## THE FUTURE OF PARKING: SAFETY BENEFITS AND CHALLENGES

The goal of this research is to explore parking facility design and operational change recommendations to improve parking safety in light of the advent of self-parking features using different market penetration rates (MPR).

Over **2,000**fatalities and nearly **95,000** injuries
in non-traffic
crashes

1,427 back over fatalities to children aged 14 and under

nationwide

A vehicle spends

96% of the day
occupying a space
in a
parking
lot

On-Street Parking

8%

25% MPR

DECREASE IN VEHICLE CONFLICTS

75% MPR

45%

DECREASE IN VEHICLE
CONFLICTS

)ff-Street Parking



DECREASE IN VEHICLE CONFLICTS



REDUCTION IN PEDESTRIAN-VEHICLE EXPOSURE

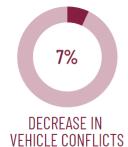


DECREASE IN VEHICLE CONFLICTS



REDUCTION IN PEDESTRIAN-VEHICLE EXPOSURE

Parking Garade



14%
REDUCTION IN

PEDESTRIAN-VEHICLE

**EXPOSURE** 



DECREASE IN VEHICLE CONFLICTS



REDUCTION IN PEDESTRIAN-VEHICLE EXPOSURE



Maximum increase in parking facility capacity



45%

Maximum reduction in the number of conflicts



72%

Maximum reduction in pedestrian-vehicle exposure







