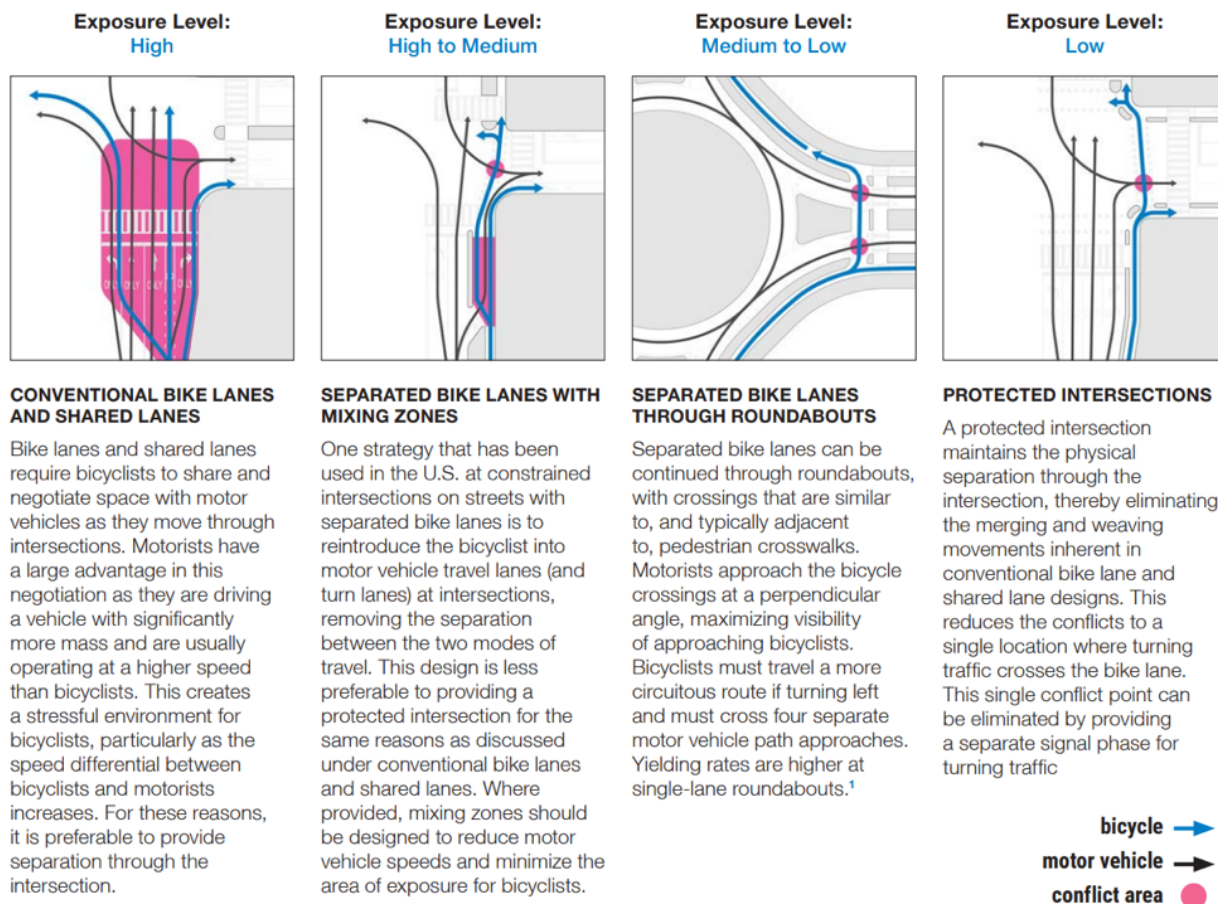


Protected Intersections: All major intersections must be protected with cyclists crossing parallel to crosswalks and protected by small concrete islands. Left turns are made in two phases – bikes and then cars. There are no right-turns on red allowed for vehicles. A diagram of this type of intersection, taken from the *Massachusetts Separated Bike Lane Planning & Design Guide* is shown here:

