



# **King County Traffic Safety Equity Evaluation Report FY 2022-2023**

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the Kent Police Department

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## I. Equity Evaluation Process

A comprehensive equity evaluation was undertaken with the support of the King County Target Zero Steering Committee to review all King County Target Zero planning for the 2022-2023 fiscal year. A program plan was outlined to systematically gather and evaluate the work of the King County Target Zero program. The following outcomes were defined as part of this process:

- Conduct equity training for all steering committee participants and staff
- Conduct the comprehensive equity review
- Produce a written report of the evaluations
- Include recommendations of action oriented next steps
- Present findings to the entire steering committee, WTSC, Public Health, and Kent Police Department leadership

The first step in the equity evaluation included some education and centering of equity issues in the Steering Committee discussions. This included reviewing and discussing within Steering Committee meetings the importance of the materials outlined below:

- PBS Movie on [Driving While Black: Race, Space and Mobility in America | PBS](#)
- Podcast on The Arrested Mobility podcast by Charles T. Brown [https://arrestedmobility.com/episodes/\[arrestedmobility.com\]](https://arrestedmobility.com/episodes/[arrestedmobility.com]). Episode 1 (jaywalking) and Episode 6 (killer roads).
- NYTimes article on Road Deaths Racial Gaps <https://www.nytimes.com/interactive/2023/04/26/opinion/road-deaths-racial-gap.html>

The Government Alliance on Race & Equity (GARE): Racial Equity Toolkit was selected to guide the equity evaluation process. This tool was closely based on a similar tool created by the City of Seattle. To conduct the equity review, the program was divided into three groups and steering committees were assigned to each group.

- Group 1 – Impairment, Distraction, Speeding, People Riding Motorcycles, Heavy Trucks
- Group 2 - Safe Systems Approach, People Walking, Biking, and Rolling, Lane Departures, Intersections, EMS and Trauma Care Services, Cooperative Automated Transport
- Group 3 - Unrestrained Occupants, Young Drivers, Older Drivers, Traffic Data Systems, Evaluation, Analysis and Diagnosis

Zoom workshops were held for each group, facilitated by a Target Zero Manager, to work through each of the sections of the programming. Notes were gathered and collated from each of the meetings. Two additional open listening sessions were held to allow Steering Committee members to provide feedback on each of the additional sections of the equity review. All notes were gathered and developed into this final report. The below report is organized into two main parts. The first 12 pages summarize the findings and actions items from the process. Pages 13-52 are the detailed summaries by topic item that were gathered during the workshops. This report will be provided to all Steering Committee members in the August committee meeting, to all Public Health, Kent Police Department, and WTSC leadership, and additionally provided to all Coalition partners.

## II. Key Outcomes

Key outcomes were summarized and consolidated from the fully outlined meeting reports below. These outcomes were common themes throughout the equity evaluation and represent the top issues for investment in equity for King County traffic safety programming.

### Data Needs:

Data should be broken down into the following categories to support identifying and reducing disparities in injuries and deaths:

- Race and ethnicity for serious injury data (note: fatal injury data is available for race and ethnicity) and other crash and near miss data
- Regions of King County, neighborhoods, and sub-neighborhood level
- Point or intersection type level data
- School district (help support Teens in the Driver's Seat program implementation)
- Drivers' education and socioeconomic status and race

Evaluate overlap and connections between multiple risk factors (shared risk and protective factors) to identify prevention points, including:

- Rage and Speed (psychological connections)
- Level of speed (pursuit involved, extreme speeding [10+ mph over the speed limit])
- Unrestrained drivers, alcohol positive and speeding
- Alcohol positive, drug positive and speeding that are unrestrained.
- Could unrestrained be a downstream impact of other potential issues (alcohol, drugs, speeding, etc.), where can our impact make the biggest change?
- Interaction between driver behavior and education on vehicle technology and the changes in outcomes

There are several key factors that should be considered when gathering additional data:

- Data should be provided back to the community directly.
- Driver behavior data is gathered post-crash by law enforcement, can we assess how accurate that is being done.
- Make data more easily digestible (info graphics) and ensure people can integrate the data.
- Translate findings into every language that is represented in the data.
- Data presented should go even deeper into inclusion of those with disabilities (deaf, blind, color blind, etc.)

Community, socioeconomic, and sociodemographic data that should be incorporated into the discussions of traffic safety and equity include:

- School district data such as race/ethnicity, free and reduced lunch eligibility, homelessness, foster care, students with disabilities.
- Inequities of the built transportation system and its impact on communities of color and those of lower income

- Lighting data
- Community safety data
- Air quality and pollution and effects on communities
- How people get to work
- Local and regional demographic and socioeconomic data
- Socioeconomic status of vehicle owners and the technologies for safety within their vehicles
- Built environment (i.e., lack of sidewalks and safe places to walk)

Newer types of data that need to be incorporated into the analysis to support a full understanding of traffic impacts and equity:

- Serious Injury data
- Data on pedestrian exposure (how much walking is happening and has it increased)
- Housing status of individuals injured, killed, and ticketed
- Healthcare, hospital and first responder data
- Integration of all data sources
- Qualitative and anecdotal data
- King County specific data on Cooperative Automated Transport
- Injuries not captured in crash report data
- Engagement of communities to gather speed data across the county

Data on best practices to support better program implementation and outcomes include:

- Empirical data of speed measurement within the communities
- Cost effective safe system solutions that work
- Efficacy of the Teens in the Driver's Seat program
- Data on the efficacy of pedestrian education
- Are there communities we can compare to and evaluate our work

### **Community Engagement**

Need more community engagement and follow-up to ensure we are acting in accordance with community need and wants and ensuring change. Modes to gather input include:

- Gather input from and provide information at community safety fairs and community activities where a lot of people are already assembled.
- Make sure we are engaged with the bicycling communities.
- Identify organizations that help communities that are low income (resource fairs, food banks, homeless, etc.) to partner for information gathering.
- Social media to gather feedback and promoting safe behavior.
- Recognizing that people are working at different times and holding events/gathering feedback at different times throughout the day.
- Materials in different languages, translation, interpretation, reaching those with lower English proficiency.
- Public health clinics and healthcare for the homeless.

