The Seattle Department of Transportation

2012 ROAD SAFETY SUMMIT action plan

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MESSAGE from the MAYOR

Dear friends,

Everyone who uses the streets in our city – whether it's in a car, on a bicycle, on a bus or train, or on foot – is a family member, a co-worker, a neighbor, and a friend who is trying to get home safely. Recent tragedies showed us that we have work to do as a community to improve safety and help build a culture of empathy for everyone using our roads. In late 2011, I joined Councilmembers Sally Bagshaw, Richard Conlin, Tom Rasmussen, and Mike O'Brien in convening a Road Safety Summit. We brought the public together to listen to what they had to say, and Dr. David Fleming of Public Health – Seattle & King County provided a dialogue on traffic safety that was data-driven and relevant. We brought many stakeholders together to discuss safety issues in more detail. We heard a lot of ideas and comments about ways we can improve safety on our roads. But the main thing we heard was that people in Seattle agree — everyone should feel safe out there.

This Road Safety Action Plan lays out a long-term, sustained campaign to achieve zero traffic fatalities and serious injuries on our roads. The City of Seattle, Public Health – Seattle & King County, and our community partners are committed to undertaking the actions laid out in this document to reach that goal. We will educate the public about the rules of the road, and we will enforce those rules using a variety of proven strategies. We will address the environment of our roads, separating modes of travel where it makes sense and designing our streets in ways that promote safety. We will evaluate our actions to ensure we are taking the right steps to reach our goal of zero fatalities, making adjustments as needed and making efficient use of our resources.

Most importantly, we will build a culture of empathy. We all have a right to use our roads safely, no matter how we choose to get around. It's time we started looking out for each other, and taking responsibility for protecting the safety of everyone whether they are walking, biking, riding transit, driving or using any other means to get around.

Zero fatalities and serious injuries is a goal that we are committed to pursuing over the months and years to come. I encourage you to read the Action Plan and share your comments with me and our partners. Together, we can build a culture of safety for everyone.

Sincerely,

Mike McGinn
Mayor of Seattle

MESSAGE from the CO-CHAIRS

Dear friends,

Getting to where we need to go, safely, is a deeply shared objective, if not always top of mind. Serious injuries and fatalities happen in a heartbeat but have eternal effects that often come with a heavy personal burden. Because collisions are a leading cause of death for Seattle residents ages 5-24 years, reducing collisions is a matter of public health. And it is estimated that the vast majority of collisions are a result of human error. So, with greater individual deliberation behind the wheel, handlebars, or in the crosswalk we can keep our kids, grandparents, neighbors and friends safe.

Increasingly the residents of Seattle choose many different ways to travel around and enjoy our magnificent city. Our kids walk to school, our spouses bikes to work, our dads take the light rail to the game at the stadium, and our neighbors drive to work. The commonality of our travel choices is we are all pedestrians. We walk to and from the car, train, bus or bike rack to get to our final destination. Most of us are drivers. And some of us are bicyclists. The fact is, that most of us use several forms of transportation throughout the day - transforming from drivers and pedestrians and back again. Each travel mode comes with its own set of unique operator instructions, but personal responsibility, and adherence to rules of the road is common to all.

The data in the following pages reveal collision trends that provide comfort, clarity, and caution. Comfort that there is a downward trend in fatalities, clarity in that the safety is not fundamentally about one travel mode verses another, and caution in that there are persistent and rapidly growing contributing factors to fatalities that need serious attention. Personal responsibility is the single greatest factor for improving safety. Personal responsibility means not driving impaired - which remains, stubbornly, the single largest contributing factor to fatalities - or driving distracted - a contributing factor that is growing at an alarming rate. Together, these are the two greatest contributing factors to all serious injuries and fatalities. Reducing impaired and distracted driving would make all drivers, pedestrians and bicyclists equally safer.

There are of course other, more pedantic, rules of the road that all users should obey. Pedestrians should look up, then left, right and left again before crossing the street. Bicyclists should obey the signals and yield to pedestrians on the sidewalk. And vehicle drivers should drive the speed limit and yield the right of way to pedestrians.

We are in this together and we need to work collectively to improve safety for all roadway users.

As disparate as our professional careers appear, as co-chairs, road safety binds us as a means, ends, or objective of our work. Safer roads keep our employees and colleagues alive and well. Safer roads make a wider range of transportation options a viable and affordable choice for more our residents more of the time. Safer roads keep our communities and families healthy at less personal and public cost.

We are hopeful about the future. We thank the City of Seattle for identifying the need and leading the effort to reduce injuries and fatalities in our streets, and our Road Safety Summit partners for sustaining and growing the effort to the benefit of all.

Road Safety Summit Co-chairs

Dr. David Fleming
Director & Health Officer
Public Health - Seattle & King County

Jamie Cheney
Executive Director
Commute Seattle

Doug Palm
Director of Global Facilities
Program for Appropriate Technology in Health (PATH)

SAVE OUR
CROSSWALK!!!
JAVA BEAN

EXECUTIVE SUMMARY

Our Challenge

The World Health Organization has listed traffic safety as an international public health priority and the Centers for Disease Control and Prevention identifies collisions as a leading cause of death for young people. In the United States, more than 30,000 people are killed in traffic crashes each year and another 2,000,000 people are injured. In Washington this is over 400 deaths per year, and nearly 20 occur on Seattle streets. While Seattle's traffic safety record is relatively strong compared to peer cities, we believe that even one fatality is one too many.

Our Goal

Based on this foundation, this document outlines our strategy for eliminating serious and fatal crashes in Seattle by 2030. Similar to Washington state's Target Zero program, this plan is based on the premise that collisions are preventable and that by working together we can eliminate deaths and serious injuries on our streets.

How We'll Get There

We used two main strategies to identify focus areas within this plan. The first strategy was to bring together the many individuals and organizations concerned about traffic safety in Seattle. Through a series of Road Safety Summits held in 2011, we worked to identify priority focus areas. We also asked the broader public for their ideas and received more than 3000 comments. Next, we looked to our data to better understand what type of collisions are occurring, and where, when and why they're happening. Based this very detailed crash data analysis, and community and organizational feedback, we identified these six focus areas:

- Creating a Culture of Empathy
- Fewer People Speeding
- Fewer People Traveling While Distracted
- Fewer People Traveling While Impaired
- More People Know and Follow the Rules of the Road
- Safer Roadway Design for All

To achieve success in these focus areas, we have included the following strategies: education and outreach, building a safer environment, developing effective enforcement strategies, and evaluating our work to ensure we're making progress. These specific strategies are based on proven countermeasures, recognized by the Washington Traffic Safety Commission and the National Highway Traffic Safety Administration. Throughout this document, we have also focused on developing a culture of empathy on our roads. While change in any of the other five focus areas will lead to reductions in specific types of crashes, developing a roadway culture that recognizes our shared responsibility for ensuring everyone's safety is the only way to eliminate all serious injury and fatality collisions.

Finally, no one single organization or agency alone can implement the strategies within this plan. Successfully eliminating serious injuries and fatalities requires partnerships between government, community groups, non-profits, and individuals. We invite you to join in our efforts to make Seattle a safe and comfortable place to travel for all people, no matter how you choose to go – by car, transit, bike, or as a pedestrian.

INTRODUCTION

Long-term Goal

We envision a transportation system with zero traffic fatalities and serious injuries by 2030.

Reducing collisions, injuries, and fatalities is a winnable battle. U.S. traffic collisions have shown a downward trend over the last decade. The National Highway Traffic Safety Administration (NHTSA) estimates that nearly 90 percent of collisions are caused by human error. This means we have a significant opportunity to improve safety.

Getting down to zero fatalities and serious injuries may sound like an ambitious goal. We believe this is a goal worth striving for. The trends are in our favor. We have tools and strategies that have been shown to reduce fatalities and collisions. There are a lot of people already working toward this goal statewide, including Washington State through their "Target Zero" plan and the Institute of Transportation Engineers. Most importantly, we have a community that is committed to protecting the safety of everyone who uses our roads.

The first step in determining how we would meet our long-term goal was to ask the public for their ideas. Three public forums, data analysis, an online survey, and in-person outreach, provided an opportunity for the public to give their input on three questions:

1. What do you think are the highest priority safety problems to solve on Seattle roads?
2. What do you think are the most important things to do to make Seattle roads safer?
3. We often talk about what government can do to promote safety. What are the ways that non-governmental groups and individuals can promote safety?

Their answers provided guidance for moving forward with this plan.

A Data-driven Effort

Data is the centerpiece of this plan. It guides how we will focus our investments, helps develop goals and action items, tells us what messages the public should hear more often, and determines our success. Since data tells us where collisions occur and why, we are able to use our resources most effectively by concentrating our efforts on those specific locations, corridors, or collision causes, saving staff resources and increasing effectiveness.

National and state traffic safety research and practices have been consulted to develop this plan. The National Highway Traffic Safety Administration's "Countermeasures that Work" appraises traffic safety efforts across the nation and rates each strategy according to its effectiveness. Washington State and its partners have been implementing Target Zero for more than a decade to reduce collisions based on proven and effective strategies. This Action Plan allocates resources to locations and corridors where problems frequently occur, targets behaviors that commonly cause collisions, and employs proven strategies to mitigate these issues.

A Citywide Effort

This Action Plan is the result of the people of Seattle coming together to improve safety on our streets. No single government, organization, or community group can achieve zero road fatalities on their own. To achieve our long-term goal, the City has cultivated strong partnerships with employers, community groups, transportation advocates, government agencies, health care providers, public schools, and universities.

Major employers like Group Health, the Program for Appropriate Technology in Health (PATH), the Bill & Melinda Gates Foundation, and Fred Hutchinson Cancer Research Center will take on road safety by providing lunchtime safety trainings to their employees.

