

# DIRECT COSTS OF MEDICAL CARE FOR PEDESTRIANS AND BICYCLISTS HIT BY A VEHICLE IN LOS ANGELES COUNTY

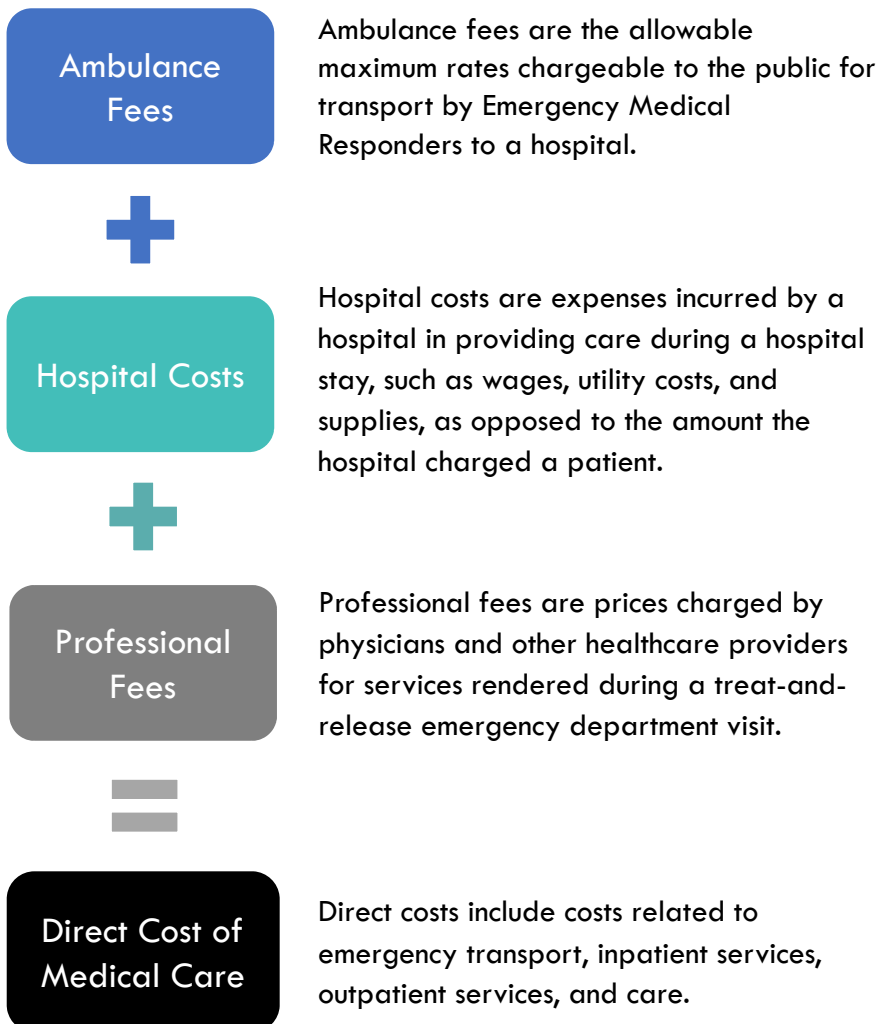
People walking and bicycling are among the most at-risk users on the street. Collisions between them and motor vehicles can result in devastating health and economic consequences. Each year, approximately 1,060 people die or are severely injured in Los Angeles County while walking or biking.<sup>1</sup> Addressing the root causes of crashes requires that we invest resources in safer street infrastructure as well as systems changes and education campaigns that promote a culture of safety.

Local governments often lack information about the extent of motor vehicle traffic collisions (MVTCS) and their associated costs, which makes decision-making on important resource investment tradeoffs challenging. To place in perspective the economic losses that result from these crashes, the Los Angeles County Department of Public Health (DPH) calculated the minimum direct costs of medical care for pedestrian and bicyclist victims of motor vehicle traffic collision in the county.

In Los Angeles County, people walking and bicycling represent **13%** of all motor vehicle crash victims, but nearly **38%** of the fatalities.<sup>1</sup>

## APPROACH

### Basic Formula for Calculating Direct Costs of Medical Care



DPH modified an approach<sup>2</sup> developed by the University of California, San Francisco:

- 1) Assign a cost for each ambulance transport to a medical facility
- 2) Convert inpatient hospital charges to hospital cost
- 3) Assign a cost for each emergency room service provided to address injury

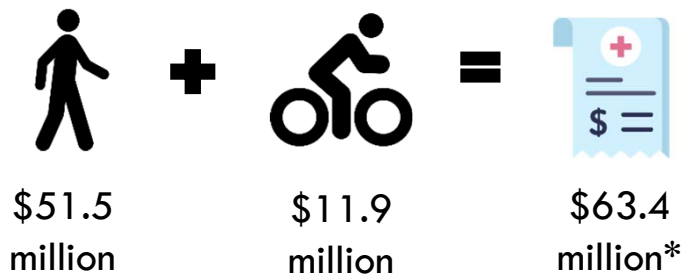
Direct costs of medical care were calculated by summing costs associated with transport by first responders to a facility, hospitalization, and treat-and-release emergency department visits.

Data was not available to calculate emergency department costs for patients treated-and-released or professional fees for patients admitted.

For more detailed information, visit: <http://publichealth.lacounty.gov/place/>

# DIRECT COSTS OF MEDICAL CARE FOR PEDESTRIAN AND BICYCLIST CRASH VICTIMS IN 2014

In Los Angeles County,



\*Approximately two-thirds (2/3) of the overall costs (\$41.0 million) are attributed to crashes in the city of Los Angeles

With \$63.4 million, on average we could...

- Plant 147,000 trees or
- Build 476 miles of bike lanes or
- Fill 491,000 potholes or
- Fix 78,000 curb ramps

## STRATEGIES TO REDUCE PEDESTRIAN AND BICYCLIST INJURIES AND DEATHS

**Invest in Safety Infrastructure:** Designing roads that reduce the impact of crashes is essential to saving lives. This means investing in infrastructure that can prevent crashes, like slowing cars down through traffic calming measures, and installing crosswalks, curb extensions and bike lanes that make it safer to walk and bike.

**Create a Culture of Safety:** Saving lives means changing culture – the broad set of attitudes and beliefs that underlie everyday decisions. Promoting a culture of safety means supporting safety infrastructure, safe behaviors by road users, and elevate the importance of safety in all decision-making.

**Practice Safe Behaviors:** Individual responsibility for practicing safe behaviors includes not driving while under the influence of alcohol and drugs, never texting while driving or crossing streets, and understanding and obeying the rules of the road.



Invest in Safety Infrastructure



Create a Culture of Safety



Practice Safe Behaviors

### References

<sup>1</sup>Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2017. Retrieved January 3, 2018. <https://tims.berkeley.edu/>

<sup>2</sup>Lopez, D.S., Sunjaya, D.B., Chan, S., Dobbins, S. & Dicker, R.A. Using trauma center data to identify missed bicycle injuries and their associated costs. *Journal of Trauma and Acute Care Surgery*. 2012; 73(6):1602-1606.

### Images

Freepik – [www.flaticon.com/](http://www.flaticon.com/)  
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