- People using transit services (they are already walking, biking, and using transport).
- Gathering behavioral information from motorcyclists themselves on their concerns.
- Community focus groups.
- BIPOC Communities. Hispanic/Latinx community partners in this work (have been engaged in the past).
- Law enforcement engagement of their communities
- Community organizations
- Schools
- Rural communities
- Individuals with disabilities
- Youth engagement

Topics to include in the engagement of communities and organizations should include:

- Use of force in traffic safety and public perception
- Use of automated traffic enforcement modes
- Why drivers choose to speed
- Asking the community directly what they feel they need to be safe walking

When engaging communities, ensure that one is aware of other community engagement efforts that are occurring and how we can incorporate the knowledge already gathered. Some examples of efforts include:

- [Who's Streets Our Streets](#)
- [Seattle Department of Transportation Blog](#)

Additional important topics for increasing community engagement in traffic safety work:

- Translation and interpretation services for those that are non-native English speakers.
- Include community to participate in the observational surveys and evaluation.
- Evaluating the program and ensuring it is in alignment with our priorities.
- Focus on drivers' education and promoting safety for all road users.

### **Advancing Equity**

Key initiatives to advancing equity in traffic safety work that should be implemented:

- Review of all the High Visibility Enforcement (HVE) work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Tracking where officers are focusing their enforcement efforts and review that for equity. Consequences of disproportionate levels of ticketing in the Black and BIPOC communities.
- Emphasizing the role of engineering and roadway design in driver behavior and speed and reducing injuries and fatalities.

- Tackling data gaps will help us fully understand the equity issues we are facing and provide opportunities to reduce equity impacts.
- Environmental impact of less driving, especially on communities of color and low-income communities.
- Participation from all communities, especially those that are BIPOC, low income, and disabled. Working with community organizations that are already doing this engagement work and fund them directly to continue and expand.
- Continue to be a voice for changing the fines and fees structures around tickets and citations to have a lower burden on our lower socio-economic status areas and people.
- Break down the silos between the community experience and where we are currently operating as a community.
- Evaluate alternatives to traditional traffic enforcement and how they could support equity (including automated enforcement).
- Identify additional multi-pronged approaches to support young driver safety.
- Incorporated cooperative automated transport technologies into fleet vehicles.
- Standardize vehicle safety technologies within all new vehicles.
- Incorporate businesses more into the traffic safety realm as key partners (i.e. trucking, driving schools, etc.).
- Invite community members to participate in programming such as being a member of an observation or evaluation team.
- Engagement of the public through multiple modes of interventions (i.e. parenting classes through the court upon divorce, DUI court education, traffic school, etc.)
- Incorporate overall health impact of communities of color and low-income communities.

### **Implementation**

To achieve full implementation and sustainment of equitable traffic safety programming the following elements will need to be included:

- Emphasis on engineering controls and changes to ensure lasting change for safety in our communities.
- Advocate for NHTSA to shift funding towards safe system approaches to planning, including engineering.
- Increase passive ways to get people to slow down.
- Ongoing investment in data gathering, evaluation and sustainment. Incorporating qualitative data and use it in the short term as more quantitative data elements are increased. Integration of data sources.
- Hearing from experts in the community throughout the creation and implementation of programs.
- Support zoning, urban planning, building development to promote safety and equity (i.e. lighting, walkability, violence reduction).
- More cross organization/partner sharing on successful safe system implementation and approaches.
- Implementation of alternative approached to traditional enforcement.

- Political support to shift focus to safety and the safe system approach (i.e. support of walkability).
- Need to identify remote options to continue to gather data and invest in these areas.
- Ensure positive messages are maintained. Make it easier for people to enjoy their communities.
- Set limitations on what type of vehicles you might be able to drive based on what technology you are tested on (i.e. only drive standard if you are trained and tested on a standard vehicle).

### **Accountability and Evaluation**

Key areas in need of investment for accountability and evaluation in traffic safety programming include:

- Gauging impact of the target zero initiatives for efficacy, equity, and sustainability. Can we estimate how much worse the problem might have been if we were not doing these initiatives.
- Engagement of partners with the community in the evaluation process.
- Evaluation of the high visibility enforcement work and ensuring it is not leading to unnecessary use of force situations.
- Evaluation of media and marketing campaigns to ensure effectiveness.
- Support communicating and data translation with elected officials and make the case for safety investments.
- Continue to share and coordinate best practices in traffic safety work among partners.
- Providing information back to the community from program work and data gathering.
- Reducing carbon emissions and increase environmental partnerships.
- Ensuring equitable financial investment and distribution to support traffic safety.
- Is change in culture even possible to evaluate this?
- Continual evaluation of cooperative automated transportation technologies and how it is impacting equity.