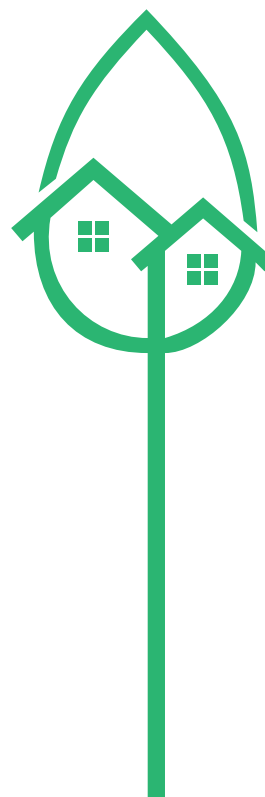


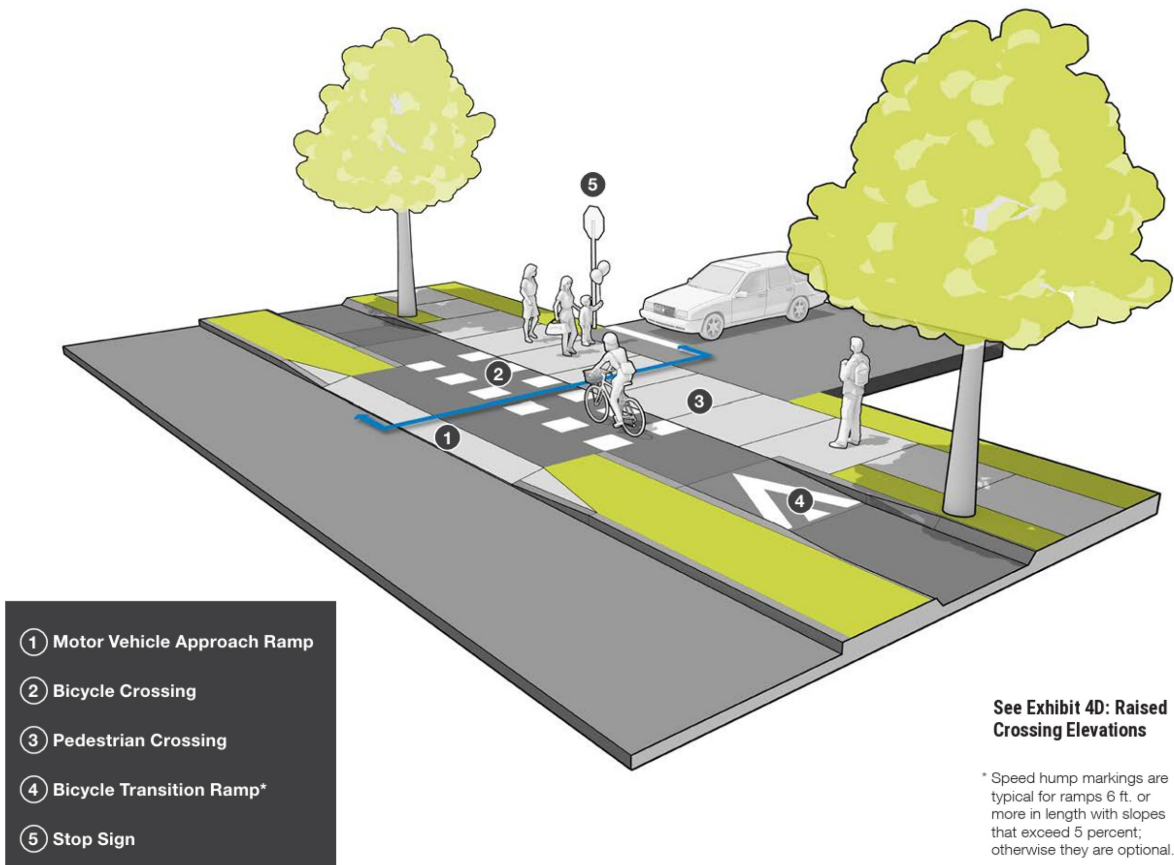
These types of intersections have been shown to significantly reduce traffic collisions and fatalities for cyclists, pedestrians, and drivers. This is because they force drivers to slow down, improve sightlines, and decrease conflict points, as shown here:





For minor intersections, bike paths and sidewalks should continue level across the roadway, with vehicles being forced to come up over the sidewalk and path. This forces vehicles to slow to 5 mph or less when crossing bike and pedestrian traffic. A diagram of this type of crossing, taken from the *Massachusetts Separated Bike Lane Planning & Design Guide* is shown here:



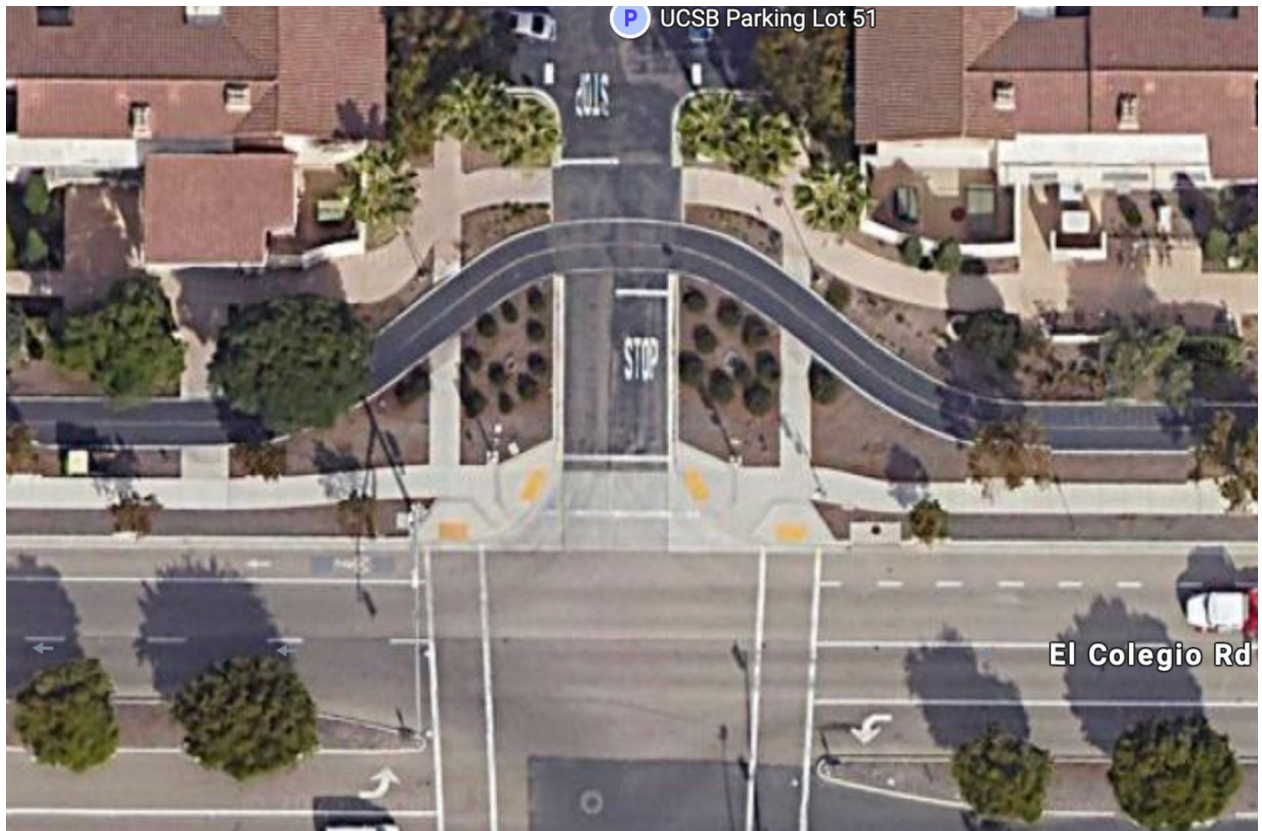


Separate signals: at signalized intersections, cyclists should have their own green signal, timed with the pedestrian crossing signal. At especially busy intersections, the vehicle green signal should be a completely separate phase.



Inset Driveways: at driveways, bike paths should be inset to allow room for cars turning right to come to a full stop before proceeding across the bike lane.

This type of crossing has been implemented in Isla Vista, California as shown here, taken from Google Earth Imagery:



An Empathy Metric: when considering preliminary bike lane plans, city transportation planners should ask themselves “would I let a child ride alone on this infrastructure?” If the answer is no, the bike infrastructure should be redesigned.





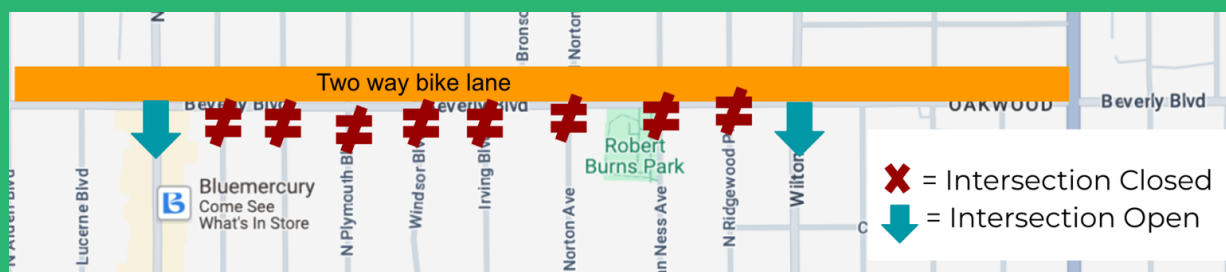
A New Child Safe Design “The Continuous Path”:

An innovative bike lane design creates a continuous protected bike lane across small intersections by closing them to through-traffic, and making it impossible for a car to encroach into the lane and hit a biker. The closed intersections turn the neighborhood into a “Superblock,” a planning concept from Barcelona in which intersections are closed to create a quiet, calm neighborhood with only local traffic as well as cul-de-sacs with pocket parks.

The pocket parks would not encroach on driveways, and residents and visitors could still access every home, just from a different direction.



This design would enable people to bike between major intersections without ever interacting with a moving vehicle. Then at major intersections, cities can invest more heavily in making it child-safe through the implementation of protected intersections.



1. Ciclovía and Saturday Open Streets:

A proven way to bring people out to bike is to close the street for the day. About 6-8 times per year, CicLAVia closes a stretch of LA for the day, and thousands of people pour into the streets to bike. CicLAVia is inspired by Ciclovía from Bogota, Columbia – where 75 miles are closed from 7am to 2pm every Sunday. The consecutive nature of a regular Sundays makes it part of people's routines – becoming a regular family outing, or scheduled exercise or errands. A series of consecutive weeks of a Pilot project to close a stretch of the same street can socialize people to the idea that biking could be a part of their lives.

