

# SAFETY ACTION PLAN



# TABLE OF CONTENTS

- **02.** Introduction
- **04.** Update on 2023 Crashes
- **05.** A Multi-Layered Approach to Safety
- **07.** A Vision For Safer Streets
- **15.** A Plan for Safer Users & Equipment
- **18.** A Commitment To Equity
- **20.** Summary of Action Steps

# I. INTRODUCTION



Our roads are incredibly unsafe. **BikeLA recently analyzed the <u>26 bicycle-related</u> <u>fatalities in LA County from 2022</u> and identified that infrastructure deficiencies are the main culprit behind most serious collisions on our roadways. Critically, serious and fatal bicycle collisions were clustered on roadways with high speed limits, multiple travel lanes in each direction, missing bike lanes, and poor street lighting. When these factors are combined, they create dangerous conditions for all road users and demand prompt attention from local governments and elected officials.** 

While our previous report focused on fatal collisions due to the accessibility of data and intention to honor the lives lost due to road violence, we know cyclists face safety issues everyday. We recognize the countless number of bicyclists involved in crashes large and small on our roadways, many of which go unreported. Collisions can have a life altering impact on cyclists including permanent disability and fear of returning to cycling. BikeLA's ultimate mission is to develop a transportation system that eliminates the risk for serious collisions; however, we must also provide continued support for all cyclists involved in collisions.

Just under 40 miles of bike lanes were added or improved in the City of LA last year. This is <u>down over 90% from 2012-13</u> and highlights the growing investment gap between what improvements are needed and what has actually been funded. To reach the ultimate goal of <u>zero fatal or serious roadway collisions</u>, governments at all levels need to invest far more than they currently do in infrastructure improvements and adopt proven strategies that protect bicyclists.

Tragically, fatal collisions were also found to be clustered in predominantly disadvantaged, low-income, Black/Latinx neighborhoods. These areas have suffered from a history of limited investment in public infrastructure and lack resources to drive improvements in their communities. Even when improvements are made, they are often made in isolation and fail to connect with other bike infrastructure. This simply moves the problem further down the street instead of addressing the overall problem. To move beyond this, we must escape from the egalitarian approach of providing all neighborhoods with the same amount of financial resources, instead prioritizing those that have been historically neglected and disconnected.

Beyond the shortcomings of our region's infrastructure, BikeLA recognizes the need to approach bicycle safety from the perspective of roadway users themselves. <u>Research</u> shows that providing rider education courses and informing drivers of bicycle-related rules can greatly improve safety. Likewise, ensuring cyclists wear helmets, high visibility clothing, and bicycle lights (such as through <u>BikeLA and Waymo's Operation Firefly</u>) increases awareness of bicyclists and mitigates the potential impact from collisions. Moreover, we must address the <u>growing trend of increasing vehicle size</u> and ensure emerging technologies like self-driving cars safely interact with other road users.

## Key Findings from 2022 Crash Data:

- Many collisions involved speeding drivers and were located on corridors with excessive speed limits (35+ MPH) that promote aggressive driving
- **77%** of fatal crashes took place on multi-lane roads, often with 3+ lanes in each direction
- 85% of fatalities occurred on roadways without bike lanes
- 61% of crashes occurred in majority POC neighborhoods

**BikeLA strongly advocates for a comprehensive approach to improve the safety of our roadways.** Building on the recommendations outlined in the 2023 Bicycle Safety Report, this Safety Action Plan lays out a series of recommendations and policy changes for local governments, mobility advocates, and the general public to take to achieve safer streets for everyone. While no one action will solve the problems facing our roads, we envision a broad set of strategies that together make progress and recognize the various responsibilities governments, cyclists, drivers, and advocates play.

# II. UPDATE ON 2023 CRASHES

Following a record year of 58 fatal and serious injury crashes in Southern California in 2022, there have been <u>9 recorded severe bicycle-related collisions</u> in the first three months of 2023. While this has trended down slightly, we know that one crash is one too many. Additionally, some crashes take months to report and many more go unreported. Critically, we call for increased real-time data on bicycle-related crashes and fatalities to better inform decisions around infrastructure investment, safety enforcement, and education. This starts with resuming annual bike and pedestrian counts countywide, which were <u>last conducted in 2019</u>.