### III. Action Items

Below is a list of key actions developed from the Key Outcomes to ensure the focus and centering of equity as we move forward and continue King County Target Zero program planning. The below items are grouped based on their topics and represent some of the most pressing needs to continue our commitment to equity in all our work.

#### **Advocacy**

- Advocate for the evaluation of race and ethnicity data traffic enforcement in King County. This includes: 1) inclusion of race data all traffic ticketing, injury, and crash data, 2) inclusion of race data in high visibility enforcement data, 3) evaluation of high visibility enforcement work for equitable implementation across communities.
- Advocate for policy changes to support reducing disparities and promoting equity in traffic safety (i.e., support changes to fines and fees structure for ticketing and citations, reviewing alternatives to traditional traffic enforcement, young driver safety, standardize vehicle technology to support safety, vehicle licensing type based on vehicle technology tested on)
- Advocate and apply for funding to support engineering and safe system focused changes to support safety.
- Advocate for money to support engineering programs within Target Zero programming.
- Advocate for the inclusion of traffic safety safe systems approaches into zoning, urban planning, building development, etc.
- Support communication and data translation with elected officials and make the case for safety investments.

#### **Engagement**

- Support and conduct community engagement efforts to understand needs, attitudes, behaviors, disparities and inequities throughout King County. Ensure engagement is multi-lingual and culturally appropriate to support gathering data from underserved communities. Use this information to develop the next round of traffic safety strategic planning for King County.
- Work with community organizations already doing the work in underserved communities to support grassroots organizations and engagement within a community in traffic safety.
- Break down silos between community members, organizations, business, law enforcement and traffic safety professionals through continued investment in coalition building and sharing best practices and lessons learned.

#### **Program Implementation**

- Research and apply for additional grant funding to support engineering and safe system focused safety initiatives and target implementation for underserved communities to promote equity and reduce injuries and deaths.
- Identify funding and personnel to support ongoing investment in data gathering, evaluation, sustainment, integration, and analysis.
- Increase the cross organizations/partner sharing on successful safe system implementation and approaches.

- Support the implementation of alternative approaches to traditional enforcement.
- Support programs for active transportation and reduce overall gas vehicle usage. Ensuring equitable financial investment and distribution to support traffic safety.

### **Evaluation**

- Analyze fatality data for overlap and connections between multiple risk factors.
- Analyze fatality data for sub-county trends.
- Incorporate data on community, socioeconomic and sociodemographic characteristics to provide a deeper understanding of inequities.
- Incorporate new forms and integrate data to provide a wholistic picture of inequities.
- Evaluate the impact of Target Zero programs for efficacy, equity, and sustainability, through comprehensive data and process evaluation. Engage community partners and members with the evaluation.
- Evaluation of media and marketing campaigns to ensure effectiveness.
- Provide program information and data back to the community.
- Continual evaluation of cooperative automated transportation technologies and how it is impacting equity.

## IV. Implementation Timeline and Responsibilities

The below timeline is an estimate based on current known priorities, length of estimated completion, and current resources to execute. All items should be reported on at least yearly until completion. Additionally, the key partners identified are those that are pivotal in the completion of this goal but not the only partners that will be needed to execute these items.

Action Item	Estimated Timeline	Key Partners Involved
<b>Advocacy</b>		
Advocate for the evaluation of race and ethnicity data traffic enforcement in King County. This includes: 1) inclusion of race data all traffic ticketing, injury, and crash data, 2) inclusion of race data in high visibility enforcement data, 3) evaluation of high visibility enforcement work for equitable implementation across communities.	September 30, 2024	WTSC Law Enforcement (Local, WASPC, Leadership) Target Zero
Advocate for policy changes to support reducing disparities and promoting equity in traffic safety (i.e., support changes to fines and fees structure for ticketing and citations, reviewing alternatives to traditional traffic enforcement, young driver safety, standardize vehicle technology to support safety, vehicle licensing type based on vehicle technology tested on)	Ongoing	Target Zero WTSC NHTSA Congress
Advocate and apply for funding to support engineering and safe system focused changes to support safety.	July 1, 2024	Target Zero
Advocate for money to support engineering programs within Target Zero programming.	Ongoing	Target Zero WTSC NHTSA
Advocate for the inclusion of traffic safety safe systems approaches into zoning, urban planning, building development, etc.	Ongoing	Target Zero WTSC
Support communicating and data translation with elected officials and make the case for safety investments.	Spring 2024	Target Zero WTSC
<b>Engagement</b>		
Support and conduct community engagement efforts to understand needs, attitudes, behaviors, disparities and inequities throughout King County. Ensure engagement is multi-lingual and culturally appropriate to support gathering data from underserved communities. Use this information to develop the next round of traffic safety strategic planning for King County.	November 1, 2023	Target Zero WTSC
Work with community organizations already doing the work in underserved communities to support grassroots organizations and engagement within a community in traffic safety.	September 30, 2024	Target Zero
Break down silos between community members, organizations, business, law enforcement, and traffic safety	September 30, 2024	Target Zero