2. The Advantage of Pilot Projects:

Implementing temporary pilot projects has been shown to be the most effective method of community engagement, allowing residents to experience changes firsthand and provide informed feedback. This approach, often referred to as Tactical Urbanism, tests urban design ideas with temporary materials like paint and planters that can be iterated or removed, before expensive, time-consuming and hard to dismantle permanent implementation. LCI has written a

guide to Pilot <https://docs.google.com/document/d/1itN40N2BQJz40EoUkl41-WlCNVYsity4fVZBZD646vo/edit?tab=t.0#heading=h.8ar3uwewzvck> Projects which goes into more detail.

3. Summary:

As of today, very few places outside the Netherlands and Copenhagen have been able to create the perfect mixture of land-use and bike infrastructure to bring bike mode share from 8% to 80%. However, some cities in North America appear to be on this path. In Montreal, bike mode share is approaching 20% of all trips. Some neighborhoods in Toronto have reached 20%. Areas of Brooklyn have reached 15%. In all these cities, the trend is continuing to go up.

The common thread between these cities is simple: a continued rollout of high-quality, curb-separated, Class IV lanes and protected intersections in already dense neighborhoods often featuring universities. Los Angeles should pursue similar policies and infrastructure, while continuing to encourage cycling through events like Ciclavia. Los Angeles should seek to find the tipping point to making cycling a popular mode of transportation for all, and closely track the outcomes of pilot projects to find what it takes to create a bike culture.





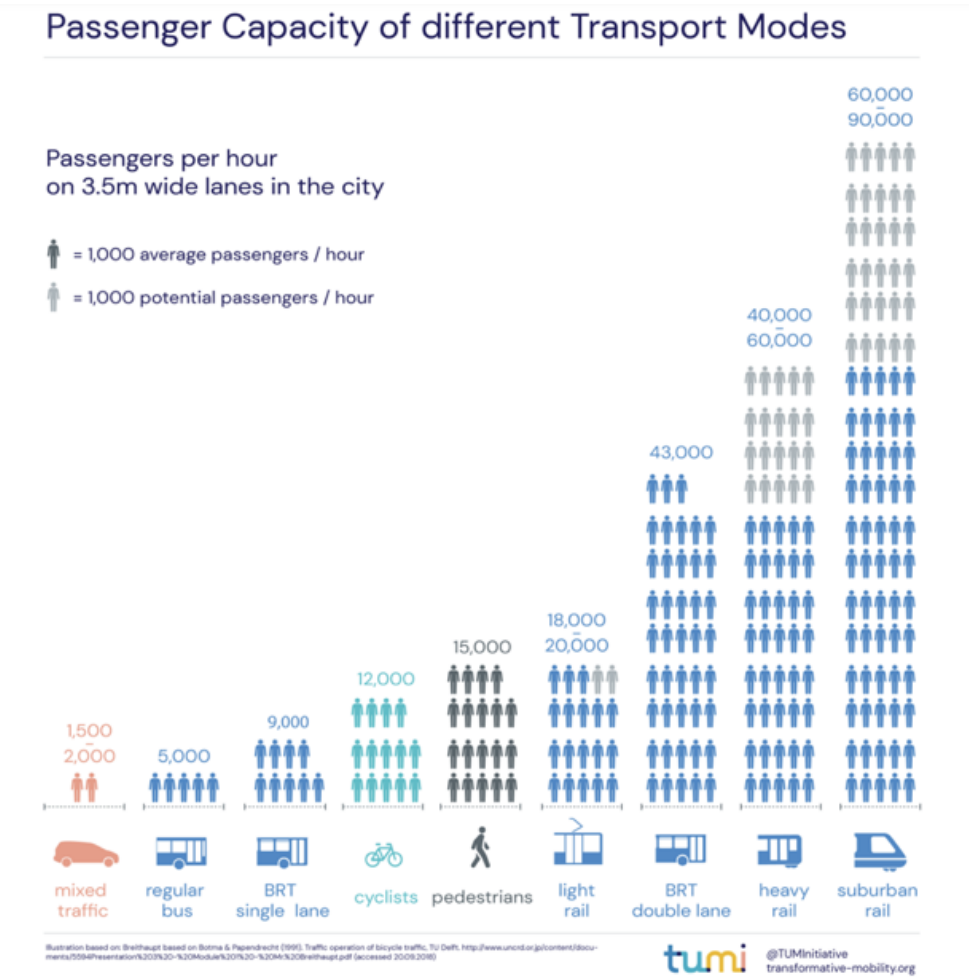
③ Transit

3. Transit

Essential Components: Speed, Frequency, Connectivity

The third leg of the stool of mobility is transit. Transit includes local buses, Light Rail Transit (LRT), Heavy Rail Transit (HRT), and Bus Rapid Transit (BRT). LA has two transit systems, buses and rail, which incorporates heavy rail, light rail, and two rapid bus lines. Despite billions in investment and high quality transit infrastructure, less than 7% of trips are made by transit.

High-quality public transit is essential for cities because it moves more people than cars do using less space—one full bus replaces about 75 cars on the road, reducing congestion and freeing up road space for other uses, such as bike lanes and wider sidewalks. But this miraculous benefit is eroded when buses are slowed and delayed by private cars.





