

## #64

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### Q1

Define the problem: [Outline the challenge(s) your recommendation will address. Insert links to reports where appropriate.]

Per 100,000 population, older adults have the highest pedestrian fatality risk of all age groups (Traffic Safety Facts-Pedestrians [NHTSA, 2019]) Risk per unit of exposure, e.g., street crossings, is even higher. This issue is even more critical as adults are encouraged to increase their physical activity for better health (CDC, Adults Need More Physical Activity, <https://www.cdc.gov/physicalactivity/inactivity-among-adults-50plus/index.html>).

### Q2

Pick your Master Plan for Aging goal(s): [Check the goal(s) your recommendation aims to fulfill. View MPA Framework document for reference]

**Goal 1: Services & Supports. We will live where we choose as we age and have the help we and our families need to do so.**

**Goal 2: Livable Communities & Purpose. We will live in and be engaged in communities that are age-friendly, dementia-friendly, and disability-friendly.**

**Goal 4: Economic Security and Safety. We will have economic security and be safe from abuse, neglect, exploitation, and natural disasters and emergencies throughout our lives.**

### Q3

Choose your MPA Framework objective: [Check the objective(s) your recommendation will accomplish. View MPA Framework document for reference.]

**Objective 1.1: Californians will have access to the help we need to live in the homes and communities we choose as we age.**

**Objective 2.1: California's neighborhoods will have the built environment to fully and meaningfully include older adults, people with disabilities, and people of all ages.**

#### Q4

Outline your recommendation: [In one to two sentences, sketch out your idea for the Master Plan for Aging.]

The recommendation is to (i) identify cities that have a disproportionate number of older adult pedestrian deaths, and (ii) request that Caltrans allocate additional resources through the Highway Safety Improvement Program (HSIP) and/or the Active Transportation Program (ATP) to fund systemic improvements. While the aim is to protect older pedestrians, these improvements will benefit everyone.

#### Q5

Identify and quantify your target population: [Describe which groups of Californians will be impacted by this recommendation, with numbers if available.]

The number of residents age 65 and older is expected to double between 2012 and 2050, and the number of those age 85 and above is expected to increase by over 70% between 2010 and 2030. Improving pedestrian safety through improved infrastructure, education, and enforcement should benefit aging pedestrians in California, in addition to reducing risk for the entire population.

#### Q6

Share your recommendations for an age-friendly California: [Insert detailed bullet points describing your Master Plan for Aging ideas.]

- Conduct detailed analyses of pedestrian fatalities based on risk by city/county, by total number and number per 100,000 population, and by location, since areas of risk tend to be concentrated geographically.
- Compile and evaluate the analyses in an annual report.
- Distribute the report to Caltrans, the Office of Traffic Safety, and to individual cities and counties.
- Use these analyses to help direct resources from the Highway Safety Improvement Program (HSIP) and the Active Transportation Program (ATP).

## Q7

Provide any supporting evidence for your recommendation: [Add links or summaries of research evidence that support your unique vision.]

Literature on pedestrian risk:

Seniors (those over the age of 65) comprised 1,165 (17%) of all 5,977 nationwide pedestrian deaths in 2017. California's rate of pedestrian fatalities per 100,000 population in 2017 was 2.17 (the national average was 1.84). Pedestrian fatalities represented 23.8% of total traffic fatalities in the state, one of only eight states at the higher end of the ped fatalities range. The number of pedestrian fatalities was the highest in Los Angeles—116 in 2017,

(National Highway Traffic Safety Administration. 2019. Pedestrians: 2017 data. Traffic Safety Facts. Report No. DOT HS 812 681)

The Active Transportation Program (ATP) was created by Senate Bill 99 (Chapter 359, Statutes of 2013) and Assembly Bill 101 (Chapter 354, Statutes of 2013) to encourage increased use of active modes of transportation by achieving the following goals:

- Increase the proportion of trips accomplished by biking and walking.
- Increase the safety and mobility of non-motorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction.
- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