professionals through continued investment in coalition building and sharing best practices and lessons learned.		
<b>Program Implementation</b>		
Research and apply for additional grant funding to support engineering and safe system focused safety initiatives and target implementation for underserved communities to promote equity and reduce injuries and deaths.	July 1, 2024	Target Zero Local Jurisdictions WSDOT
Identify funding and personnel to support ongoing investment in data gathering, evaluation, sustainment, integration, and analysis.	September 30, 2024	Target Zero
Increase the cross organizations/partner sharing on successful safe system implementation and approaches.	July 1, 2024	Target Zero
Support the implementation of alternative approaches to traditional enforcement.	Ongoing	Target Zero WTSC
Support programs for active transportation and reduce overall gas vehicle usage.	September 30, 2024	Target Zero WTSC
Ensuring equitable financial investment and distribution to support traffic safety.	September 30, 2024	Target Zero
<b>Evaluation</b>		
Analyze fatality data for overlap and connections between multiple risk factors.	September 30, 2024	Target Zero WTSC
Analyze fatality data for sub-county trends.	September 30, 2024	Target Zero
Incorporate data on community, socioeconomic and sociodemographic characteristics to provide a deeper understanding of inequities.	September 30, 2024	Target Zero WTSC
Incorporate new forms and integrate data to provide a wholistic picture of inequities.	September 30, 2025	Target Zero WTSC
Evaluate the impact of Target Zero programs for efficacy, equity and sustainability, through comprehensive data and process evaluation. Engage community partners and members with the evaluation.	September 30, 2025	Target Zero
Evaluation of media and marketing campaigns to ensure effectiveness.	September 30, 2024	Target Zero
Provide program information and data back to the community.	Ongoing	Target Zero WTSC
Continual evaluation of cooperative automated transportation technologies and how it is impacting equity.	Ongoing	WTSC Target Zero NHTSA

## V. Full Discussion Overviews (By Topic Area)

Below is the full report of conversations during the equity review with the Steering Committee. Sections outlining the program and desired results/outcomes are captured in the yearly operational plan which can be used in coordination with this document.

### Evaluation Area: Impairment

#### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth – cannabis impairment, child death review, known impacts
- Community engagement
- Criminal justice
- Economic development – with safer movement through the area, reducing the billions of dollar burden of crash and injury/death
- Education
- Environment – alternative options to driving if impaired, public transport
- Food access and affordability – increasing safe routes and transportation options
- Government practices – with policy work
- Health
- Human services
- Planning and development – driver behavior and safe system approach, reduce human error
- Transportation
- Other – all roadway users of the transportation system
- Pedestrians – safer movement through the communities

Additional Comments:

- Increase evaluation of the reach and impact of the media and marketing campaigns. Share equivalent cost of how that media would show impact. Effectiveness of education campaigns can vary widely, how to increase effectiveness.

#### STEP #2: Data

What's the data? What does the data tell us?

##### Known Data:

Fatalities in King County 2012-2022 with an alcohol-impaired driver

Year	Fatalities
2012	28
2013	24
2014	20
2015	24
2016	18

Fatalities in King County 2012-2022 with a drug-positive driver

Year	Fatalities
2012	30
2013	25
2014	34
2015	38
2016	40

2017	29
2018	29
2019	20
2020	25
2021	26
2022	25

2017	42
2018	43
2019	34
2020	34
2021	51
2022	47

1. 34% of driver involved in a fatal crash in King County were positive for drugs and/or alcohol
2. Of the fatalities from 2012-2021 in King County, 23% had an alcohol impaired driver and 36% had a drug positive driver involved
3. Impairment is the number one priority in King County and accounted for 349 or 60% of the total fatalities in King County from 2017-2021

**Additional Data Needs**

- Use communities count data to support health planning areas
- Evaluated differences among regions in King County, identify neighborhoods and sub-neighborhoods that could help identify disparities in relation to racial inequities (may need to combine across years for some smaller sub-regions)
- King County Medical Examiner’s office data for fatalities in King County
- Point level data for fatalities that include race and ethnicity
- Need race and ethnicity data for all crash data (including serious injuries and minor injuries)
- Is there data that we could pay for that could help support our needs (internal to PH or other data sources or expertise)
- Integration of data is needed to support understanding the full scope and impacts
- Look at data by school district to help prioritize the implementation of teens in the driver’s seat or other programs
- Evaluate for evidence of bias related to enforcement campaigns
- Partnerships to evaluate for micromobility related crashes and other newer transportation modes

**STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- We have engaged multiple agencies and community partners to support our strategic planning work and lead our program prioritization
- Still need to continue to engage the Hispanic/latinx community partners in this work (have been engaged in the past)
- Work with the individual cities within the county and see what their community engagement processes look like for developing local priorities. How do we show all of the levels of engagement to support our full community
- Conversation with law enforcement on how they engage their community and from their perspective how they think we could engage
- Tapping into engagement that is already occurring:  
<https://drive.google.com/file/d/19g1pigMiEpsQEK11e9n7aYAWL6t2hPg3/view>

- Community surveys and community focus groups on the use of enforcement to support impaired driving and other approaches: go to other community meetings that are not necessarily traffic safety focused can help get additional input, engaging schools
- Working with businesses (delivery, other driver types) and work on impairment. Ignition interlocks for businesses

#### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Review of all the HVE work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Should we be tracking where officers are focusing their enforcement efforts and review that for equity
- WTSC has removed historical requirements for number of stops per hour and stops for equipment etc.
- Our group needs to continue to be a voice for changing the fines and fees structures around tickets and citations to have a lower burden on our lower socio-economic status areas and people
- Break down the silos between the community experience and where we are currently operating as a community (who's streets, our streets report)
- More data and information could help focus future dollars for improvement on the engineering side/transportation
- Consequence is disproportionate levels of ticketing in the black and BIPOC communities and could lead to other more severe injury or outcomes associated with the stops

#### **STEP #5: Implementation**

What is your plan for implementation?