AAA Washington promotes safety through public service announcements on the radio and by distributing traffic safety information through their website and Driver Improvement Classes.

We're working with the University of Washington and Seattle Public Schools to engage young people in our city and we've partnered with insurance companies on programs to address distracted driving and motorcycle safety in Seattle.

The freight community will participate in events where people can get behind the wheel of large vehicles to help cyclists, pedestrians, and drivers appreciate the challenges of driving a big rig.

Pedestrian advocates Feet First will continue their real-world safety trainings for students, the Cascade Bicycle Club will spread the Road Safety messages through their classes, camps, and rides, and Commute Seattle will advance their Bike Nice program that encourages cyclists to follow the rules of the road and set a high standard for urban cyclist behavior.

The City Neighborhood Councils will help disseminate educational information throughout the city and help recruit community members to be on point for neighborhood traffic safety.

All of our partners will help us reach deep into our city by distributing information about our efforts to their networks.

In addition to our year-round work, we'll assemble safety experts from the health care field, academia, transportation advocacy groups, and traffic safety professionals for an annual traffic safety conference. In order to eliminate serious injury and fatal collisions on our streets, we must be responsive to collision trends and emerging issues. The annual conference will allow the City and our partners to evaluate past efforts, discuss the latest research in collision and injury prevention, and modify our strategies for improving safety.

The strong partnership between the City of Seattle and our community will help this effort have a long-lasting impact on safety. A complete list of our partners can be found in the Road Safety Partners & Acknowledgements section.

To get involved and become a partner, go to www.seattle.gov/BeSuperSafe.

Our Approach: Education, Environment, Enforcement, Evaluation, Empathy

It's important that we approach our goal of zero fatalities and serious injuries with an understanding that there are both behavioral and environmental changes that contribute to safety. To do this we have identified a multifaceted approach through education, environment, enforcement, evaluation, and empathy.

EDUCATION

We will ensure understanding and respect for our mutual roles and responsibilities when we use our transportation system, whether you choose to ride a bike, walk, or drive, or all three. Education and awareness efforts aim to improve knowledge of the rules of the road and new roadway features, support our enforcement patrols, and provide a foundation for our environmental improvements. Through this plan we will develop a broad education campaign focused on roadway safety.

ENVIRONMENT

The built environment plays a pivotal role in the safety of our streets. We will continue to design and build streets that prioritize safety and promote transportation options. When improvements are made, we'll work to inform everyone so they understand how to use and react to new roadway features.

ENFORCEMENT

Enforcement efforts will improve safety in locations where collisions frequently occur and target the factors that commonly lead to crashes. Enforcement patrols will be supported by outreach efforts to inform the public of the presence of and the rationale behind the increased patrols. By increasing awareness about our enforcement efforts, we can help change the behavior of people who receive citations and the broader public who hear about enforcement efforts.

EVALUATION

The education, enforcement, and environmental efforts that we undertake as part of the Road Safety Action Plan will be evaluated as we go to ensure that we're using resources in the most effective way possible. Evaluating our work ensures that we can make adjustments if we're not maximizing our effectiveness. We will track our progress through the Seattle Department of Transportation's Annual Traffic Report.

EMPATHY

Our actions will emphasize the shared responsibility we have to get rid of fatalities and injuries and improve safety on our roads. We need to look out for each other and help each other get where we're going safely.

Coordinated strategies have been shown to be more effective at reducing collisions than stand-alone efforts; therefore, our actions will employ several of the "E's" at the same time when possible. For example, to deter speeding on a particular roadway, we will implement environmental changes to the roadway, launch an education campaign about speeding, increase the frequency of enforcement patrols along a corridor, and monitor the results.

Traffic Safety Corridor Projects aim to reduce collisions through short-term, low cost engineering, enforcement, and education efforts. Data shows that this approach to traffic safety works.

Seattle, along with residents and our partners at the Washington Traffic Safety Commission and the Washington State Department of Transportation, has implemented traffic safety corridor projects on Rainier Avenue South and Aurora Avenue North.

In two and a half years of work on Aurora, our efforts have reduced total collisions by 21 percent, with fatal and serious injuries down by 28 percent. Even more encouraging is that the emphasis our education and enforcement efforts placed on the leading contributing causes of collisions such as failure to yield, speeding, and inattention/distracted driving has paid off. Collisions in which failure to yield was a contributing circumstance are down 34 percent, collisions caused by inattention/distracted driving are down 30 percent, and collisions involving speeding have been reduced by 24 percent.

We will carry the momentum from previous traffic safety corridor projects onto Lake City Way this fall of 2012.

HIGHLIGHTED PROJECT
Traffic Safety Corridor Projects

DID YOU KNOW....
Between 2007 and 2010, more than **54,000 collisions** occurred on our streets

WHAT'S HAPPENING

Seattle is consistently recognized as one of the safest major cities in the country for pedestrians, people biking, and people driving. But we know there is much more that can be done. Even one fatality or serious injury is one too many. Safety is our most important priority and Seattle continues to focus on infrastructure improvements; partnerships with schools, employers, and safety advocates; and targeted enforcement of traffic laws.

Through the implementation of our Pedestrian and Bicycle Master Plans, we have invested in improvements based on the character of our roadways, collision data, demand for new or improved facilities, and identification of areas with the greatest needs, reflecting our goals of protecting health and promoting equity. This approach to prioritizing our projects has allowed our city to zero-in on the locations and corridors that demand attention.

Despite the improvements we've seen over the years, collisions occur on Seattle streets every day and remain a significant public health issue. Between 2007 and 2010, more than 54,000 collisions occurred on our streets, resulting in 473 serious injuries and 77 fatalities. For people ages 5 to 24, motor vehicle collisions are the leading cause of death in Washington.

Every collision has a considerable impact on society. Crashes cause congestion which limits the productivity

ON SEATTLE STREETS

of not only Seattle, but much of the region as well.

Congestion means wasted time and wasted gas.

The effect that serious and fatal collisions have on our city is significant. Each of these tragedies touches the families, friends, and co-workers of those involved in an incalculable way. Of the 11,913 collisions on our city streets in 2010, 93 resulted in serious injuries and 19 were fatality collisions. These numbers can and should be much lower.

Each crash also requires a significant infusion of public dollars since fire and police department resources must be directed to each incident. The American Automobile Association (AAA) Foundation for Traffic Safety, using Federal Highway Administration data, estimates the cost of a single fatality collision at $6 million. The Centers for Disease Control and Prevention estimates that fatality collisions alone cost Washington approximately $665 million each year. We have a significant opportunity to not only improve safety for people across the city but to eliminate the societal costs of these incidents as well.

A transportation system with zero fatalities and serious collisions would ensure that people using all modes are safer on our streets, that people and goods keep moving, and that families will no longer be affected by these preventable crashes.

What the data tells us

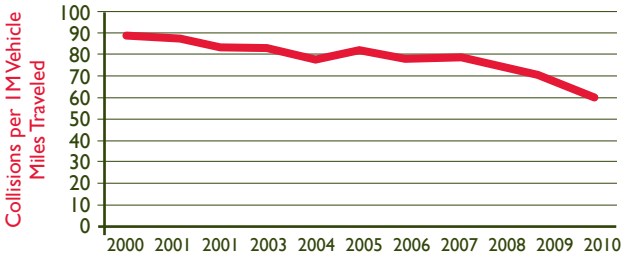
Data indicates that Seattle has made substantial progress toward improving safety. The number of traffic collisions is steadily decreasing. While there were nearly 12,000 reported collisions in Seattle in 2010, the overall number of collisions was nearly 11 percent lower than in 2009 and more than 33 percent lower than in 2000.

Seattle is one of the safest major cities for pedestrians in the country, yet still an average of 500 pedestrian-involved collisions occur each year. The trend for pedestrian collisions has remained relatively flat for the past decade.

Collisions involving people on bicycles dropped in 2010, but the number of collisions was higher than in 2002. Nearly 370 people riding bicycles are involved in collisions in Seattle each year – more than one per day.

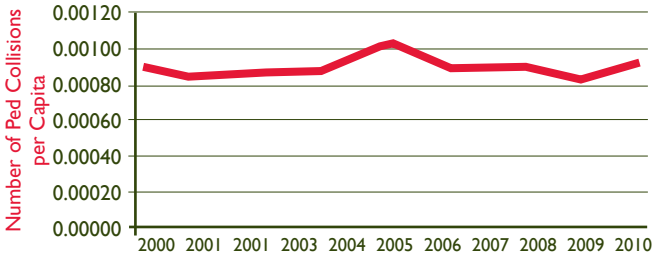
Eliminating serious injuries and fatalities on our streets means reducing collisions across the board through data-driven environmental improvements and enforcement efforts, educational outreach targeted at the behaviors that most frequently cause collisions, and fostering a climate of mutual respect on our roadways.