Investments in public transit yield substantial economic returns; for instance, every \$1 billion invested supports and creates approximately 50,000 jobs, and every \$10 million in capital investment yields \$30 million in increased business sales. Additionally, public transportation offers a safer travel alternative, with a person reducing their chance of being in an accident by more than 90% simply by taking public transit as opposed to commuting by car.

Environmentally, public transit reduces gasoline consumption, saving the United States 6 billion gallons annually, and communities that invest in public transit reduce the nation's carbon emissions by 63 million metric tons annually. Moreover, households can save around \$10,000- \$13,000 annually by taking public transportation and living with one less car, underscoring its cost-effectiveness for individuals. Overall, robust public transit enhances urban mobility, promotes economic growth, improves safety, and contributes to environmental sustainability.

How do we scale transit?

Transit scales when it's fast, frequent, and has good connections to other transit routes, residences, and commercial areas. The key is that it is reliable to get to work, school, and appointments on time.

Fast, Frequent, and Connected

Fast transit gets people to their destinations as fast or faster than driving, and frequent transit reliably runs at least every 15 minutes, but ideally every 2-8 minutes. When transit fulfills both of these objectives and has good coverage throughout the region, riders can easily get where they need to go without worry.

Connected transit refers to connections to other transit lines and modes, as well as high-quality first/last mile connections. The latter is essential for creating high ridership; if people can't walk or bike to the nearest

transit stop, they won't ride transit—even if the transit itself is fast and frequent.

How: Rail transit can easily be fast and frequent if it is fully grade-separated from other modes. Grade separation is a design where a railroad track crosses roadways at a different elevation, typically using an overpass or underpass, so that trains and vehicles can pass through the intersection without having to stop at the same level. A subway system is grade separated, as the trains in tunnels never have to interact with cars on the surface, thereby minimizing delay.

The problem with buses: Bus systems, tend to fail during peak travel times, leaving commuters frustrated. This is because buses use the same roads and lanes as cars, meaning they are no faster than car traffic, and travel time is unpredictable - making people late for work or an appointment. That's why riders generally prefer rail over buses. However, a single subway line costs billions of dollars and takes decades to build. For instance, the D Line/Purple Line extension is expected to cost \$9 billion. Buses are a more cost-effective alternative—if they are given their own lane.

Connectivity: As discussed above, an essential component to creating a high-quality transit system is connectivity. The walkability chapter of this report discussed how people are willing to walk between 3 and 15 minutes to reach a bus stop, depending on the pleasantness of their surroundings. For a transit stop, if the area surrounding a stop has bleak land uses like warehouses or surface parking lots, and a lack of residents, few people will access the station. This effect is seen on the Denver Metro system; though it is relatively fast, safe, and frequent, it suffers from low ridership due to poor station-adjacent land uses and streetscapes. If, however, the streets adjacent to a station are home to bustling businesses, wide sidewalks, tree coverage,

low-traffic volume streets, and numerous homes, ridership will increase. The same logic holds for bike lanes; as discussed in the Bikeability Chapter, most people won't ride a bike if the route is unsafe. Safe bike infrastructure around a transit stop will increase the number of people who can easily access it, as a 15-minute bike ride is about a 3-mile radius around the station, while a 15-minute walk is around 1 mile.

BRT: A Mobility Miracle

There is one system that mirrors the speed and reliability of a train at the cost of a bus: a Bus Rapid Transit system, or BRT. In the 1990s, Los Angeles imported this concept from Curitiba, Brazil and Bogota, Colombia on its Metro J Line (Silver Line) and later on the G Line ((Orange Line). A BRT is a simple concept: paint a bus lane, and time the traffic lights for the buses. Buses zip along in their own lane, never hitting a traffic light except when they get to a bus stop. For the BRT rider, it feels like a Light Rail because the bus never stops between stops. BRTs are also on time, so riders can relax, knowing exactly when they will arrive and that they will never be late. A fully built out BRT system feels like a “subway on the street.”

Getting Buses Out of Traffic

Bus Lanes: LADOT already understands the power of bus lanes and plans to have 120 miles total by 2035. However, that target was set back in 2015 and since then, the city has only constructed 29 miles (not including the J-Line, which mostly runs in a freeway).

Painting a bus lane is simple, inexpensive, and can happen essentially overnight – although they take time to plan, the actual build-out can happen in a few weeks. The city simply paints one traffic lane orange or red, and it becomes a dedicated **bus-only lane** – cars are then fined if they drive in the lane.