Crashes continue to consist of many of the same factors including multi-lane streets and high speed limits. Additionally, many have been clustered in suburban environments. In fact, outside of the City of Los Angeles, many South Bay and San Gabriel Valley cities reported at least one serious or fatal collision so far this year.

BikeLA calls for urgent action from transportation agencies, mobility advocates, and the general public. Through improved data collection, targeted investments, and ongoing programs to support safety, we can begin to envision a future with safer roads.



# III. MULTI-LAYERED APPROACH TO SAFETY

To reach the goal of zero fatalities or serious injuries on our roadways, LA County needs to adopt a systematic approach to safety that focuses on infrastructure, human behavior, and safe vehicles and equipment.

No one solution will resolve the safety issues on our roadways; rather, complementing efforts from all relevant agencies must be planned and delivered in concert. The <u>California Office of Traffic Safety</u> and the <u>US Department of Transportation</u> both recently embraced the "Safe System Approach," which calls for proactive solutions, redundancy, and shared responsibility.

BikeLA supports this approach and encourages all relevant stakeholders (planners, elected officials, active transportation advocates, and the general public) to play a shared role in making our streets safer. Moreover, this comprehensive perspective on road safety must consider and address the historical inequities plaguing our transportation system through targeted investments and greater focus on uplifting community voices.



## 01 Safe Streets

- Investing in infrastructure upgrades including new protected bike lanes and neighborhood bicycle boulevards.
- Improving roadway operations by lowering speed limits, increasing roadway maintenance funding, and adopting new technologies to encourage safer driving and equitably enforce traffic laws.
- Pay special attention to high risk areas including school zones, major intersections, and transit stations.
- Recognize that streets are used by everyone, not just cars

# 02 Safe Users

- Providing bicyclists with free education courses that demonstrate proper riding techniques and best practices for safety
- Increase driver awareness of traffic laws through public education campaigns



## **03** Safe Equipment

- Stress the importance of wearing helmets as a last line of defense for bicyclist safety
- Ensuring vehicles are built with safety in mind, especially as they become more technologically advanced
- Increasing rider visibility by encouraging the use of bicycle lights and high visibility clothing



# IV. A VISION FOR SAFER STREETS

LA County's road network is incredibly complex, with over 21,000 miles of roadways and countless transportation agencies responsible for maintenance and operation. Longstanding practices that prioritize vehicle throughput have come at the expense of unsafe roads for transit users, pedestrians, and bicyclists. Yet, our streets present an immense opportunity to transform our city and reclaim space for active transportation modes. BikeLA has laid out a vision for our streets, with a focus on safety and mobility for all, not just cars.

## I. Major Arterial Streets

Arterial streets, or streets with high traffic volumes (>20,000 vehicles daily), multiple travel lanes, complex intersections, and frequent public transit are essential in supporting broader regional transportation, yet are the most dangerous environments for all roadway users. The high speed limits, wide travel lanes, and numerous conflict points make it difficult to identify bicyclists and pedestrians. Improvements must be carefully planned to protect vulnerable road users while still maintaining high throughput. As such, strategies should focus on separating various road users and increasing visibility at high risk points (intersections, driveways, transit stops).

## Potential Strategies Include:

- 1. **Improved Bike Lane Design**, such as with parking protected and/or buffer separated bike lanes
- 2. Shared Bike/Bus Lanes that provide space for bicyclists and enhanced public transit when street space is limited
- 3. **Urban Boulevards**, with slow speed frontage roads for bicyclists and local traffic
- 4. Intersection Enhancements including protected bike intersections and two-stage turn boxes
- 5. Enhanced Street Lighting and Signage
- 6. Leading Bicycle/Pedestrian Interval to give vulnerable users a head start in crossing the street.

## Successful Projects in LA County:

- 1. **Venice Blvd.** (from La Cienega Blvd. to National Blvd.)
- 2. **Reseda Blvd.** (from Victory Blvd. to Parthenia St.)
- 3. **Bellflower Blvd.** (from Atherton St. to PCH, Long Beach)



**Figure 1**: Recently completed parking separated bike lanes on Venice Blvd.

**Figure 2**: Example of Shared Bike/Bus lane on roads with limited space in Boston, MA

**Figure 3**: Urban Boulevard Concept with parallel access roads that provide safe spaces for cyclists

**Figure 4**: Protected Bicycle Intersection on major arterials in Fremont, CA



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PAGE 8









**Figure 1:** Road diet along Avalon Blvd. In 2020, one travel lane in each direction was converted into a buffered bike lane.