Eligible applicants include:

- Local, Regional or State Agencies
- Caltrans
- Transit Agencies
- Natural Resources or Public Land Agencies-State or local park or forest agencies-State or local fish and game or wildlife agencies-Department of the Interior Land Management Agencies-U.S. Forest Service
- Public schools or school districts
- Tribal Governments
- Private nonprofit Organizations
- Any other entity with responsibility for oversight of transportation or recreational trails

Eligible project categories include the following:

- Infrastructure Projects: Capital improvements that will further the goals of this program.
- Plans: The development of a community wide bicycle, pedestrian, safe routes to school, or active transportation plan that is located in a disadvantaged community.
- Non-Infrastructure (NI) Projects: Education, encouragement, and enforcement activities that further the goals of the ATP.
- Combination Projects: A project that combines Infrastructure and Non-Infrastructure components.

(Caltrans Active Transportation Program [ATP]. <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/atp/2019/atp-fact-sheet.pdf>)

## Q8

Give examples of local, state or national initiatives that can be used as an example of best practices: [Provide any available links and sources.] Local: State: National: Other:

Local: A data-driven, systemic analysis of the City's entire roadway network was completed as recommended by the City of San Diego's Pedestrian Safety Audit. The Audit recommended developing a robust methodology to identify high crash locations through a grant-funded study.

The City was awarded the Caltrans' Systemic Safety Analysis Report Program (SSARP) grant. City staff and its consultant evaluated the crash data on all city streets and intersections and found that pedestrians have the highest percentage of fatal and severe injuries. A total of 12% of pedestrian collisions resulted in severe or fatal injuries, while the percentage for bikes and vehicles were 6% and 3%, respectively.

The primary cause of these crashes is a left turning vehicle failing to yield to a pedestrian crossing a permissive left turn. This occurs at signalized intersections where at least one of the roadways has more than two travel lanes and the volume on the primary roadway is between 7,000 and 25,000 average daily traffic. The results from the systemic analysis shows that vehicles making permissive left turn movements under the conditions described above have a higher likelihood to come into conflict with pedestrians.

Implementation of leading pedestrian intervals (LPI) during the walk phase allows oncoming pedestrians time to get further across and be seen better by drivers attempting to make a permissive left turn. With the inclusion of an activated blank out sign allows the LPI to be implemented without further degrading the level of service at the intersections. In addition, the sign restricts the driver's movements while the pedestrian enters the intersection, thus effectively preventing the right turn vehicle versus pedestrian conflict. Countdown timers tell pedestrians how much time there is left to cross an intersection, which allows pedestrians to make a safer, more informed decision to cross or wait. High Visibility crosswalks provide important additional detection time to drivers alerting them to the likelihood of crossing pedestrians.

(The City of San Diego. 2018. Highway Safety Improvement Program (HSIP) Cycle 9 Project Application Lead Pedestrian Interval Systemic Safety. <https://www.sandiego.gov/sites/default/files/safety-grant-pedestrian-safety-improvements.pdf>)

State: California has implemented proven pedestrian safety countermeasures using a combination of engineering, education and enforcement including the following:

- Classroom and community group safety presentations.
- Positive reinforcement citations for children demonstrating safe pedestrian behavior.
- A Safetyville mock city to practice safe behavior.
- Walking school bus activities.
- Enforcement of safe driving behavior at crosswalks.
- Efforts to educate the community on how to interact with new types of infrastructure.
- In addition, Section 402 funds were used in Lancaster to purchase utility box wraps with pedestrian safety messaging, as well as for the Southern California Association of Governments to promote community outreach and traditional countermeasures.

(Governors Highway Safety Association (GHSA). 2019. Pedestrian Traffic Fatalities by State 2018 Preliminary Data.