Citywide Collision Rate



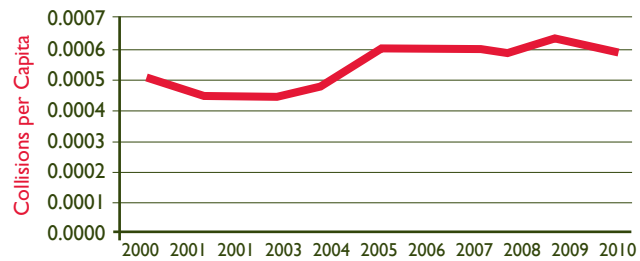
Year	Collisions	Average Daily Traffic	City Wide Collision Rate
2000	17,846	545,548	89.62
2001	17,547	543,006	88.53
2002	16,497	540,351	83.64
2003	16,057	540,028	81.46
2004	15,527	540,423	78.72
2005	16,148	543,675	81.37
2006	15,967	557,068	78.53
2007	15,134	523,616	79.19
2008	14,173	531,508	73.06
2009	13,344	525,925	69.51
2010	11,913	541,320	60.29

Pedestrian-Involved Collisions per Capita



Year	Ped-Involved Collisions	Seattle Population	Ped Collisions per Capita
2002	476	570,859	0.00083
2003	454	570,437	0.00080
2004	457	570,375	0.00080
2005	473	573,296	0.00083
2006	565	580,485	0.00097
2007	490	589,304	0.00083
2008	503	598,541	0.00084
2009	479	602,000	0.00080
2010	529	608,660	0.00087

Bicycle-Involved Collisions per Capita

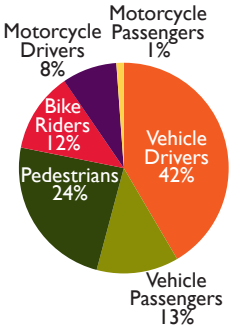


Year	Bike-Involved Collisions	Seattle Population	Ped Collisions per Capita
2002	293	570,859	0.0005
2003	263	570,437	0.0005
2004	257	570,375	0.0005
2005	279	573,296	0.0005
2006	354	580,485	0.0006
2007	359	589,304	0.0006
2008	355	598,541	0.0006
2009	382	602,000	0.0006
2010	366	608,660	0.0006

Serious Injury and Fatal Collisions

Serious injury collisions dropped more than 35 percent in Seattle between 2007 and 2010. Still, 93 individuals were seriously injured on our streets in 2010 alone. Seventy-seven people were killed in crashes on our streets between 2007 and 2010 including eight bicyclists and 30 pedestrians. While we've seen a promising downward trend in the rate of collisions in Seattle, even one serious injury or fatality collision is one too many.

Serious Injuries and Fatalities
2007 - 2010

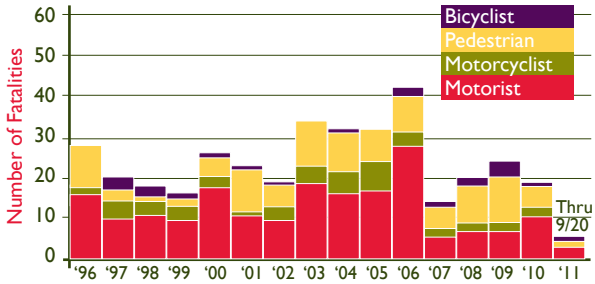


Despite the fact that there are fewer collisions involving pedestrians and people on bikes overall, they're more likely to be severely injured or killed in a crash. Collisions involving pedestrians or people on bikes comprised just six percent of all crashes between 2007 and 2010 yet nearly 50 percent of the fatalities that occurred during this time period were pedestrians or people on bikes.

Collision data indicates that certain factors more frequently contribute to fatality collisions on our streets. Impaired driving was a contributing factor in nearly half of all fatal collisions in Seattle (48 percent). Speeding was a contributing factor in more than 42 percent of these collisions, and distraction contributed to 22 percent of fatal collisions.

In order for Seattle to reach our long-term goal of zero serious injury and fatal collisions, we must achieve approximately one fewer fatality and approximately five fewer serious injuries each year for the next 20 years.

Fatalities on Seattle Streets by Mode



What contributes to crashes

When a collision occurs, one or all of the drivers involved may be cited for a traffic infraction, and the contributing factors are noted on the collision report. Law enforcement officers determine the cause or the causes of collisions when possible. This information allows us to focus our education and enforcement efforts on the behaviors that are causing problems on our streets. The most commonly cited causes of crashes in Seattle are as follows:

Failure to Grant Right-of-Way

"Did not grant right-of-way" to vehicles or pedestrians is the most commonly cited factor for collisions year after year in Seattle. This contributing factor can be noted in many different collision scenarios but generally indicates that a driver, pedestrian, or person on a bicycle stopped a fellow traveler from continuing on their legal path. An example of a "did not grant right-of-way" collision occurs when a left turning driver initiates a turn without allowing enough space to complete the movement. Pedestrian collisions sometimes occur when a driver fails to stop for a pedestrian in a legal crosswalk.

Inattention

"Inattention" is the second leading contributing cause of collisions in Seattle and highlights a newer but rampant issue in traffic safety: mobile phone use while driving. Many other circumstances are considered inattention like eating, grooming, distractions outside the vehicle, distractions inside the vehicle, and adjusting an audio system.

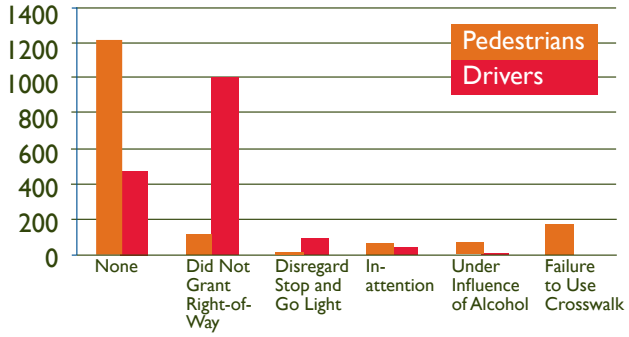
Following too Close

"Following too closely" was noted as a contributing circumstance in more than 800 collisions in 2010. This behavior frequently results in rear-end collisions. Rear-end crashes accounted for 15 percent of all collisions in 2010 and commonly lead to injuries.

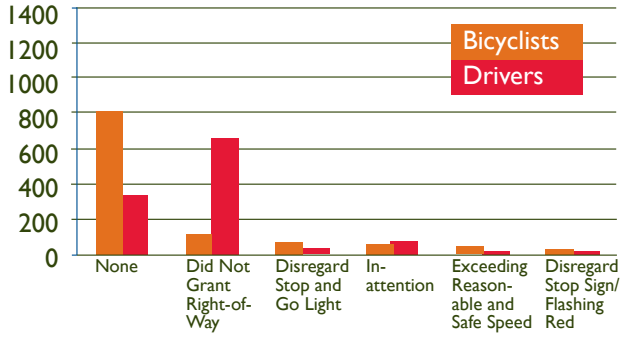
Speeding

Speeding was noted as a contributing factor in 479 collisions, under the categories "exceeding reasonable and safe speed" and "exceeding the speed limit". More than 60 percent of the citations issued by the Seattle Police Department in 2009 and 2010 were for speeding , yet speed still contributes to one-third of all collisions on our streets.

Top Contributing Circumstances to Pedestrian Collisions 2007 - 2010



Top Contributing Circumstances to Bicycle Collisions 2007 - 2010



The most frequently cited cause of pedestrian and bicycle collisions is drivers failing to grant the right-of-way. Among pedestrians, unsafe crossing practices, such as crossing against a signal or failing to use a crosswalk, are often cited as factors in serious collisions. For people on bikes, failure to grant the right-of-way to vehicles is the most commonly reported factor in collisions. Other contributing factors in serious bicycle collisions included disregarding traffic signals or stop signs, improper passing, and inattention.

Where serious collisions happen

The vast majority of fatal and serious injury collisions take place on arterial streets, with nearly half of fatal collisions occurring at intersections and half at mid-block locations. These collisions occurred at geographically dispersed locations throughout the city. While serious collisions can occur on any street, severity generally increases when arterial streets are bigger and have more traffic.

Arterials are commonly wider than non-arterial streets, have more lanes of traffic, higher pedestrian and vehicular traffic volumes, and higher vehicular speeds. Arterial streets generate more activity because they facilitate intercity and regional travel, host transit routes, contain business and retail areas, and offer direct routes to destinations. The result is a greater potential for conflict between pedestrians, people who bike, and people driving. To reduce serious injury and fatal collisions, it is clear that our efforts must focus on arterial streets.

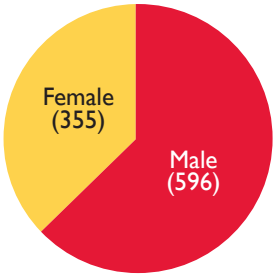
Who is involved in crashes

In terms of demographics, we know that men are most commonly involved in collisions and are more likely to be seriously injured or killed in crashes. Specifically, men between the ages of 18 and 34 are most often involved in crashes. Twenty-one percent of people who die in traffic crashes in Seattle are between the ages of 16 to 25 and twenty-six percent are between the ages of 26 to 40. In 2010, 80 percent of the people killed in collisions in Seattle were men.

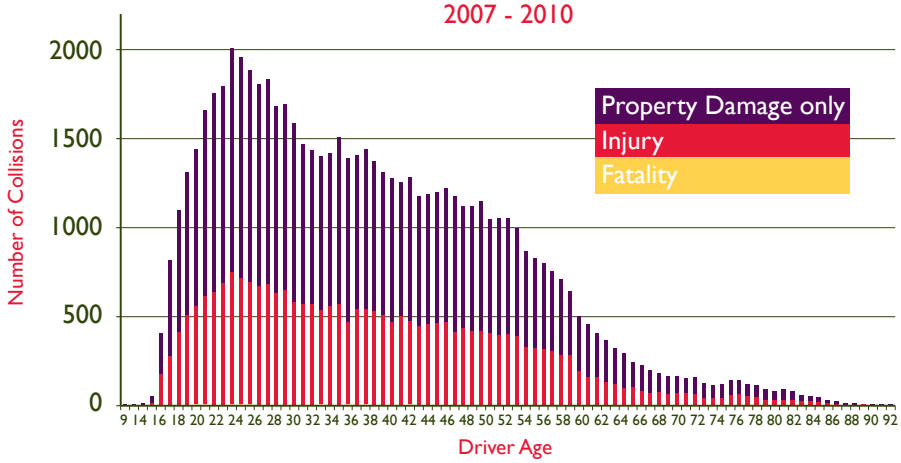
Serious collisions involving pedestrians and people who bike encompass a wide range of age groups. The age of pedestrians who have been killed in a crash on our streets between 2007 and 2010 ranged between age 19 and 91. Older pedestrians tend to be more at risk of serious injury or worse if involved in a crash. More than 76 percent of all pedestrian fatalities during this time period were people over age 50.