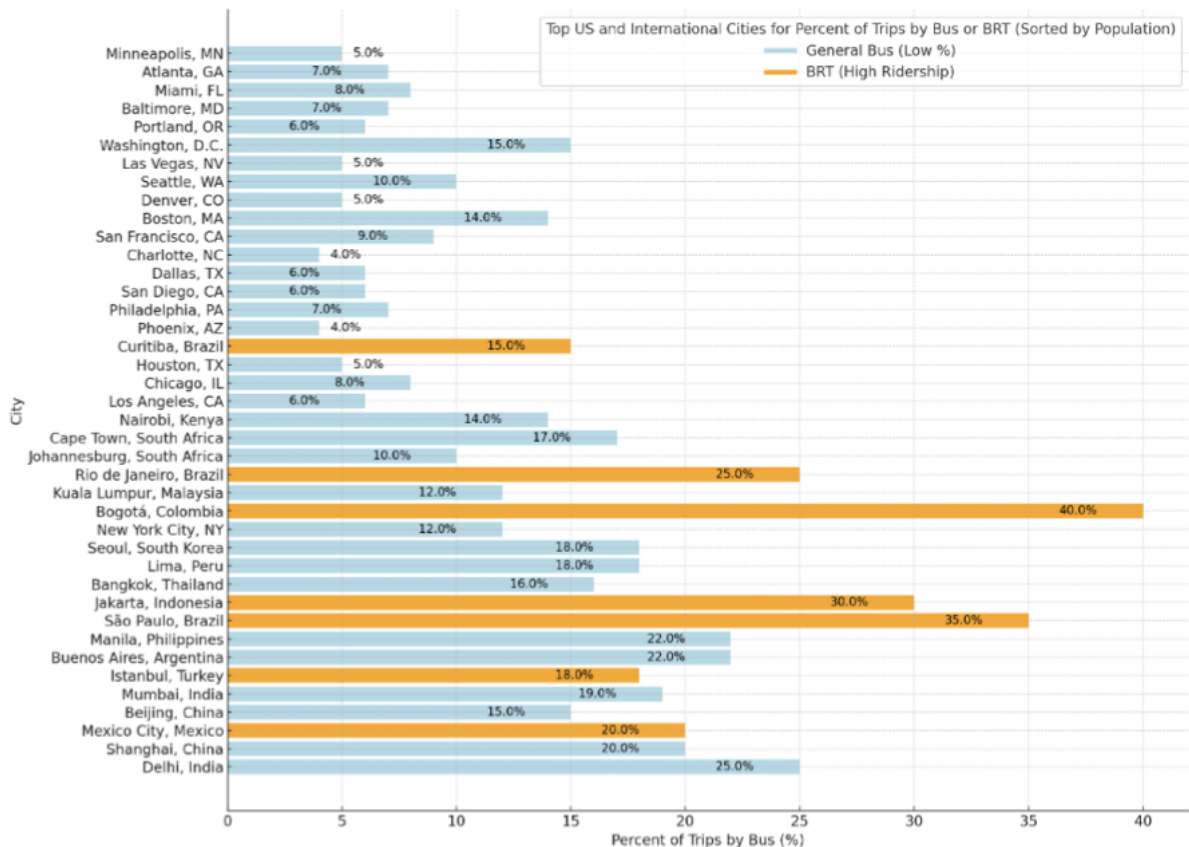
Additional enhancements include separating the bus lanes from car traffic with physical buffers (to physically prevent cars from blocking the bus) and creating high quality bus stops, or bus islands for center-running lanes. These bus stops can have seating, heating and cooling, food carts, phone charging, and real time information - making the experience pleasant and inviting.





The best BRTs have center-running lanes with signal priority, enforcement, and high-quality stations; a bus with signal priority tells upcoming stop lights to stay green if they are green, minimizing time spent waiting. San Francisco has implemented a full, center-running BRT along Van Ness in the heart of the city.

While buses struggle with ridership and in the US rarely get over 10% mode choice, a high quality BRT scales and can reach as high as 40% of trips (Bogota). The following chart, with BRT in orange and regular bus in blue, shows the popularity of buses vs BRT in the top 40 systems in the world.



LA's Current BRT Plans

LA Metro has created ambitious plans for BRTs including the BRT Vision and Principles Study in 2020, outlining goals and possible projects such as the Vermont Transit Corridor to bring upgraded bus service along Vermont Avenue, Metro's second busiest transit route, as well as the North Hollywood to Pasadena Corridor that would connect the San Fernando Valley to Pasadena. However, like most BRTs, these projects are bogged down in delays:

Project Name	Length (miles)	Start Date	Expected Completion	Total Duration (Years)
Vermont Avenue BRT	12.4	Early 2025	2028	12
North Hollywood to Pasadena BRT	18	Fall 2023	2027	11
G Line (Orange Line)	N/A	2023	2027	11
Lincoln Boulevard BRT	N/A	January 2027	December 2029	13



BRT VISION AND PRINCIPLES STUDY

FIGURE 3: TOP 30 BRT VISION & PRINCIPLES STUDY CORRIDORS MAP



BRT Highest Ranked 30 Corridors

3rd Street	Figueroa	Long Beach Blvd	Sunset
7th Street	Florence - Whittier	MLK	Venice Blvd
Alvarado/Hoover	Garvey	Main	Vernon
Anaheim	Hawthorne	Olympic	Washington Mid City
Atlantic	Jefferson	Pico	West Olympic
Avalon Blvd	Jefferson/Slauson	Prairie	Western to Green Line
Broadway	La Brea	Santa Monica	
Century	La Cienega Culver City	Soto	

What Went Wrong with Quick Build BRT?