**Figure 2:** Along bicycle boulevards, traffic circles and diverters help slow down cars and enable bicyclists to safely navigate intersections.

**Figure 3:** Example of a partial street closure in Portland, OR that only permits bicycle and pedestrian traffic to cross the major street.

**Figure 4:** Enhanced crosswalk with hybrid beacon in Beverly Hills, CA

**Figure 5:** Speed humps and other traffic calming strategies help all users share the road; Portland, OR



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PAGE 9

## **II. Minor Arterial & Collector Streets**

Collector streets serve as vital connectors in the street grid. Benefitting from relatively lower traffic volumes (1,500 - 20,000 average vehicles per day) and little through traffic, improvements should focus on calming all traffic so space is safely shared. Additionally, these corridors should be the center of speed reduction efforts, as many of them serve critical destinations like schools, retail centers, and community services.

### **Potential Strategies Include:**

- 1. Road Diets and Lane Conversions that replace excess travel lanes with dedicated bike facilities.
- 2. Improved Bike Lane Design including physical buffers and enhanced intersection treatments.
- 3. **Roundabouts** and other intersection calming techniques that slow down drivers and reduce dangerous conflict points.
- 4. Lower speed limits and speed reduction tools including curb extensions and narrower lanes.

## Successful Projects in LA County:

- 1. **E Broadway** (from Alamitos Ave to Obispo Ave, Long Beach)
- 2. **Avalon Blvd** (from Jefferson Blvd to 120th St, Los Angeles)
- 3. **Cordova St** (from Hill Ave to Arroyo Pkwy, Pasadena)

## **III. Local Streets**

With overall low traffic volumes (<1,500 average vehicles per day) and primary purpose of connecting residences to the broader transportation system, local streets create natural environments where people can safely ride bikes. However, improvements can still be made to limit cut through traffic and ensure bicyclists are protected at intersections with larger streets. Moreover, efforts to maintain low driver speeds must be made.

## **Potential Strategies Include:**

- 1. **Bicycle Boulevards** or specially designated local streets that prioritize bike travel and serve as alternatives to busier streets
- 2. **Traffic calming devices** such as speed bumps, median islands, and neighborhood traffic circles.
- 3. Closing local streets to through traffic and **installing traffic diverters/barriers**.
- 4. **Special treatments at intersections with major streets** including median islands and hybrid beacons

## <u>Successful Projects</u> <u>in LA County:</u>

- 1. Michigan Ave. Neighborhood
- **Greenway**, Santa Monica 2.**6th Street Bicycle**
- Boulevard, Long Beach
- 3. Willoughby Ave, Kings Rd, Vista/Gardner Street Design Project, West Hollywood & Los Angeles

# ACTION STEPS FOR SAFER INFRASTRUCTURE

BikeLA recommends four key policies that can transform our streets to better serve all users.

## Action #1: Create a county-wide speed reduction strategy that pairs speed limit changes with design modifications and employs new technology to equitably enforce speed limits.

The issue of excessive speed is well researched and documented. In 2020, speeding was a contributing factor in <u>29% of all traffic fatalities</u> according to the National Highway Traffic Safety Administration, with many of these crashes concentrated along corridors with higher speed limits. Critically, small changes in the speed limit can have consequential impacts on roadway safety. A <u>2004 study</u> found a 10% reduction in average speeds resulted in 34% fewer fatal crashes, likely due to increased driver visibility and reaction times.

Even when posted speed limits are reduced, <u>drivers will likely speed anyways</u> if the road is improperly designed to favor high speeds, reducing any benefits gained from simply changing speed limit signs. However, when traffic engineers pair lower speed limits with traffic calming strategies including raised crosswalks and curb extensions, drivers have no choice but to slow down.

Explore **broad speed limit reduction policies** with default speed limits of 20 MPH for residential streets and 25-30 MPH for neighborhood main streets.

Prioritize **slow speeds in school zones (15 MPH)** and areas with high bike and pedestrian volumes.

Plan street improvements with **traffic calming measures** in mind, including narrower lanes, median islands, and roundabouts.

Adopt **new technologies** to increase awareness and enforcement of speed limits including radar speed signs and automated enforcement cameras.