[https://www.ghsa.org/sites/default/files/2019-02/FINAL\\_Pedestrians19.pdf](https://www.ghsa.org/sites/default/files/2019-02/FINAL_Pedestrians19.pdf))

## Q9

Provide a roadmap to implementation: [Insert any actions state agencies, legislators, counties, local government, or philanthropy can take to move this recommendation forward. Some of the entities listed below may or may not be applicable to each recommendation.] State Agencies/Departments: [action to be taken by Governor or specific state agencies] State Legislature: [legislation needed to implement recommendation] Local Government: Federal Government: Private Sector: Community-Based Organizations: Philanthropy: Other:

- State Agencies/Departments: [action to be taken by Governor or specific state agencies] Obtain funding to conduct analyses. Utilize analysis results for outreach to cities/counties and to help direct resources.
- Local Government: Use analysis results to help develop proposals for increasing pedestrian safety.
- University: Develop data analyses and reports describing patterns of pedestrian fatality by location, time of day, infrastructure, etc.

## Q10

Identify person-centered metrics: [What are the individual measures of inputs or outcomes that can be used to predict your recommended action's impact on people.]

Number of pedestrian fatalities and severe injuries in older adults. This measure can be accessed via the Statewide Integrated Traffic Records System (SWITRS). This metric should show a decline in pedestrian fatalities and severe injuries both in absolute numbers and in number per 100,000 population.

## Q11

Measuring Success: [Describe specific metrics that could be used to empirically measure the effectiveness of your recommendation]

- One measure of effectiveness will be the number of communities that apply for and receive funding for pedestrian safety improvements based on risk for older adults.
- A second measure of effectiveness is the number of pedestrian fatalities and severe injuries as measured by the Statewide Integrated Traffic Records System (SWITRS). This measure should decline over time.

## Q12

Measuring Success: [How would we know that the implementation of your recommendation is successful?]

Short term: By 2020...

**Conduct first round of analyses of pedestrian fatality and severe injury and prepare first annual report.**

Mid term: By 2025...

**Increase in number of cities/counties that have applied for and received HSIP and ATP funding based at least partially on pedestrian risk for older adults.**

Long term: by 2030...

**Measurable reduction in number, as assessed by 10-year trends, of pedestrian fatality and severe injury as assessed by SWITRS.**

### Q13

Provide data sources: [What existing data can be used to measure success or progress?]: Existing data sources: [specify datasets, variables, and data owner/location] Suggestions for data collection to evaluate implementation of this goal when no data sources exist:

Existing data sources: [specify datasets, variables, and data owner/location]

- Statewide Integrated Traffic Records System (SWITRS)

Suggestions for data collection to evaluate implementation of this goal when no data sources exist:

- Survey of cities/counties that are applying for, have applied for, or have received HSIP or ATP funding based at least partially on pedestrian fatality/severe injury risk.

### Q14

Identify potential costs and/or savings: [Provide any research, actuarial analysis or other evidence of the cost of, or potential savings from, implementing your recommendation.]

- Pedestrian fatalities and severe injuries are increasing in greater numbers in California compared with other types of traffic fatalities and severe injuries. Based on the rapidly growing older adult population—in conjunction with the higher pedestrian risk among this population—the number of pedestrian fatalities and severe injuries will continue to rise if nothing is done to address this problem. The calculated societal costs for a fatal or severe injury are very high (FHWA, Crash Costs for Highway Safety Analysis, 2018). A major savings in these costs can be realized if the number/rate of fatalities/injuries can be reduced. This is supported by the fact that countermeasures funded through the Highway Safety Improvement Program (HSIP) and Active Transportation Program (ATP) have been shown to be cost effective.

Of course, reduced costs/increased savings is one way to assess the benefit, but another significant benefit is apparent if seniors' safety increases, in addition to their perceptions of safety, so that they are more likely to walk for activities such as exercise, shopping, going to medical appointments, and socialization.

### Q15

**High**

Prioritize your recommendation: [How would you prioritize your recommendation relative to other needs/priorities?]

### Q16

Contact information: [Let's stay in touch!]

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