The average age of bicyclists who have been killed on our streets in that same time period was 53, though the majority of serious bicycle collisions involved people under age 40.

All Fatal and Serious Injury by Gender
2007 - 2010



Driver Age for All Collisions
2007 - 2010



A note about our data

Collision data includes all reported collisions on Seattle streets. Interstate 5, Interstate 90, and State Route 520 are not included since these roadways are not the jurisdiction of the City of Seattle.

The main data source for the Road Safety Action Plan is the Seattle Department of Transportation. Other data sources include the Seattle Police Department, Public Health – Seattle & King County, the Washington Traffic Safety Commission's Traffic Research and Data Center, and the Washington Fatality Analysis Reporting System.

ROAD SAFETY FOCUS AREAS

We will achieve our long-term goal of zero fatalities or serious injuries on our roadways by concentrating our efforts in six focus areas. These focus areas are a reflection of data, traffic safety research, and public input from the Road Safety Summit of 2011. The six focus areas of the Road Safety Action Plan are as follows:

- **Creating a culture of empathy on Seattle's roads**
- **Fewer people speeding**
- **Fewer people traveling distracted**
- **Fewer people traveling impaired**
- **More people who know and follow the rules of the road**
- **Safe roadway design for all**

Collision data clearly indicates that we need to focus on speeding, distracted driving, and impaired driving. These three traffic safety issues contribute to the majority of serious injury and fatality collisions on our streets. With proven countermeasures in our toolbox, we have a significant opportunity to reduce collisions in these areas. If we are able to improve safety in these three focus areas, people will be safer across the board.

Public input from the Road Safety Summit meetings in 2011 consistently indicated that knowing and following the rules of the road, along with safe roadway design for all, are major concerns for the public. As part of this plan, we will launch an outreach campaign to help people understand the rules of the road and continue to design and build safe streets for everyone.

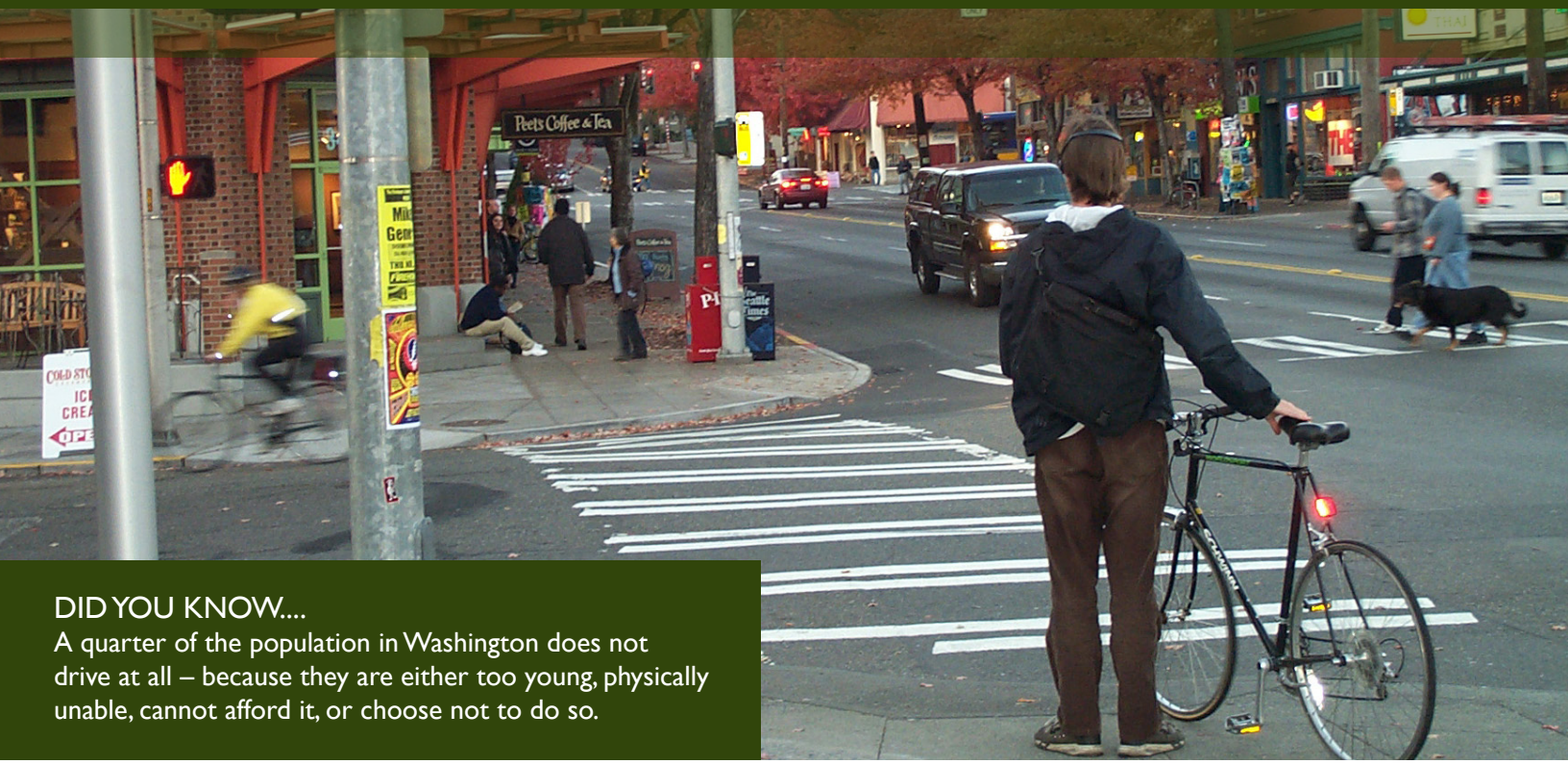
Empathy is another aspect of traffic safety often overlooked by transportation professionals but consistently cited by the public. Fostering an environment of mutual respect on our streets and looking out for those around us will improve interactions on our streets and ultimately improve safety. We will approach each of our focus areas with empathy woven into everything we do.

We will improve safety in each focus area by emphasizing education, enforcement, and environmental improvements. In order to evaluate our efforts, we have established indicators that will provide a measuring stick as we continue to execute the Action Plan.

The following sections describe each focus area, related actions, and measures, in more detail.

FOCUS AREA

CREATING A CULTURE OF EMPATHY



DID YOU KNOW....
A quarter of the population in Washington does not drive at all – because they are either too young, physically unable, cannot afford it, or choose not to do so.

No matter how you choose to travel in Seattle, you should feel safe on our streets. Sharing the streets is about more than just following the rules. It requires us to realize that the person in a car, on a bike, or on foot is another human being too, someone who is just trying to get where they're going safely. The people we pass in our travels are our friends, our neighbors, our family, our co-workers. Far too often, collisions change the lives of these people who share our city, or even cut their lives short. Research shows that the majority of these incidents are preventable. A culture of empathy for each other is the missing ingredient in reducing fatalities and improving safety on our roads.

What does a culture of empathy look like on our roads? It means being aware of who is out there sharing the roads with you, and giving them the courtesy they deserve. It means knowing the rules of the road and making sure you're following them no matter how you get around – not because you must, but because these rules help everyone be safe.

Empathy is:

- Being predictable, so that others won't be surprised by your actions.
- Knowing the rules of the road.
- Following the rules of the road, even when it's tempting to do otherwise.
- Getting rid of distractions.
- Yielding to bicyclists and pedestrians who are sharing the road with you, and giving them the space they need to feel safe.
- Waiting to cross the street until it's safe and legal, and being aware of your surroundings.
- Following the speed limit, and driving only as fast as is safe.
- Enjoying your trip, by relaxing and being considerate of everyone else on the road.

Empathy is a fundamental concept in our shared efforts, and in each of the following focus areas we will include very specific action items, but within each action item we strive to develop a culture of empathy on our streets.

FOCUS AREA

FEWER PEOPLE SPEEDING

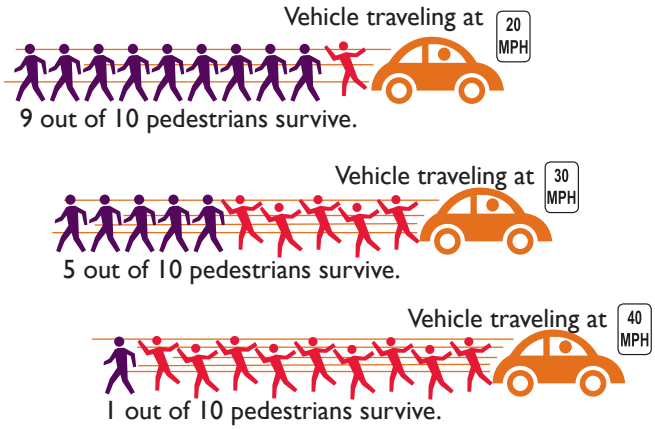
DID YOU KNOW....
One out of every three collisions in our city involves speeding

MEASURES

Number of collisions attributed to speeding annually	479 (2010)
Speed-involved collisions resulting in fatalities	42 percent (2006-2010)
Identified corridors where 85th percentile speeds are at or below the posted speed limit	30 percent (2010)

Speeding creates undesirable conditions for everyone. People driving the speed limit sometimes end up being tailgated, dealing with aggressive drivers weaving in and out of traffic, or being pressured into driving faster. This often leads to road rage or worse – a collision. Conditions for walkers and bikers deteriorate with speed as well. Crossing a street where cars routinely speed can seem insurmountable to pedestrians and people on bikes; especially children and seniors.