- Not fully resources to be able to support the implementation of teens in the driver's seat or do the bar checks strategy
- Items that are priority 1 are fully resources because of grant deliverables could create inequities because of what is supported with funding/resources and not.
- Staffing in law enforcement has improved and we are able to support additional enforcement operations
- Officers that are operating in HVE are more trained to support the traffic work, but this has not been evaluated with data to understand the possible impacts
- We should emphasize the engineering component of this work more to ensure we are making lasting change as well as supporting equity
- Push NHTSA to shift their funding more toward the safe systems approach

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We are tracking outcomes of our target zero work throughout the year and providing that feedback to our funder and steering committee
- How do we know if we are having an overall impact in the community, by the numbers it might not seem clear that we are, but if we weren't doing this it could be even worse.
- Engagement of partners with the community in this process is so important
- Have worked hard to support communications and coordination of best practices in our work, WTSC often follows our lead
- Accountable to WTSC throughout our funding reporting, auditing, etc.
- Want to ensure that our HVE work is not leading to unnecessary use of force situations and complaints
- Evaluation of media and marketing campaigns to ensure effectiveness

## Evaluation Area: Distraction

### Step #1: Impacts

What does this proposal have an ability to impact

- Children and youth
- Community engagement
- Criminal justice
- Economic development – with safer movement through the area, reducing the billions of dollar burden of crash and injury/death
- Education – focus on texting and driving (other distraction?)
- Environment – alternative options to driving
- Food access and affordability – increasing safe routes and transportation options
- Government practices – with policy work
- Health
- Human services
- Planning and development – driver behavior and safe system approach, reduce human error
- Transportation
- Other – all roadway users of the transportation system
- Pedestrians – safer movement through the communities

Additional Comments:

- How can we work at the sources of the distraction, electronic devices, countermeasures that target this key source. Especially on the education and policy portions (could also be true for impairment)

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data:

Fatalities in King County 2012-2022 with a distracted driver involved

Year	Fatalities
2012	22
2013	22
2014	24
2015	34
2016	27
2017	25
2018	18
2019	24
2020	16
2021	20
2022	21

1. 35% of those killed were pedestrians
2. 21% of fatalities in King County were associated with a distracted driver from 2017-2021. Distracted driving does not make the level one priority areas in King County (7<sup>th</sup>)

### **Additional Data Needs**

- Distracted driving is often underreported which could impact its priority level within the county. There will be data gaps for any of these issues when a fatal crash is a hit and run.
- Would be useful to compare the distracted driving associated with pedestrian involve collisions with other factors that are involved in pedestrian deaths
- Most distracted driving occurs on city streets and not on highways (from most recent observational survey by WTSC)
- Age breakdown on data. There is a perception of younger drivers being more distracted, who is really driving distracted to target the work
- State-law for Distracted Driving implemented in 2015. Have we seen a decreased since then in overall distracted driving, not just fatalities
- All designation of driver behavior is post-crash by law enforcement. How diligently is this information being collected due to all of the other components occurring in a crash
- Look at data by school district to help prioritize the implementation of teens in the driver's seat or other programs
- Evaluated differences among regions in King County, identify neighborhoods and sub-neighborhoods that could help identify disparities in relation to racial inequities (may need to combine across years for some smaller sub-regions)
- Point level data for fatalities that include race and ethnicity
- Need race and ethnicity data for all crash data (including serious injuries and minor injuries)
- Is there data that we could pay for that could help support our needs (internal to PH or other data sources or expertise)
- Integration of data is needed to support understanding the full scope and impacts

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- The distracted driving survey engages across our community over five years – informs a lot of information on perception of harm and also knowledge of the law
- Engagement of community through an app based community engagement event for safe driving (city of Seattle) – can really change some people's behaviors.  
<https://sdotblog.seattle.gov/2019/07/23/positive-results-from-seattles-safest-driver-2-0/>
- Some insurance companies are using tools to monitor driver behavior to be able to reduce rates
- Work with the individual cities within the county and see what their community engagement processes look like for developing local priorities. How do we show all of the levels of engagement to support our full community
- Conversation with law enforcement on how they engage their community and from their perspective how they think we could engage
- Tapping into engagement that is already occurring:  
<https://drive.google.com/file/d/19g1pjgMiEpsQEK11e9n7aYAWL6t2hPg3/view>
- Re-engagement of the Washington state insurance council

#### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- The behavioral survey is translated in Spanish as well as English as well as the media and marketing for distracted driving. The radio ads are both in English and Spanish and a Spanish speaker officer out of Bellevue has been on those platforms as well. Have not translated into other languages and groups yet
- The media and marketing were created to represent the diversity of the communities of focus
- Review of all the HVE work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Should we be tracking where officers are focusing their enforcement efforts and review that for equity
- WTSC has removed historical requirements for number of stops per hour and stops for equipment etc.
- Our group needs to continue to be a voice for changing the fines and fees structures around tickets and citations to have a lower burden on our lower socio-economic status areas and people
- Break down the silos between the community experience and where we are currently operating as a community (who's streets, our streets report)
- More data and information could help focus future dollars for improvement on the engineering side/transportation
- Consequence is disproportionate levels of ticketing in the black and BIPOC communities and could lead to other more severe injury or outcomes associated with the stops

#### **STEP #5: Implementation**

What is your plan for implementation?