Metro also adopted the Quick Build BRT initiative¹⁴ to use temporary, low-cost materials like paint that are [quickly](https://docs.google.com/document/d/1frGitKEqD_HJ-aJfEII8QfrZB8k4AVUoUq39tRFH6gs/edit?tab=t.0) installed to implement a new street design cheaply, docs.google.com/document/d/1frGitKEqD_HJ-aJfEII8QfrZB8k4AVUoUq39tRFH6gs/edit?tab=t.0 and make it easily reversible if needed. But Metro was forced to scale back its designs due to community concerns over parking and traffic lane reductions. Funding constraints have resulted in slow implementation and limited infrastructure upgrades. While even a block of bus lane can save a bus from traffic delays, the limited sections of bus lane currently built don't cover enough route mileage to meaningfully shorten schedules, and the buses that use them are still at the mercy of delays from other parts of their route.

The importance of speed: Cities can implement BRT either piecemeal or all at once. Currently, we are doing it. LA has spent decades trying to implement BRTs, and could have a BRT network within one year, where a bus comes every 6-10 minutes along every route, connections are quick and smooth, and the buses run like clockwork – getting

riders to work, school, or outings pleasantly and reliably.

We know the problems, and we know the solution. We could have a functioning, safe, and inviting bus system overnight. We have been improving transit in LA for decades, yet most Westside arterials remain choked during rush hour. We need to take action for climate and air quality and quality of life, and BRT is the miracle transit solution.

Recommendations for Transit:

- 1. Quick Build BRT initiative** to quickly deploy side-running painted BRT lanes on major corridors before the 2028 Olympics. Better yet, implement the top 15 BRT corridors identified in the 2020 Vision and Principles Study.
- 2. Implement the 2020 Vision and Principles Study:** LA can follow through on the well-researched project concepts in the City's vision study. The City can establish a network of BRTs along major routes directly connecting to Metro stops in Central and West LA—the city's most congested job centers. Anyone within walking distance of a line would have easy BRT access and would be far more likely to take transit than they



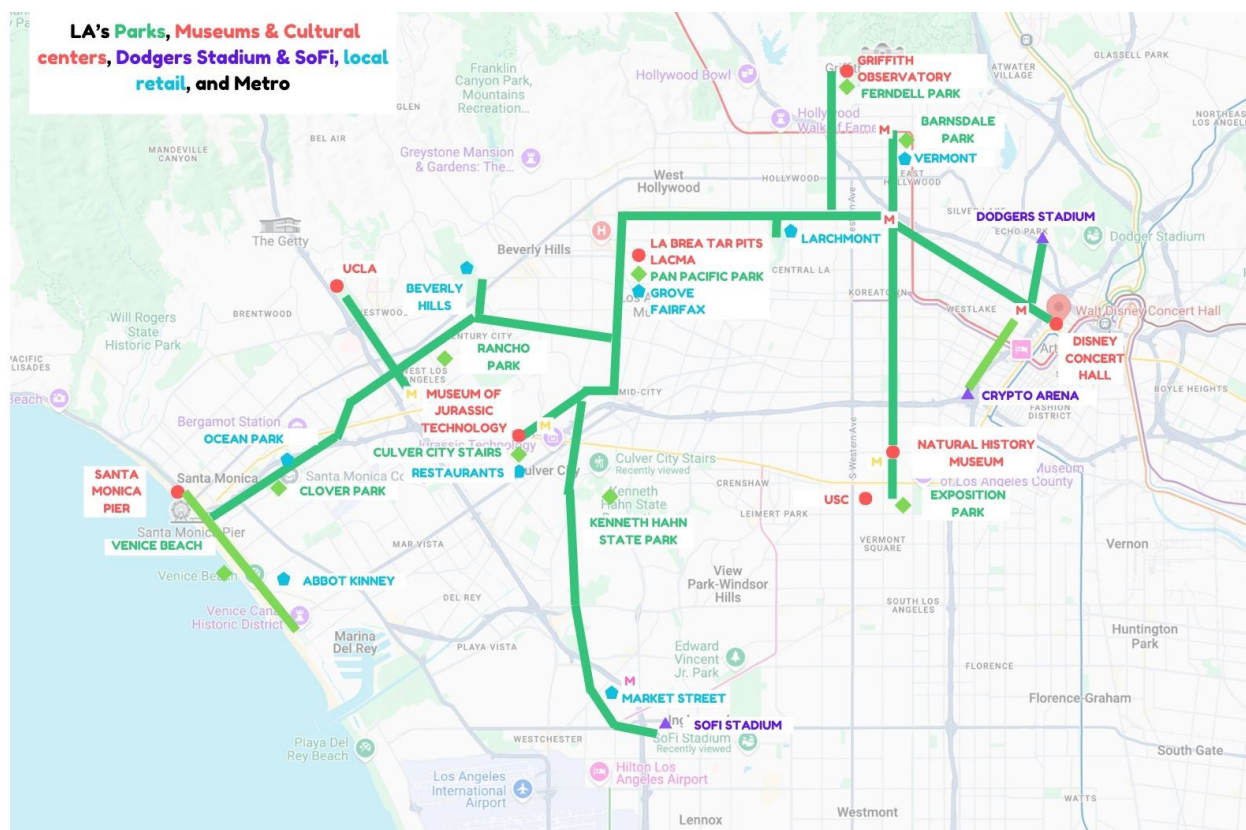


are today. This would of course make the buses faster and more reliable. It's better for riders, but it's also cheaper to operate. That's because faster buses require fewer service hours to achieve the same frequency and less schedule padding to achieve the same reliability.