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## Action #2: Embrace road diets and lane conversion strategies on more corridors in LA County, leveraging their high value and rapid implementation timeline.

In 2022, 77% of fatal collisions involving bicyclists took place on multi-lane roadways in LA County. Yet, many roadways in the region are currently overbuilt with excess travel lanes, creating vulnerable conditions for cyclists and disproportionately prioritizing auto movement. For most roads with low to moderate traffic volumes (<20,000 vehicles per day), <u>one lane in each direction is sufficient</u>. BikeLA calls for "road diets" or transformations of overbuilt roadways into <u>complete streets</u> that serve everyone.

Converting extra travel lanes into enhanced bike facilities helps calm traffic and restore wasted road space for more productive uses. Additionally, there are substantial safety benefits associated with road diets. Several studies highlight that overall crashes on corridors with road diet treatments see <u>19%-44%</u> fewer crashes.

Adopt a **county-wide vision for road diets** with uniform design principles, prioritizing minor arterial and collector streets that currently have 4+ lanes

Evaluate current traffic volumes on roads that are scheduled to receive major reconstruction and implement **low-cost design changes** as part of the project

Incorporate the **voices of residents and local businesses** when planning road diets, ensuring access and safety needs are addressed in designs.

# After Road Die Without State Mage Source: LADD

Image Source: KCRW Public Radio

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PAGE 13

## Action #3: Develop enhanced design standards for bike infrastructure and consider safer alternatives to traditional bike lanes.

While traditional bike lanes provide designated space for cyclists to travel on busy roadways, <u>most bike lanes are inadequate</u> and offer little protection from high speed and turning traffic. Riders, especially those that are new to cycling in Los Angeles, will ultimately feel safer when extra space is provided between drivers and themselves. BikeLA recommends focusing on improving the quality of new and existing bike lanes to attract new riders and create a safer Los Angeles.

Make high quality, **protected bike lanes the default choice** for all road improvements in the county

Improve the quality of barriers separating bicyclists from vehicles, opting for higher quality alternatives like parked cars and raised curbs

Explore alternatives including **bicycle boulevards and shared use/bicycle paths** that move bicyclists away from high traffic volume streets

Ensure bike lane improvements are **planned in the context of a broader network**, closing regional gaps and avoiding "bike lanes to nowhere."

Consider how to best **accommodate bicyclists at intersections** by protecting turning movements and increasing visibility for all road users.

## Action #4: Improve visibility conditions on roadways by properly maintaining street lighting, lane markings, and signage.

Planning and building high quality infrastructure is not enough to ensure the safety of all road users. We must also focus on improving the operations and maintenance of our roadways, specifically in the areas of street lighting, signage, and lane markings. BikeLA strongly recommends increased funding for road maintenance and operations, ensuring that this money is allocated equitably for all communities and road users.



Ensure every city has **up-to-date information on the current status of street lights** and universally adopt the use of high quality LED bulbs.

**Increase the frequency of road re-striping** to enhance visibility and adopt improved standards for marking bike lanes (i.e. green paint at intersections)

Evaluate current signage on roadways and **replace worn down and/or confusing signage** with clear and highly visible solutions

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# V. A PLAN FOR SAFER USERS & EQUIPMENT

**Safe streets means more than just safe infrastructure.** To fully address the issues plaguing our roadways, we must also look to educate cyclists on best practices for safe riding, inform drivers of road rules, and protect all road users with technology and safety gear.

BikeLA has been a leader in the space of cycling education and training. Through past programs and partnerships including Metro BEST (see page 17) and the LAUSD After School Bike Club Program, we have educated thousands on the importance of riding safely and defensively. Additionally, through our chapter and community partners, we seek to empower cyclists of all skill levels with education materials and community events. As part of our plan to build safer streets, we urge a strong recommitment from the public and private sector to expand investment in bicycle education programs. Educating drivers on proper traffic laws and how to properly yield to cyclists is also a proven strategy to lower serious collisions that must be reinforced.

Beyond education, we must also expand efforts to equip cyclists with safety tools, such as bicycle lights through BikeLA and Waymo's Operation Firefly Program (see below). Ensuring riders wear high visible clothing and helmets as a last line of defense can also reduce the risk of serious and deadly crashes. Finally, as our cars get smarter, we must develop this technology in a way that recognizes and safely interacts with cyclists.