- Distracted driving is funded appropriately, WTSC want us to take more money to expand this work but don't have the personnel bandwidth
- Items that are priority 1 are fully resources because of grant deliverables could create inequities because of what is supported with funding/resources and not.
- Staffing in law enforcement has improved and we are able to support additional enforcement operations
- Officers that are operating in HVE are more trained to support the traffic work, but this has not been evaluated with data to understand the possible impacts
- We should emphasize the engineering component of this work more to ensure we are making lasting change as well as supporting equity
- Push NHTSA to shift their funding more toward the safe systems approach

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- Support communicating with elected officials and make the case for safety investments

- Effectively translate data that may be confusing to a concise messaging that policy makers can then take to advocate for change
- We are tracking outcomes of our target zero work throughout the year and providing that feedback to our funder and steering committee
- How do we know if we are having an overall impact in the community, by the numbers it might not seem clear that we are, but if we weren't doing this it could be even worse.
- Engagement of partners with the community in this process is so important
- Have worked hard to support communications and coordination of best practices in our work, WTSC often follows our lead
- Accountable to WTSC throughout our funding reporting, auditing, etc.
- Want to ensure that our HVE work is not leading to unnecessary use of force situations and complaints

## Evaluation Area: Speed

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Criminal justice
- Economic development – with safer movement through the area, reducing the billions of dollar burden of crash and injury/death
- Education
- Environment – alternative options to driving
- Food access and affordability – increasing safe routes and transportation options
- Government practices – with policy work
- Health
- Human services
- Planning and development – driver behavior and safe system approach, reduce human error
- Transportation
- Utilities – water and sewer districts and power companies have authority to support street lighting, not usually roads departments. Speeds could increase if they can see further also
- Other – all roadway users of the transportation system
- Pedestrians – safer movement through the communities

Additional Comments:

- First year we have speed enforcement funds, we are doing monthly enforcement campaigns to support that effort

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data:

Fatalities in King County 2012-2022 where speed was involved with the driver

Year	Fatalities
2012	38
2013	28
2014	38
2015	37
2016	20
2017	42
2018	46
2019	24
2020	28
2021	42

2022	50
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1. Speed is involved in 31% of all fatalities in King County from 2017-2021. It is a level one priority (5<sup>th</sup>) for King County
2. 50% of fatalities associated with a speeding driver in King County 2012-2021 were also Drug Positive

### **Additional Data Needs**

- What behaviors encourage a driver not to speed?
- Is there a connection between rage and speed, psychological connections to speeding? Look at this year to year
- If there was a speed related collision, was there a pursuit, was there an extreme speeding event (10+ miles over)?
- Type of roadway the fatality occurred on, particularly how many lanes the roadway is? what is the roadway design?
- Connection of speeding with or other high-risk behaviors i.e. seatbelt use, age of driver, driving history?
- Need some more empirical data through speed measurements within the community to gather those that are occurring beyond the crashes. Should exist on many of the arterials within the region already but we will need to gather it all together
- Compare data for urban and rural areas for certain factors that might be more correlated
- Evaluated differences among regions in King County, identify neighborhoods and sub-neighborhoods that could help identify disparities in relation to racial inequities (may need to combine across years for some smaller sub-regions)
- Point level data for fatalities that include race and ethnicity
- Need race and ethnicity data for all crash data (including serious injuries and minor injuries)
- Is there data that we could pay for that could help support our needs (internal to PH or other data sources or expertise)
- Integration of data is needed to support understanding the full scope and impacts

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Cities and communities have individually gathered data for speed along the arterials, would have to engage across all of the communities to get a picture across the county
- Look at the high crash corridors and see if the data is available for those areas
- Engagement with our drivers on why they chose to speed
- Engagement with our communities (BIPOC) and what are their concerns within their community for traffic safety
- Work with the individual cities within the county and see what their community engagement processes look like for developing local priorities. How do we show all of the levels of engagement to support our full community

- Conversation with law enforcement on how they engage their community and from their perspective how they think we could engage

#### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Really want to emphasize the role of roadway design in their behavior to speed
- Good federal literature on why people speed and how that impacts outcomes
- Review of all the HVE work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Should we be tracking where officers are focusing their enforcement efforts and review that for equity
- WTSC has removed historical requirements for number of stops per hour and stops for equipment etc.
- Our group needs to continue to be a voice for changing the fines and fees structures around tickets and citations to have a lower burden on our lower socio-economic status areas and people
- Break down the silos between the community experience and where we are currently operating as a community (who's streets, our streets report)
- More data and information could help focus future dollars for improvement on the engineering side/transportation
- Consequence is disproportionate levels of ticketing in the black and BIPOC communities and could lead to other more severe injury or outcomes associated with the stops

#### **STEP #5: Implementation**

What is your plan for implementation?