- 3. Adopt a "Tactical Urbanism" approach** of implementing temporary Pilot Projects that experts have confidence will work and result in long-term support. The community engagement process around these projects should also be changed because the current system is not equipped to allow for accurate feedback. A Pilot bus lane, for instance, allows residents to experience changes firsthand and provide informed feedback. "Seeing is believing," and a firsthand experience with visible benefits allows for more accurate feedback and engagement.

One option for a Pilot is to use the summer time because traffic congestion drops considerably as kids are out of school and people go on vacation. Cities can test out a network of BRT or bus lane routes – possibly between key LA summer destinations like the beach, stadiums, parks, and museums. The Pilot could last 4-6 weeks, while the city collects feedback, and then be extended if it's popular. (This Pilot could also include a network of closed "Cic LA Via" streets for biking.)

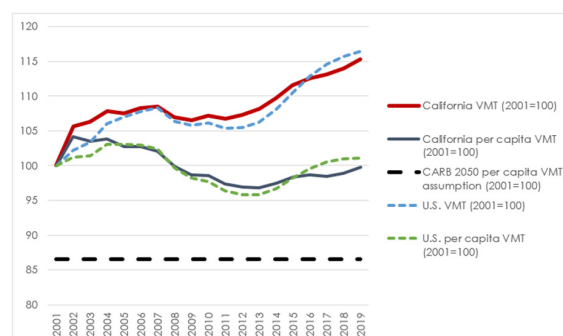
- 4. Full BRT:** If a city wants to truly change mobility, it can implement center running BRTs with signal priority and high quality stations. LA already has the mobility plan that specifies priority routes and BRT standards including station design, operations, signal priority, and more. These plans just need to be implemented.



Summary of Recommendations: Everything everywhere all at once – a Value Proposition

There are only a few realistic ways to address traffic: high quality transit with safe and inviting access by walking and biking, which has infrastructure to form useful networks across the city; and changing zoning rules to allow for more housing closer to a combination of transit, errands, and jobs. We recommended combining all of these.

The value proposition for voters and stakeholders starts with understanding that traffic is unsolvable: we can't widen streets or speed cars up to get more cars through the system. We also can't address climate without addressing passenger vehicle emissions which make up 28% of CA emissions alone.* Sitting in traffic strains our mental health and reduces our happiness. The incremental changes Los Angeles has made so far are not reversing vehicle miles travelled (VMT).



On the other hand, the body of research regarding walking, biking, and transit show that there are “glitches” in the system preventing walking, biking, and transit from working for the vast majority of people. Meanwhile, there are essential components that, if implemented, directly address these glitches, creating popular and viable non-car mobility networks. For voters, these unsolvable the issues could have a solution if they jump in with both feet.

An LCI Pilot Street would combine these ideas along one street. Gentle Density of 3-5 stories of multi-family housing would be allowed while requiring neighborhood serving retail on the ground floor so residents have the range of their daily and weekly needs met. The streetscape can evolve to include wide sidewalks, protected bike lanes, and all the other recommendations described in this paper. Specific commercial corridors in Los Angeles could be targeted for these Town Centers particularly those which spoke off Metro stops. With a range of small retail choices and high quality walkable access to reach job centers via BRT and LA Metro people who live in the LCI could live car-free.

* And EVs cannot scale up and get built fast enough to reach climate goals.



When we talk about 15 minute neighborhoods being the most sought-after and scarce housing typologies – 40% of Americans want to live in one, yet only 6.8% do – the amenities and value is the high quality of the street. What is so special about Greenwich Village and what Jane Jacobs successfully protected from demolition in the 1960s is charming,

walkable streets where people can stroll, linger, and come together. And combining **great streets** like these, with **high quality** housing makes it realistic and imaginable to live without a car.

If we had streets like this, why wouldn't we add housing?



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Expert Sources

The LCI Mobility report is drawn from the writing, reporting, interviews – including from the podcast ‘Bike Talk,’ and design from professors, experts, and practitioners from around the world.

- Carlos Moreno — Professor; originator of the “15-Minute City” concept
- Donald Shoup — former Distinguished Research Professor of Urban Planning, UCLA; author of *The High Cost of Free Parking*
- Charles Marohn — Founder, Strong Towns; author of *Confessions of a Recovering Engineer*
- Brett Atencio-Thomas — Active Transportation Coordinator, Costa Mesa, CA; Principal Transportation Planner, LA Metro
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