From busy arterial streets like Rainier Avenue South to low volume neighborhood streets, speeding is a persistent traffic safety issue in Seattle. One out of every three collisions in our city involves speeding. Despite the fact that most drivers identify speeding as a threat to their safety, the majority also say they exceed the speed limit when they're behind the wheel.



Many of us cheat a little while driving. We've become accustomed to driving five miles per hour over the speed limit thinking that we won't get pulled over at that speed. What most of us don't realize is that by driving slightly in excess of the speed limit, we greatly increase both the risk of a crash and the severity of the crash.

Unfortunately, data shows that speeding has had a tragic toll on our roadways. Between 2006 and 2010, speeding was a factor in 42 percent of fatality collisions in Seattle.

Speed is especially lethal for vulnerable users like pedestrians and people on bikes. A pedestrian hit at 40 miles per hour has an 85 percent chance of dying. Pedestrians are much more likely to survive a collision with a vehicle at 20 miles per hour. Keep in mind that speed has very little influence on the likelihood of an injury when pedestrians or cyclists are hit by a vehicle – the chance of injury remains near 100 percent regardless of speed.

Speed makes it more difficult for drivers to recognize potential hazards and increases the time and distance it takes to bring a vehicle to a stop. This accounts for the fact that speeding contributes to more than four out of every 10 fatality collisions in Seattle.

People who bike also need to be aware of their speed. Whether riding downhill, on a sidewalk, or on a multi-use path, biking at an appropriate speed ensures that other people feel comfortable. Riding at a reasonable speed helps people on bikes have sufficient time to react to unexpected conditions.

ACTIONS

Collision data tells us that more than half of speeding-involved fatality collisions occur on the weekends. More than 80 percent of the drivers involved in speeding crashes were male and nearly 40 percent were under age 25.

Lower speeds make our neighborhoods more livable and our commercial areas more shop-able, our walking routes to school safer and our streets less stressful. Through this Road Safety Action Plan, the City of Seattle and our partners will embark on a comprehensive approach to deter speeding and eliminate speeding-related collisions.

EDUCATION

Develop a Speed Safety Awareness Campaign Targeting Younger Drivers

Effective educational outreach is an essential component of traffic safety programs that successfully reduce crashes related to speeding. The City and our partners are working to create educational outreach materials to raise awareness about speeding. These efforts will target the people most commonly involved in speed-related collisions – men ages 16 to 24. Educational materials will emphasize enforcement efforts and highlight the safety benefits of driving the speed limit.

ENVIRONMENT

Post Appropriate Speed Limits

SDOT will ensure that speed limit signs are clearly visible and installed at appropriate intervals on arterial roadways. SDOT will also conduct traffic studies to evaluate the speed limit on arterial corridors throughout Seattle.

Improve School Zone Speed Limit Signage

Since 2007, SDOT has improved school zone signage for every public and private school in the city – more than 170 schools. Clearly visible school zone speed limit signage alerts drivers to the reduced speed limit and improves the walking environment for Seattle students. SDOT's Safe Routes to School program will work to highlight school zone signage at an additional 10 schools per year through measures such as flashing beacons that emphasize the school zone speed limit.

Expand the Use of Dynamic Message Signs to Support Enforcement

Special enforcement messages will be posted on the City's network of Dynamic Message Signs while increased enforcement efforts are underway. Using these signs to provide public information about enforcement activities has the capability to reach hundreds of thousands of people and reduce speeding.

Utilize Traffic Calming

SDOT will implement measures to calm traffic on corridors where speeding is common. When appropriate, features like radar speed signs provide direct feedback to drivers about the speed at which they are traveling and have been shown to reduce speeds by three to five miles per hour. SDOT will continue to implement our Arterial and Neighborhood Traffic Calming Programs to reduce speeds. Through these programs, we work with the community to remind drivers to act responsibly and deploy traffic calming devices where appropriate.

Deploy Neighborhood Speed Watch Trailer

SDOT will deploy the mobile speed watch trailer to 50 locations per year. The speed watch trailer detects and displays the speed of oncoming vehicles. Placing the speed watch trailer on our streets provides another reminder to drive responsibly.

Design Roadway Modifications to Discourage Speeding

People naturally drive slower on narrow streets. Conversely, people tend to drive faster on wider streets. Reducing speeding can be accomplished by ensuring that our travel lanes are not overly wide, by ensuring that signal timing does not encourage high speeds, and by installing traffic calming devices when appropriate.

Support "Neighborhood Safe Speeds Bill"

Provide support toward the passage of state legislation that would allow cities to reduce speed limits to 20 mph on non-arterial streets more easily. This bill, originally proposed in 2011, has broad implications for our residential streets; especially those streets that will become part of our Neighborhood Greenways system.

ENFORCEMENT

Launch Safe Driving Emphasis Patrols

The City will launch "safe driving emphasis patrols" throughout Seattle with a focus on corridors with a data-demonstrated speeding problem. These patrols will be preceded by robust outreach through numerous media channels to inform drivers about the patrols and the rationale behind these efforts in advance. These patrols will enforce all traffic laws but emphasize speeding. Known as high visibility enforcement, this effort to inform and enforce has been proven effective at reducing impaired driving and increasing seat belt use. This strategy is currently being employed by the State of Washington and their local partners through Target Zero.

Deploy Aggressive Driving Response Unit to Patrol Hotspots

SPD's Aggressive Driving Reduction Unit (ADRU) will be deployed to collision hotspots throughout the city to target speeding, following too close and aggressive driving violations. ADRU deployments will be publicized in advance. The results of the patrols will be posted on the SPD Blotter.

Install Permanent Photo Enforcement in Four School Zones

Automated enforcement of the speed limit has been demonstrated to be a highly effective tactic to reduce collisions. NHTSA reports that fixed photo enforcement of speed can reduce collisions by 20 to 25 percent and reduce speeds significantly (NHTSA Countermeasures That Work, 2011). Four new cameras will be installed in 2012 by the Seattle Police Department.

DID YOU KNOW....
Automated speed limit enforcement has been demonstrated to be a highly effective countermeasure and can reduce crashes by 20 to 25 percent

Support Expanded Use of Automated Photo Enforcement

The State of Washington currently allows automated photo enforcement of speed in school and construction zones only and is currently considering an expansion of this enforcement tool. To determine whether this technology would be effective in other locations, the Seattle Police Department partnered with the Washington Traffic Safety Commission for an automated speed enforcement pilot project. The Traffic Safety Commission's evaluation of this tactic found promising results. At Seattle's two pilot locations, Elliott Avenue West and 35th Ave Southwest, the speed of the majority of drivers dropped considerably. Therefore, the City will work with the State to expand the use of photo enforcement systems on our streets.

Photo courtesy of Seattle Neighborhood Greenways.

HIGHLIGHTED PROJECT
Neighborhood Greenways

Neighborhood Greenways can lower speeds on our neighborhood streets. The community-based Seattle Neighborhood Greenways and SDOT have partnered to identify good places for new greenway construction. Seattle's first Neighborhood Greenway in Wallingford includes a median island, signage, new pavement markings, and many other improvements. Neighborhood Greenways do more than just calm traffic. They also provide a connected network of streets throughout the city where speeds and traffic volumes are lower, making it safer and more comfortable for people of all ages and abilities to walk and bike. According to the Federal Highway Administration, a Neighborhood Greenway in Columbia, MO, developed in coordination with the community and the U.S. DOT, saw not only increases in pedestrian and bicycle activity, but also substantial reductions in speed and traffic volumes. Several years after construction, the majority of neighbors like the Columbia, MO Greenway and consider it a true neighborhood amenity!

With this in mind, Seattle will be building more Neighborhood Greenways in 2012.

To see what's happening near you, visit: http://www.seattle.gov/transportation/greenways.htm and www.SeattleGreenways.org

FOCUS AREA

FEWER PEOPLE TRAVELING WHILE DISTRACTED

DID YOU KNOW....
Distracted driving has become the number one killer of teenagers in America

MEASURES

Number of collisions attributed to inattention or distraction annually	961 (2010)
Percentage of distracted-driver involved collisions resulting in fatalities	22.3 percent (2006-2010)

Target Zero, the State of Washington's plan to eliminate fatalities and serious injuries defines distracted driving as any activity that diverts a driver's attention from the primary task of driving. Distractions may include using cell phones, eating, grooming, texting while driving, or adjusting the radio. Anything that diverts attention visually, manually, or mentally. Distractions that take a driver's eyes off the road are visual distractions. Manual distractions take a driver's hands off the steering wheel. Those that take a driver's mind off the road are cognitive distractions. Some non-driving activities, such as texting, are particularly dangerous because they involve all three types of distractions. (Target Zero)

Distraction or inattention is the second leading contributing cause of collisions in Seattle. More than 1,000 collisions are caused by inattention every year – 1,000 completely preventable collisions. Between 2006 and 2010, distraction accounted for more than 22 percent of traffic fatalities.

It is important to note that distraction-related collisions are underreported. If no one witnesses the distraction, it is up to the drivers to self-report being inattentive behind the wheel. Drivers are reluctant to do this since they would be admitting fault in the incident. Therefore, the actual number of collisions caused by distraction is likely much higher than is currently represented in collision data.

