VISION ZERO SUCCESS STORY — BEHAVIORAL

Safest Driver Contest — Boston, Massachusetts

FHWA is pleased to present this vision zero success story. While behavioral initiatives don't typically fall under FHWA's purview, they play a critical role in reaching our goal of zero deaths, and our part of our shared responsibility to reduce fatal or serious injuries. For more information on safe driving behaviors, please visit our partner agency, the National Highway Safety Administration (NHTSA) at: https://www.nhtsa.gov/road-safety.

Key Successes

Two seasons of the Boston "Safest DRiver Contest" yielded the following results. During the **first season**, the top 25% of drivers showed:

47% -reduction in distraction.

37% -reduction in harsh braking.

35% -reduction in speeding.

During the **second season**, 35 days after registration, participants showed:

48% -reduction in distraction.

57% -reduction in harsh braking.

38% -reduction in speeding.

Mayor Martin J. Walsh commented, "I'm proud of our winners and their contribution to make our streets safer. The City of Boston is committed to ensuring our streets work for everyone, and by investing in programs such as Boston's Safest Driver, we will continue to emphasize the importance of safe streets, and safe driving habits."

There was positive public response to the contest. "Interest in the contest was contagious," said the 2019 Slow and Steady Driver prize winner Jenn Brandel. "Once my family and friends learned about the competition, they started trying to outdo each other and get higher scores. While I'm bracing myself for jokes about being the Slow and Steady winner, I've learned to become a more patient and careful driver."

Background

The City of Boston's Mayor's Office of New Urban Mechanics (MONUM) championed the inaugural "Safest Driver Contest." As a partnership between the Vision Zero Task Force, MONUM, and the Transportation Department, the Safest Driver Contest held its first season in 2016 and a second season in 2019. Similar contests have been held in other cities including Seattle, San Antonio, and Los Angeles.

The contest aimed to change driver behavior by offering incentives to participants who adopted safe practices while behind the wheel. Participants downloaded an app that used five performance evaluation metrics to assess each driver including braking, acceleration, speeding, cornering, and distraction. The app made calculations for these metrics based on the phone's GPS, accelerometer, and gyroscope. The app collected and stored the monitored behaviors of individual drivers for each trip.

Contest Details

Season 1 (2016): The first season of Boston's Safest Driver Contest occurred from October 3, 2016 to December 3, 2016 and included nearly 5,000 participants. The app assessed and ranked the drivers by their overall safety scores. Weekly prizes included the top three drivers of the week and the most improved driver.

https://www.boston.gov/departments/new-urban-mechanics/ bostons-safest-driver-competition





Driver behaviors that were monitored were:

- · Braking Harsh or abrupt braking.
- Acceleration How quickly the vehicle accelerates.
- Speeding Based on a variable speed in excess of the speed limit and by road type.
- Cornering Based on the infrastructure and how the vehicle maneuvered around the existing roadway facilities.
- Distraction Measured by smartphone sensors and evaluated based on the screen state, the speed of the vehicle (greater than 10 mph), phone position (held or fixed), and screen interaction.

A "Car-Free" trip award was also included in the first season to promote mode shift from a single occupancy vehicle to other modes of transportation.

The City awarded \$4,500 to the top four winners and distributed approximately \$4,500 in additional weekly prizes.

Season 2 (2019): The second season of Boston's Safest Driver Contest occurred between May 6, 2019 to July 28, 2019 and included over 2,000 participants. In addition to the individual resident challenge, the second contest included a corporate challenge with participating Transportation Management Associations. The prize categories for the second round included:

- · Safest City of Boston Driver
- Safest Boston Metro Driver
- · Least Distracted Driver
- · Slow and Steady Driver
- Corporate Challenge Safest Driver
- Safest Workplace of Drivers
- Workplace with Most Non-driving Trips

The City awarded \$25,000 in prizes, including four grand prizes totaling \$16,000 and biweekly prizes of \$50.

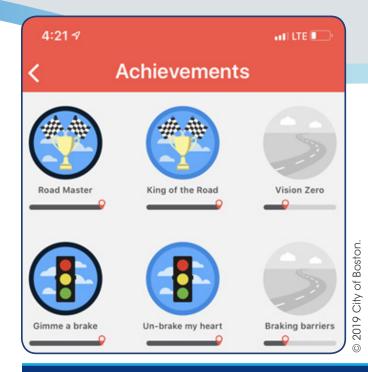


Figure 1. Graphic. Boston Safest Driver competition dashboard page.

Figure 2. Graphic. Boston scoring dashboard.



Funding

The Arbella Insurance Foundation sponsored the 2016 competition. Liberty Mutual Insurance and a National Safety Council Road to Zero Safe System Innovation Grant (funded by NHTSA) sponsored the 2019 competition.

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