BikeLA and Waymo's Operation Firefly provides free bicycle headlights and safety education to Angelenos. Since the program launched in 2012, over 12,000 cyclists have received free lights.

# ACTION STEPS FOR SAFER USERS & EQUIPMENT

Through the work of community advocates, the public sector, and the general public, BikeLA recommends two key steps.

## Action #5: Build on past cycling safety education and public engagement efforts, with extra focus on youth, minority communities, and riders with disabilities.

To transform Los Angeles' active transportation system and support cyclists of all ages and abilities, BikeLA recommends doubling down on safety education programs to best support newer cyclists. Through these programs, riders learn the fundamentals of navigating streets by bike, how to safely prepare their bike for travel, and how to avoid dangerous situations on the road. Additionally, providing frequent engagement and group ride programs for cyclists also helps build the broader cycling community, which is key to elevating confidence and interest in cycling. Educating drivers must also be part of the solution, with public awareness campaigns and reinforcement of safe driving practices.

Cycling education has proven to be highly successful, especially when it is targeted towards high needs groups including children. In fact, a <u>study evaluating the Safe Cycle</u> <u>program in Australia</u> shows students that participated in the education training course were more 49% likely to ride their bike long-term and had increased confidence.

Develop an **updated bicycle education curriculum** and expand opportunities for students to gain training through in- and out-of-school programs

Forge partnerships between the community organizations and public agencies to **increase safety course offerings and digital education materials** 

Concentrate **bicycle education and engagement events** in areas that target priority groups including minorities, low-income riders, and riders with disabilities

**Expand traffic safety education campaigns** through advertising and social media, with a focus on teaching bicycle-related road rules and best practices

## Program Highlight: Metro BEST (Bicycle Education & Safety Training)

From 2017-2022, BikeLA partnered with LA Metro to deliver a series of free bicycle education courses for Angelenos. The program supplements infrastructure investments by directly addressing the fear many potential cyclists experience through training courses, <u>educational</u> <u>materials</u>, and bike tours. BikeLA strongly urges Metro to recommit to long-term investments in bicycle education programming to reduce potential barriers to cycling and make navigating LA by bike easier and safer.



## Action #6: Reinforce safety with improved vehicles and equipment, focusing on increasing visibility and reducing the potential for serious injury.

Designing safer cars and bicycles is one way to improve safety for cyclists. When struck by larger vehicles including SUVs and trucks, pedestrians are <u>two to three times more likely</u> <u>to die</u> when compared to a standard passenger car. Reducing the size of vehicles to increase overall visibility and ensuring driver assist and self-driving technologies are safe is paramount for protecting cyclists and pedestrians.

Critically, we also must not ignore the tried and true methods for safety including helmets, high visibility clothing, and bike lighting. Studies highlight the multiple benefits of wearing <u>helmets</u> and <u>bicycle lights</u> with significantly fewer serious injuries. These interventions seek to supplement (but not substitute) other improvements in infrastrucutre and education, helping reduce chances for fatalities and serious injuries.

**Update vehicle safety regulations** and increase vehicle safety testing to promote smaller designs and improved technology standards

**Promote the use of helmets for all cyclists** and emphasize that they serve as a critical tool for preventing serious collisions

**Distribute safety equipment including high-visibility vests and bike lights** to cyclists through expanded partnerships with community groups

# VI. A COMMITMENT TO EQUITY

Infrastructure investments, education efforts, and outreach programs must reach all communities in order to achieve a truly safe city. In fact, the most marginalized communities must receive extra attention to close gaps caused by decades of underinvestment and address greater roadway safety concerns. Moreover, low-income and minority communities are often more dependent on non-car transportation modes, making the need for safe and inclusive streets even more paramount. Through deliberate policy actions that prioritize investments in these neighborhoods and safely connect them to the broader street grid, we can achieve the goal of zero roadway fatalities for all communities. At the same time, transportation agencies and community partners have an obligation to respect the unique needs of these neighborhoods and incorporate community feedback in the planning process.

BikeLA's past research highlights the geographic challenges and disparities of road safety in the county. The top four crash hot spots identified in <u>2023 Bicycle Safety Report</u> (Ave H & J in Lancaster, Figueroa St in Downtown LA, Figueroa St and MLK Jr Blvd in South Central LA, and Anaheim St in Long Beach) are all located in predominately Black and Latinx neighborhoods, suggesting that **the issue of unsafe roads is chronic and concentrated**.