- This is our first year of funding for speed, but high rate of citations given on speed this year. Law enforcement has put a lot of focus into this as well, so it is being adequately resources
- Increase passive ways that we can get people to slow down
- Items that are priority 1 are fully resources because of grant deliverables could create inequities because of what is supported with funding/resources and not.
- Staffing in law enforcement has improved and we are able to support additional enforcement operations
- Officers that are operating in HVE are more trained to support the traffic work, but this has not been evaluated with data to understand the possible impacts
- We should emphasize the engineering component of this work more to ensure we are making lasting change as well as supporting equity
- Push NHTSA to shift their funding more toward the safe systems approach

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We are tracking outcomes of our target zero work throughout the year and providing that feedback to our funder and steering committee
- How do we know if we are having an overall impact in the community, by the numbers it might not seem clear that we are, but if we weren't doing this it could be even worse.
- Engagement of partners with the community in this process is so important
- Have worked hard to support communications and coordination of best practices in our work, WTSC often follows our lead
- Accountable to WTSC throughout our funding reporting, auditing, etc.
- Want to ensure that our HVE work is not leading to unnecessary use of force situations and complaints

## Evaluation Area: Unrestrained Occupants

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth – including those of driving age,
- Community engagement
- Criminal justice - considered during enforcement (civil vs criminal)
- Education
- Health – injury from being unrestrained
- Transportation

Additional Comments:

- Unrestrained or improperly restrained children and older kids moving prematurely out of child restraints is a big concern
- Education on proper restraints should be included
- Cultural elements associated with restraint use (i.e. immigrants coming from areas where restraint use may not be common practice, not aware of the importance of restraints)
- Education for targeting younger children, parents, guardians, and caregivers is a gap in planning
- Guidance has changed over the years for parents and caregivers on the use of restraints need to update caregivers with current information
- Education within driver training classes on where to get and how to get child restraint and education on how to properly install and restrain should be included

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data:

Number of Fatalities from crashed involving a motor vehicle, in King County, who were unrestrained 2012-2021

Year	Unrestrained
2012	15
2013	11
2014	21
2015	28
2016	7
2017	19
2018	20
2019	17
2020	11
2021	32

1. From 2012 to 2021 24% of fatalities who were unrestrained, were a passenger of a motor vehicle and 76% were the driver.
2. 70% were male
3. 46% were alcohol positive, 59% were drug positive and 50% were speeding
4. Unrestrained occupants accounts for 17% of total king county traffic fatalities
5. Unrestrained occupants is not a level one priority for King County.
6. 83% of children in fatal crashes were restrained

#### Additional Data Needs

- Missing data on racial demographics on who is most impacted. Race and ethnicity is pulled from death certificates and not reported for serious injuries or not injury type of events
- Acknowledged that the transportation systems has inequalities built into it and the faster road ways tend to bisect communities of color and how the structure of the roadway impacts those that are injured and killed
- Relationships between the different high-risk behaviors
  - Is there a correlation between unrestrained, alcohol positive and speeding or are they separately correlated.
  - Do we have data on those who are alcohol, drug and speeding that are unrestrained?
  - Could unrestrained be a downstream impact of other potential issues (alcohol, drugs, speeding, etc.), where can our impact make the biggest change?
- Understanding why there is such a higher proportion of men who are unrestrained to support education campaigns.
- Fatal injury data is not the end of the story. Serious injury, and crashes can be devastating without a fatality. We should have data that shows the full picture and that should dictate how we program.
- Knowing regionally where accidents occur to know where to do outreach. Using location (city, zip code) data to connect to driver data to support be a proxy for demographic data
- Age breakdown of adults who are unrestrained and informing of engagement and education efforts
- Incorporate qualitative data, recognizing that anecdotal information is also data

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Have 80-100 certified technicians for child passenger safety work in different ways and within different communities (individual contact, community events, weekly/monthly scheduled events, virtual car seat support program)
- Data gaps of knowing which communities are impact could lead to engagement gaps as well
- Focusing on translation and interpretation services for those that are non-native English speakers as these might be the groups that we are looking to reach with this information.
- Ensuring that the education resources are translated into those that are the top tiers within King County
- Community engagement with rural communities on restraint use
- Parent class through the court upon divorce, DUI court education, traffic school for tickets – all opportunities that could be used to engage with drivers on the importance of using restraints

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- The driving schools have not been aware of the resources and translation and interpretation services that are available through the WTSC that are updated regularly. Incorporate business more as partners in this work (especially the driving schools)

- Continue to support the driving schools to collaborate more on education and resources before people begin to drive
- Collaborate with cultural community consortium. What groups already exist and how can we support and fund them to continue with the community engagement that they are doing
- Really hard to address the equity with the gaps in the data

#### **STEP #5: Implementation**

What is your plan for implementation?

- The work is realistic but to ensure that the work is reaching those that we hope to impact and need to support it is very difficult to do without the data. Can we use qualitative data in the shorter term to help support the needs which we continue to support the gathering of the long-term data needs
- Hard to answer if there aren't more resources and partnerships available to support this implementation. Especially if this isn't indicated through the data as the number one priority within the county.