No matter what causes the distraction, we all have the responsibility to stay focused on the road. We should be ready for anything at any time on our roadways, especially in the bustling urban environment of Seattle. A child may run out between vehicles at any time, a driver may make an unexpected maneuver, or roadway conditions may change in a flash, so being alert is vital to safe travel.

Despite the fact that the use of handheld mobile devices while driving is a primary offense in Washington, it is clear that people have not gotten the message. This is particularly worrisome since a driver who is texting while driving is as impaired as a driver with a .08 BAC (Washington State Department of Licensing). Talking on a cell phone – with or without a hands-free device – increases the chance of crashing by a factor of four (Text, Talk, Ticket – Washington Traffic Safety Commission).

Young drivers are particularly at risk. The Center for Disease Control and Prevention recently conducted a nationwide survey and found that nearly 60 percent of teens have texted or sent emails while driving. Data reflects the severity of this issue, as distracted driving has become the number one killer of teenagers in America.

Though nine out of 10 people support stricter laws (Blueprint for Ending Distracted Driving, NHTSA), cell phone use while driving remains a significant issue. As a city, we need to acknowledge the great responsibility we have as drivers and act accordingly. Parents need to set an example for kids by ignoring distractions and focusing on driving. Young people need to hold their peers accountable for their actions.

Even walking distracted can be a hazard. Everyone is a pedestrian at some point each day and it's easy to get engrossed in a phone conversation or music while walking. As pedestrians, we should never assume that we are safe just because we are crossing the street in a marked crosswalk. In fact, most pedestrian-involved collisions occur in marked crosswalks so it is crucial to pay attention when crossing any street.

People riding bikes should also avoid distractions. Some of the same distractions to other people on the road – music, mobile devices, for example – can be distracting to people on bikes. When riding in traffic or on trails, it's important to focus on your path.

ACTIONS

State data indicates that 40 percent of inattention-related deaths occurred during weekends with 25 percent occurring in July and August.

The United States Department of Transportation and NHTSA released the "Blueprint for Ending Distracted Driving" in June 2012 which recognizes stricter laws, increased enforcement, and more education for young drivers as effective measures to combat distracted driving. This Action Plan is in alignment with the federal recommendations. We will increase enforcement of distraction-related laws, raise awareness of the stricter cell phone laws, and support the importance of paying attention to the road through educational outreach.

EDUCATION

Conduct Direct Outreach to Young People

The City and our partners will engage young people through our schools in an effort to provide more education about the dangers of distracted driving. This program will include a contest that will challenge our city's youth to take driving seriously.

Expand Citywide Outreach

While data shows that young drivers are most likely to be distracted while behind the wheel, people of all ages are prone to distracted driving. Citywide outreach will highlight our existing cell phone laws and remind people why it is so important to be attentive while traveling.

Coordinate the Driven to Distraction Pilot Project

The City has teamed up with Driven to Distraction, a statewide group of citizens concerned about the growing rate of distracted driving on the roads, to implement a low-cost pilot project in Seattle. This project will enlist the support of residents and businesses to distribute signs and safety messages about distracted driving. Residents will work with local media to raise awareness about this issue and highlight trouble spots in the community. Before and after studies will be conducted to evaluate the effectiveness of this resident-to-resident plea to pay attention on our streets.

ENVIRONMENT

Improve Signage to Make it Easier to Find Your Way

Signage is an important factor in roadway safety. Poor signage can lead to distraction-related problems as drivers struggle to find their destination. To improve safety, SDOT is in the process of replacing all of our street name signs. Efforts are also underway to improve signage to port facilities, interstate highways, and major arterial routes.

Use Dynamic Message Signs to Support Enforcement

Special enforcement messages will be posted on the City's network of Dynamic Message Signs while increased enforcement efforts are underway. The signs have the ability to reach hundreds of thousands of drivers per day and discourage distracted driving.

ENFORCEMENT

Conduct Distracted Driving Emphasis Patrols

NHTSA-funded studies in two U.S. locations showed a 38 to 56 percent reduction in cell phone use and a 42 to 68 percent reduction in texting while driving as a result of high visibility enforcement. The City and our partners at Public Health – Seattle & King County will collaborate to support increased enforcement of distracted driving laws. These efforts will be supported with publicity through media channels and will be focused in locations where distracted driving collisions occur most often.

5TH AVE
10 VIA 15TH AVE

FOCUS AREA

FEWER PEOPLE TRAVELING WHILE IMPAIRED

DID YOU KNOW....
Almost half of all fatal collisions in Seattle involves impairment.

MEASURES

Number of collisions attributed to impairment annually	408 (2010)
Percentage of fatal collisions where impairment is a factor	48 percent (2006-2010)

Impairment accounts for nearly half of all traffic fatalities. Impaired drivers are more likely to speed, more likely to be inattentive behind the wheel, and more likely to fail to grant the right of way to people on foot, in wheelchairs, or on other wheels, and people riding bikes. It takes impaired drivers twice as long to react when compared to a non-impaired driver.

Impairment is the leading cause of fatality collisions on Seattle streets. Between 2006 and 2010, 48 percent of the deaths on our streets involved impairment. Thankfully, keeping alcohol and drug impaired drivers off the road has been a priority in Washington for years. SPD, Public Health – Seattle & King County, and the State of Washington have a long-standing partnership to combat impaired driving. As part of King County's Target Zero Team, SPD receives funding from the Washington Traffic Safety Commission to conduct extra patrols. These patrols are supported with a robust media presence to inform drivers of the extra patrols and to remind people that drinking and driving is not worth it. Known as high visibility enforcement, this coordinated education and enforcement strategy has been proven to deter impaired driving.

Aside from the fact that impaired drivers risk harming themselves and others on the road, the financial cost of being convicted for driving under the influence is staggering. These costs include fines, jail expenses, attorney fees, probation costs, and increased insurance rates. Driving under the influence cases can cost offenders $10,000, but the costs go far beyond the monetary. Loss of driving privileges, mandatory jail time, and potential loss of employment are just a few of the steep personal costs that anyone convicted of DUI must bear.

ACTIONS

Data tells us that half of those killed in impairment crashes were people between 16 and 30 years old. The majority of impairment-related fatality collisions occur between the hours of 6 p.m. and 6 a.m., and most frequently occur on Friday, Saturday, or Sunday. More than 40 percent of impairment-related deaths occur from June through September. Further, three out of five impairment-related deaths involved just a single vehicle.

While significant gains have been made to reduce impaired driving, we know that drinking and driving remains a common practice. It has been estimated that at least 80 million trips are made nationwide every year by drivers with a blood alcohol content of .08 or higher (the legal threshold for impaired driving in Washington) and that arrests are rare (Hedlund & McCartt, 2002).

EDUCATION

Conduct Outreach at Venues Known to Generate DUIs

Law enforcement officials collect information about the locations where drivers became intoxicated whenever possible. This information will help us launch extra efforts at targeted venues known to produce impaired drivers. This will allow our educational messaging to reach potentially impaired drivers before they drive. Outreach will include placing posters, infographics, billboards, and special messages at key sites and make intoxicated individuals think twice about getting behind the wheel.

Promote Late Night Taxi stands

As part of the Seattle Nightlife Initiative, five new late-night taxi stands have been opened in Belltown, Capitol Hill, Downtown/ Pike Place Market, Fremont and Pioneer Square. The new stands provide a safe and visible location for people to catch a cab instead of driving. Seattle will continue to develop new late night taxi stand in neighborhoods with significant late-night activities.

Promote Late Night Pre-Paid Parking Option

Also part of the Seattle Nightlife Initiative, all pay stations have been re-programmed to open at 10 p.m. to sell parking stickers for the following morning. This gives drivers an opportunity to leave their car and retrieve their vehicles the next day. The City and our partners will launch an effort to promote this transportation alternative at bars and clubs throughout Seattle.

ENVIRONMENT

Utilize Dynamic Message Signs to Support Enforcement

Dynamic Messaging Signs inform a large number of travelers about increased enforcement efforts. While enforcing a law through a traffic citation ensures that the person stopped is aware of the law, dynamic message signs are an opportunity to inform the broader public about the targeted enforcements.

ENFORCEMENT

Conduct Extra DUI Patrols

The City will provide increased support of the Seattle Police Department's work to deter impaired driving through the King County Target Zero Team. This will include a strong media presence to inform drivers of increased patrols and educational outreach about impaired driving. Enforcement efforts will occur along corridors where impairment-related collisions most frequently occur.

Deploy DUI Squad

The Seattle Police Department's DUI Squad works Seattle streets from 7:30 p.m. to 4:30 a.m. The specially trained officers on this squad detect impaired drivers by enforcing traffic laws, responding to collisions, and assisting patrol officers who have stopped a driver they suspect might be impaired by alcohol and/or other drugs. During the winter holidays the squad is augmented by an emphasis patrol known as "Drunk Net."

Provide More Training for SPD

SPD will provide additional training on driving under the influence (DUI) procedures and tactics for patrol officers to assist them in identifying, arresting and processing impaired drivers.

HIGHLIGHTED PROJECT

Drive Hammered, Get Nailed

The Seattle Police Department, through a partnership with Public Health – Seattle & King County and the Washington Traffic Safety Commission, participates in special emphasis patrols to deter impaired driving. These patrols are supported by a robust media presence which includes television and radio advertising. Occurring several times per year, this use of high visibility enforcement has been deployed nationwide and has been proven to be an effective countermeasure against impaired driving.

FOCUS AREA

MORE PEOPLE KNOW AND FOLLOW THE RULES OF THE ROAD

DID YOU KNOW....
Safety is Seattle's number one priority.