<u>Comparing Two Cities:</u>			
	Carson, CA	Santa Monica, CA	
Population (2021)	93,535	91,105	
% of Population Black/African American	22.4%	4.5%	
% of Population Hispanic or Latino	37.9%	16.6%	
% of Roadways with Bike Infrastructure*	6.2%	79.4%	
Miles of Protected Bike Lanes Built or Planned by 2025	0 miles	21.6 miles	

\*Includes all types/classifications of on-street bike infrastructure including Class II traditional bike lanes, Class III marked/signed bicycle routes, and Class IV protected bike lanes

Data Source: US Census Bureau, City of Carson General Plan, City of Santa Monica Bicycle Action Plan Amendment

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# ACTION STEPS FOR EQUITABLE CYCLING

BikeLA urges action on a series of policy changes that increase funding and resources for underinvested neighborhoods.

## Action #7: Review all transportation policies and expenditures with a focus on equity and regional inclusivity.

Despite experiencing more dangerous road conditions, many low-income and minority communities suffer from a chronic lack in regular funding for road improvements. Moreover, these communities are often more likely to rely on alternative transportation modes including public transportation, cycling, and walking. This has resulted in immense inequality, with a <u>2021 study</u> evaluating bike lane improvements across 29 US cities claiming that "lower-income White [neighborhoods] had 45.9% more bike facilities installed than lower-income POC [neighborhoods]" over a 10 year period.

Through the California <u>Active Transportation Program</u> (ATP), the state invests over \$400 million dollars annually in bike and pedestrian improvements, carefully analyzing and prioritizing projects in disadvantaged regions. While certainly a great start, most other funding including traditional street repairs are allocated at the same level per city council district. This critically ignores the problem that some communities are especially lacking in bike infrastructure.

Develop a <b>comprehensive Capital Investment Strategy</b> that is centered on
providing additional resources for higher need neighborhoods

Hold regular <b>public workshops and adopt inclusive strategies like</b>
participatory budgeting in neighborhoods to solicit community feedback on
potential improvements

**Evaluate current federal, state, and local funding sources** for active transportation projects and ensure they evaluate funding proposals with a concern for closing equity gaps



**Restore formal bike/pedestrian counts and expand data collection efforts** to understand variations in active transportation usage across neighborhoods and identify dangerous hot spots

# **SUMMARY OF ACTION STEPS**

## Infrastructure Investments:

	Primary Stakeholder	Timeline	Cost
Action #1: Create a county- wide speed reduction strategy that pairs speed limit changes with design modifications and employs new technology to equitably enforce speed limits.	Transportation Agencies, Public Works Departments, Engineers/ Planners		\$\$
Action #2: Embrace road diets and lane conversion strategies on more corridors in LA County, leveraging their high value and rapid implementation timeline.	Transportation Agencies, Public Works Departments, Engineers/ Planners		\$
<b>Action #3</b> : Develop enhanced design standards for bike infrastructure and consider safer alternatives to traditional bike lanes.	Transportation Agencies, Public Works Departments, Engineers/ Planners		\$\$\$
Action #4: Improve visibility conditions on roadways by properly maintaining street lighting, lane markings, and signage.	Public Works Departments		\$\$

## Education & Safety Programs

	Primary Stakeholder	Timeline	Cost
Action #5: Build on past cycling safety education and public engagement efforts, with extra focus on youth, minority communities, and riders with disabilities.	Transportation Agencies, Non-profits, Schools, Community Organizations		\$
Action #6: Reinforce safety with improved vehicles and equipment, focusing on increasing visibility and reducing the potential for serious injury.	Transportation Regulators, Transportation Agencies, Non-profits, Community Organizations		\$\$

## <u>Equity</u>

	Primary Stakeholder	Timeline	Cost
<b>Action #7:</b> Review all transportation policies and expenditures with a focus on equity and regional inclusivity.	Transportation Agencies, Non-profits, Elected Officials, Planners		\$\$

A safer city relies on a comprehensive set of solutions ranging from infrastructure to human behavior. BikeLA remains committed to achieving this vision for LA County.

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BikeLA strives to make LA County a safe, healthy, fun, and equitable place to ride a bike through research, education, and advocacy. Consider supporting us today.





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