MEASURES

Number of collisions attributed to "Failure to grant the right-of-way to vehicle" or "failure to grant the right-of-way to pedestrian" annually	2,494 (2010)

Whether you're walking, biking, or driving, navigating our transportation system appropriately is the key to staying safe. Yet there are many misconceptions about rules of the road. In some cases, the rules of the road are misunderstood or completely unknown.

Complicating the issue is the fact that drivers in Washington State are rarely tested on their knowledge of the rules of the road. In fact, many drivers on our roadways haven't taken the drivers exam in decades. And in that time, the City of Seattle and transportation agencies across the state have installed a number of new roadway features without much explanation about how to react to them. Features like flashing yellow turn signals, bike boxes, and sharrows improve our transportation network but can cause confusion for people unfamiliar with the modifications.

While drivers are infrequently asked to prove their knowledge of the rules of the road, pedestrians are never required to pass a test and may never have an opportunity to review the rules of the road. There is a great deal of confusion about where and when pedestrians can legally cross the street, and that every intersection is legally a crosswalk (even if it's not marked).

Bicycle laws and infrastructure are a mystery to many folks as well. While most people know that people on bike in the roadway must follow the same rules of the road as people in vehicles, many people are unaware that cyclists may ride on the sidewalk as long as they yield to pedestrians. Improving knowledge of these laws will ultimately make for more predictable interactions between people who walk, bike, or drive.

ACTIONS

This Action Plan will improve traffic safety by strengthening people's knowledge of the rules of the road. Educational outreach accompanied by training, environmental improvements, and increased enforcement of traffic laws is a proven technique for reducing collisions. In addition to existing programs like SDOT's Safe Routes to School pedestrian and bicycle training program, we plan to raise awareness about the rules of the road in a number of ways.

EDUCATION

Develop the "Road Map for Safety"

The Road Map for Safety will highlight important and often misunderstood rules of the road, inform travelers how to behave around new roadway features like bike boxes, and provide tips on how to travel safely on our city streets. In addition, the "Road Map" will get people talking about safety by highlighting locations where collisions frequently occur in their neighborhood and the circumstances that commonly lead to these crashes. Raising awareness about the issues that frequently affect our communities is a key component of improving safety.

Provide Direct Outreach and Training

SDOT will provide direct outreach to employers, community associations, schools, or any other groups interested in learning more about traffic safety. This training will be based on the "Road Map for Safety" and be conducted by SDOT staff. The "Road Map" will also be available electronically to community members

who choose to take the lead in improving traffic safety in Seattle.

Create a Network of Neighborhood Traffic Safety Ambassadors
The City will work with the City Neighborhood Council, Community Councils, and Neighborhood Block Watch Captains to create a network of traffic safety ambassadors. These individuals will help distribute safety messages to their community, work with SDOT and SPD to report poor driver behavior, and hand out 'good behavior tickets' to people who are following the rules of the road.

Continue the Holiday Pedestrian Safety Campaign
SDOT and the Seattle Police Department team up annually to promote safety in the downtown retail core during the busy holiday season. The cornerstone of this campaign is to remind drivers and pedestrians that everyone has a role in improving safety.

Foster Respect on Our Streets
The City and our partners will work to improve interactions on our streets by building awareness between all who travel. For example, we have teamed up with the freight community to improve understanding between bikers and truckers. Through this effort, the freight community will provide a semi truck and trailer for cyclists to sit in to help them gain perspective of the challenges of driving a big rig. The reverse will be done to help truck drivers discover how it feels to bike next to a large truck. These empathy-building exercises will take place as part of existing events throughout the city.

ENVIRONMENT

When the City plans to install new roadway facilities like turn signals, bike boxes, traffic calming devices or other features, we will improve efforts to inform the community about why the work is necessary, how the new facility will improve safety, and how to use the new roadway features when installation is complete. This will be a special focus for outreach prior to and during installation.

ENFORCEMENT

Knowing the rules of the road is one thing, but following them is another. At the Road Safety Summit meetings, public feedback frequently pointed out that many travelers know some rules of the road quite well but choose not to abide by them. The AAA Foundation refers to this as the "Do as I say, not as I do" attitude that many Americans have behind the wheel. Speeding is a great example of a rule that is acknowledged but often ignored.

In an effort to help encourage people to follow the rules of the road, SPD will launch safety emphasis patrols. The patrols will be data driven endeavors that take place in locations where collisions frequently occur and officers will focus on the issues that commonly cause collisions. These safety patrols will be supported with media outreach to inform the public why the patrols are occurring.

Conduct More Pedestrian Safety Emphasis Patrols
SPD has a program of pedestrian safety emphasis patrols, where an officer dressed in plain clothes acts as a pedestrian crossing the street at a legal crossing. Drivers are required to yield the right-of-way to pedestrians who are legally crossing the street and these patrols reinforce that message. These patrols will be increased.

Conduct Targeted Bicycle Safety Emphasis Patrols
SPD will dispatch units to locations where bicycle collisions frequently occur and enforce the rules of the road. SPD will look for anyone not following the rules of the road – both drivers and cyclists – in an effort to improve safety at these key locations.

Increase Education and Enforcement of Parking Laws
It's illegal to park within 20 feet of a crosswalk whether marked or unmarked in Seattle. Open lines of sight are a critical component of safety for pedestrians, people on bikes, and drivers. It's also illegal to park on sidewalks, asphalt walkways, and planting strips since

HIGHLIGHTED PROJECT
Safety in South Lake Union

PATH, Group Health, and other employers have teamed up to improve safety in the South Lake Union neighborhood. Through a series of lunchtime presentations in the work place, this effort intends to improve the knowledge of and adherence to the rules of the road, reduce distractions, and increase empathy between pedestrians, people who bike, and drivers.

this practice inhibits mobility. Seattle will increase educational efforts about parking regulations and step-up efforts to enforce these laws.

Coordinate Education and Enforcement Patrols
Public Health Seattle King County will coordinate their educational outreach with increased enforcement of pedestrian safety, DUI, speeding, and distracted driving laws in support of Target Zero.

EVALUATION

Despite access to a wealth of information and statistics, right now there's still a need for more information about the contributing causes of collisions. Public Health – Seattle & King County and the City are working together to create a serious injury and fatality review system for traffic collisions. This system would go above and beyond current efforts and potentially lead to future policy changes to increase road safety.

HIGHLIGHTED PROJECT
Safe Routes to School

SDOT's Safe Routes to School program is a partnership with the Seattle Police Department, Seattle Public Schools, Non-Profit Organizations and communities in Seattle. The goal of this program is to improve safety along school walking and biking routes, increase the number of students who walk or bike to school, and reduce motor vehicle congestion around schools.

Safe Routes to School works to make engineering improvements to designated school walking routes at five schools per year. But we also take the next step by ensuring that students are equipped with the knowledge needed to safely make their way from home to school and back again.

Second graders at each school take part in age-appropriate pedestrian safety training. After obtaining the skills to be a safe walker in the classroom, students are led on a "walking field trip" where they can practice their new skills in a real world environment.

To promote the long term use of these pedestrian safety tools, a campaign is launched to encourage parents and students to walk to school. Campaigns are determined by volunteers at each school and have ranged from walking school buses to intricate multi-month walking contests. An incentive or prize, usually donated by local businesses, is offered to students to raise awareness about the program. The goal of the encouragement portion of this program is to establish life-long walking habits.

FOCUS AREA

SAFE ROADWAY DESIGN FOR ALL

DID YOU KNOW....

Pedestrian countdown timers may reduce crashes by as much as 52%

MEASURES

Number of total collisions annually	11,913 (2010)
Citywide collision rate per 1M AADT	60 (2010)
Total number of fatalities	19 (2010)

Our streets are critical links between neighborhoods and businesses, schools and parks, homes and places of work. They contribute to a healthy economy and serve as important shared public spaces for socializing, exercising, and just exploring Seattle. Though all of these functions are critical, our most important priority must be to provide a safe environment for each and every person who uses Seattle's streets. We know that the design of our roads can play a role in what form of transportation we choose – car, transit, bike, or foot – and how comfortable and safe we feel while travelling.

For decades, Seattle has been ahead of the curve in implementing innovative roadway designs. Since 1972, Seattle has led the way in completing over 30 lane reconfiguration projects. This very simple safety initiative involves realigning lanes, changing lane widths, or altering the number of lanes – all inexpensive pavement marking changes. A study sponsored by the Federal Highway Administration estimates that lane reductions alone can reduce crashes by almost 20% in urban areas. (Evaluation of Lane Reduction "Road Diet" Measures on Crashes, Federal Highway Administration)

Guided by our Complete Streets Policy and funded through Bridging the Gap, over the last five years Seattle has resurfaced 150 lane-miles of road, constructed 80 blocks of new sidewalks, installed more than 120 miles of bicycle facilities, and added new countdown signals at 159 intersections. What's more, we're committed to continuing our safety improvements in the coming years. These will take shape in both small changes to

NICKERSON STREET CHANGES

After evaluating traffic data, SDOT engineers completed a rechannelization project on Nickerson Street. The safety improvements were remarkable and showed a 23% reduction in crashes and an even more significant decrease in the number of vehicles travelling over the speed limit.

Change in Number of Collisions on Nickerson from 13th Ave W to N Florentia St after Rechannelization

5-Year Average	1-Year Post Project	Percent Change
10/18/2004 - 10/18/2009	10/18/2010 - 10/18/2011	-23%
33.6	26	

Top End Speeders *(Percent +10 MPH Over the Speed Limit)*

	Before	After	Percent Change
Westbound	17%	1.4%	-92%
Eastbound	38%	1.5%	-96%

our streets and through new major projects. Additionally, we recognize that improving the built environment means more than just constructing new infrastructure. It means that we must ensure that everyone, adults and children, knows how to use these features and that our transportation agencies are communicating clearly about the safety elements of new projects. Together these strategies add up to a street network that is safe for all users.

ACTIONS

Even with these substantial investments in infrastructure improvements, there is still much work to be done. Seattle will continue to integrate safety into the project selection process and ensure that multimodal safety improvements are integrated into every project design.

EDUCATION

Improve Communications Prior to Project Construction
We will improve outreach efforts to ensure that communities have access to information about the safety benefits of each new project. We'll work with communities to discuss how the new features function and how pedestrians, bicyclists, and drivers can effectively utilize the improvements in their neighborhoods.

Improve Citywide Communications about New Roadway Features
Seattle will develop user-friendly, easily-accessible educational materials about how to use and benefit from new roadway features already in place. New roadway elements such as bike boxes, green bike lanes, actuated signals, and pedestrian countdown signals have been installed throughout the city. In order to fully maximize the safety benefits of these facilities, materials will be distributed on the City's website and through community partnerships with schools, libraries, hospitals, non-profit organizations, local media outlets, and large employers.

ENVIRONMENT

Complete the South Spokane Street Project in 2012
In 2012 Seattle will complete the South Spokane Street project that will include wider lanes and shoulders, as well as a permanent median. We will rebuild the lower roadway in concrete, with new curbs, sidewalks and improved pedestrian and bicycle access.

Complete the Mercer Corridor Project
Seattle will significantly improve safety along the Mercer Corridor. This project includes six of Seattle's high crash locations and will include adding left turn lanes, widening sidewalks, installing bicycle facilities, and improving signal timing for all vehicles.

Continue to Improve Pedestrian and Bicyclist Safety
In 2012 Seattle will install pedestrian safety improvements including countdown signals at 26 intersections, crossing and safety improvements at 42 locations, 500 remarked crosswalks, 12 blocks of new sidewalks, 150 new curb ramps, 3 rehabilitated stairways and 20 blocks of sidewalks repairs.

What's more, we will install 15 miles of bike lanes and sharrows, 30 miles of bike route signs, and maintain over 40 lane miles of additional bicycle facilities.

Build More Streets that Separate Modes
We'll build more separated bicycle facilities to provide a more comfortable setting for riders and a safer environment for both people on bikes and people in cars. In 2012, SDOT will continue to work on its update to the Bicycle Master Plan, and will look to include leading edge facilities in our on-street and trail networks.

Continue to Improve Driver Safety
We'll replace over 2,000 signs with new, highly reflective versions, and install larger more legible street name signs at almost 1,600 intersections. We'll construct two new traffic signals, three left turn improvements, and maintain 1,060 signals. We'll update pavement

markings on our arterial roadways.

We'll improve safety for our freight operators and provide more separated facilities for people on bikes. We'll construct six freight-specific projects that will make it easier for trucks to safely complete turning movements, help truckers find their destinations by improving signage, and preserve cargo by repaving sections of the roadway.

DID YOU KNOW....

New signage alone can reduce crashes by as much as 15%

Enhance Safety on Our Residential Streets

In 2012 we'll complete 20 small neighborhood projects such as curb extensions and traffic circles, and nine large neighborhood projects, providing sidewalks and more connected facilities throughout the city. We'll install Neighborhood Greenways that will connect residential streets across larger main streets. These corridor projects include signage, pavement markings, and crossing improvements like median islands. Through our traffic calming programs, we will continue to provide focused traffic calming on residential streets and intersections.

Grow Our Safe Routes to School Program

We'll add a minimum of five new schools to the 14 that that have already received safety improvements such as new sidewalks, crosswalks, curb ramps, or improved traffic management plans.

Maintain Quality of Pavement for All

People of all transportation modes support increasing our efforts to maintain the quality of pavement in order to increase safety. SDOT crews filled 25,110 potholes in 2011, two and a half times the number filled in 2010. In 2012, SDOT had $9 million available to address street surface repairs, including potholes, which included an additional $1.65 million in money that was prioritized from the sale of City property.

EVALUATION

Learn From Past Collisions

Seattle will continue to review every fatal collision through the Fatality and High Collision Location Program. This process will allow us to review whether appropriate engineering measures are in place to prevent similar tragedies from happening again. In addition, Seattle will continue to evaluate high collision locations to better recognize the factors contributing to crashes and to identify and implement changes in street design.

HIGHLIGHTED PROJECT

Linden Avenue North Complete Street

The redesign of Linden Avenue North between North 128th and North 145th will transform this road into a neighborhood-friendly street, improving safety for everyone. The project includes repaving; enhanced pedestrian safety with continuous sidewalks, the installation of curbs and curb ramps and a new pedestrian crossing near the Bitter Lake Community Center; improved street lighting and drainage; art that celebrates the neighborhood's history; and a two-way buffered bike lane. It's truly a safety benefit to all modes whether driving, bicycling, or walking. The project will also add street trees and landscaping along both sides of the street and complete the missing link in the Interurban Trail.

APPENDIX A
Public Comment Summary

The summary below represents the most common responses to three questions. The first question, "What do you think are the highest priority safety problems to solve on Seattle roads?" is answered below. The second and third questions ("What do you think are the most important things to do to make Seattle roads safer?" and "We often talk about what government can do to promote safety. What are the ways that non-governmental groups and individuals can promote safety?") are compiled together on the following page.

The full record of public comment is available online in addition to this summary, with a full count of separate comments and then a listing of complete comments.

PROBLEMS (797 comments total)

Education	**319**
Driver Behavior	174
Distracted driving	51
Speeding	43
Inattention	20
Rules of the road/courtesy	19
Aggressive driving	18
Impaired driving	12
Didn't specify	11
All modes Behavior	37
Didn't specify	13
Visibility	9
Bicyclist Behavior	32
Rules of the road/courtesy	28
Visibility	4
Lack of knowledge of rules of the road	26
Empathy	17
Granting right of way	16
Pedestrian Behavior	11

Other	**31**
Bicycle and pedestrian safety	20
Right to assemble	2
Advocacy	2

Enforcement	**80**
Enforcement for drivers	
Speeding	13
Distracted driving	9
Impairment	9
Didn't specify	4
Failing to yield	4
Enforcement for bicyclists	
Didn't specify	8
Rules of the road	3
Enforcement for all modes	
Rules of the road	6
Didn't specify	6
Lack of enforcement	10
Enforcement for pedestrians	2

Environment	**367**
Road conditions (potholes, road surface, etc.)	86
Inadequate bicycle facilities	68
Separate facilities	37
Didn't specify	31
Inadequate pedestrian environment	53
Road design	41
Complete Streets	29
High speeds	24
Signage and markings	20

SOLUTIONS (2,166 comments total)

Education 797

Education campaign for all modes	377
Various	169
Suggestions for outreach or campaigns	121
Rules of the road/courtesy	71
Bicycle facilities	7
Partership suggestions	6
Mentorship program	3
Education campaign for drivers	108
Various	46
Rules of the road/courtesy	26
Speeding	19
Driving with bicyclists	7
Failing to yield	3
Education campaign for bicyclists	74
Various	48
Rules of the road/courtesy	26
Education campaign for visibility	56
All modes	27
Bicyclists	24
Pedestrians	5
Empathy	39
Education through licensing, car tabs	38
Community engagement	30

Other 230

Lower speed limits	45
Bicycle licensing	38
Stricter laws or high fines	29
Policy/regulatory change	28
Various	19
Eliminate right turn on red	9
Advocacy	17
Community engagement	15

Enforcement 278

Enforcement for drivers	118
Distracted driving	35
Speeding	29
Various	27
Impairment	15
Failing to yield	12
Enforcement for all modes	104
Various	81
Rules of the road	20
Distraction	2
Enforcement for bicyclists	32
Various	24
Rules of the road	4
Visibility	4
Community engagement	10
Enforcement for pedestrians	3

Environment 861

Bicycle and pedestrian design	422
Separated facilities	150
Improve pedestrian conditions	106
Complete Streets	81
Improve shared facilities for bicyclists	75
Fewer shared facilities for bicyclists	10
Improve road design	163
Various	70
Signage and markings	62
Signalization	21
Lighting/visibility	10
Improve road conditions	137
Traffic calming	47
Better public transportation	27

Total Comments: 2,963

ROAD SAFETY PARTNERS & ACKNOWLEDGEMENTS

The Road Safety Action Plan was prepared by Jim Curtin of the Seattle Department of Transportation (SDOT) and Rebecca Deehr from the Office of Mayor Mike McGinn. Kiersten Grove of SDOT provided additional assistance.

The City of Seattle would like to recognize our community partners who have participated in public forums, reviewed public feedback and ideas, helped produce a set of recommendations for improving road safety in Seattle, and assisted in the development of our education campaign.

Co-Chairs

Dr. David Fleming	Director, Public Health – Seattle & King County
Jamie Cheney	Director, Commute Seattle
Doug Palm	Director of Global Facilities, Program for Appropriate Technology in Health (PATH)
Tony Gomez	Public Health – Seattle & King County
Annie Phare	Public Health – Seattle & King County
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Steve Lind	Washington Traffic Safety Commission
Angie Ward	Washington Traffic Safety Commission
MJ Haught	Washington Traffic Safety Commission
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Lydia Heard	Seattle Pedestrian Advisory Board
Cathy Tuttle	Seattle Neighborhood Greenways
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Robbie Phillips	Fred Hutchinson Cancer Research Center
George Allen	Seattle Metropolitan Chamber of Commerce
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making a DIFFERENCE

In order to minimize printing costs and reduce paper use, a limited number of copies were printed on recycled paper.

The individual pages are available to view at www.seattle.gov/BeSuperSafe

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