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We need to ensure that evaluation is core to anything that we are working on, are we meeting the needs of the groups that are being impacted
- WTSC is conducting surveys to gather data on driver behavior that is currently underway

## Evaluation Area: Intersections

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement – could be based on structure
- Contracting equity – possibly if include local people
- Economic development – secondary (increase walking and slowing vehicles)
- Education – as part of installing signage
- Food access and affordability
- Health – injury prevention and health of walking
- Housing - secondary
- Planning and development
- Transportation – could support by increasing walkability

Additional Comments:

- Consider using a flashing sign to gain driver's attention – could aid in evaluating when pedestrians are present at intersections
- Was data evaluated prior to designing a sign for the area to ensure we are targeting the appropriate behavior?
- Important to speak with the commuters and communities to understand the challenges that they face
- Cost effective solutions
- This is considering lower income neighborhoods
- If not able to evaluate then we can't leverage this to get communities to buy in further
- Measurement of vehicle speeds in those areas is important, even more than incidents, because they may be so bad that people may choose not to walk, maybe even more of a need to ensure safety and encourage walkability
- The observers themselves became advocates i.e. invite someone from the community to join the team when measuring the speed (raises the profile of the work and what is being seen), could report back to the government or others to influence the work
- Giving the data back to the community is super important
- Data on if people are walking, where they are walking and where they are not walking, is it dangerous to walk in some areas
- If you are going to include the community, it needs to be from a population that speeds, because you only change them when they can see it directly

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data:

Intersection Related Fatalities in King County 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fatalities	24	24	20	27	36	30	30	30	35	31
Percent of State Total	5%	6%	4%	5%	7%	5%	6%	6%	6%	5%

1. King County generally accounts for ~20% of the state’s total fatalities.
2. Between 2017-2021 there were 156 intersection related fatalities in King County, accounting for 27% of county total fatalities 2017-2021
3. Intersections are listed as the 6<sup>th</sup> (of 11) highest target zero priority area (2017-2021 data)

**Additional Data Needs**

- Understanding what issue is specifically occurring at the location you are working to impact
- Need to understand vehicle speeds
- Pedestrian exposure (how much walking is happening and how we can increase that)
- Asking community what they want/need
- Community income related information
- Is the neighborhood walkable or not, using income as an indicator
- What is the percentage of pedestrians that are involved in collisions that are distracted, on their phones, headphones on, etc? Are we educating the walker/roller to also be aware of their surroundings because a lot of collisions can be avoided by pedestrians being aware of their surroundings
- The challenge on SR 99 South roadway is that it is 100% not safe to walk but the region is extremely mobile and a lot of pedestrians.
- Impairment of walkers and drivers involved in these collisions.
- Challenges with homelessness as an equity issue, who is getting tickets
- Being distracted makes pedestrians more likely to be struck and much more likely to be victims of crime. A campaign to get off your phone and just walk

**STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Focus on schools and children engagement, safe way to get to schools
- Include community to participate in the observational surveys and evaluation
- People experiencing homelessness engagement
- Asking the community directly what they feel they need to be safe walking
- Especially for post-analysis of the intervention, it may be important to not only rely on crashes but also near-miss events. It may be important to address the issue of speeding, through engineering countermeasures (road dieting, adding median, etc.).

**STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Think about photo enforcement. Has some challenges for unintended consequences but the revenue could be reinvested in these areas
- If we don't engage the community in the process and evaluation, we risk continuing to not appropriately invest in the underinvested communities
- Looking into other strategies to support walkers and rollers and finding funds to support it
- Putting up signs could be ineffective in isolation without other work
- How to slow vehicles in coordination with this work

#### **STEP #5: Implementation**

What is your plan for implementation?

- Underfunded to support dynamic signs and engineering interventions.
- Underfunded for on-going data collection, public reporting, and community engagement
- Distribute signage in the communities
- Political plus to sharing the benefit of the walker and roller program
- Hearing from experts in the community on what they need
- Could we sample data on the pedestrian sign to measure speed change if the sign has been triggered?

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We need evaluation to ensure that we are having an impact and investment in the future needs
- Need to provide data and information back to the community on the progress
- Sustainability of the work needs evaluation

## Evaluation Area: Young Drivers

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth – additional impact on parents and caregivers
- Community engagement
- Education
- Health
- Transportation
- Other – Culture of Safety within communities

Additional Comments:

- Focused on young drivers in media and messaging/education and enforcement for “100 safe days of summer”

### STEP #2: Data

What’s the data? What does the data tell us?

#### Known Data

King County Young Drivers involved in a fatal crash 2012-2022

Year	Young Drivers involved in a fatal crash	Percent of all drivers in fatal crashes were Young Drivers
2012	25	19%
2013	31	28%
2014	23	22%
2015	33	22%
2016	31	20%
2017	36	23%
2018	35	21%
2019	29	18%
2020	35	22%
2021	33	17%
2022	37	

1. 45% were drug and/or alcohol positive
2. Young Drivers is the 5<sup>th</sup> highest priority for King County with young drivers involved in 30% of fatal crashed (2017-2021)

#### Additional Data Needs

- What portion of those impacted are over 21, or over 18?

- What is the breakdown of this by those that have and have not done drivers education? Drivers 18-25 who have not had driver education are involved in 70% more injury and fatal crashes per 1,000, compared to those who have completed driver education.
- Demographic data by race and ethnicity
- Data on the teens in the driver seat efficacy. Who is being missed by the program if it is an opt in only? Are they engaged?
- District and school level data is available on the OSPI Report Card. It includes student demographics, such as race/ethnicity, free and reduced lunch eligibility, homeless, foster care, students with disabilities, etc. <https://washingtonstatereportcard.ospi.k12.wa.us/>

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Ensuring that the program that we are focusing if effective. Who is being missed? Are we only getting those that opt in and are engaged?
- Evaluating the program and ensuring it is in alignment with our priorities to make sure we are working together not against one another.
- Ensure we can gather information back from the program since it is peer to peer and teen run?
- There is a reluctance of schools to often “opt” into these types of programs because they are so overwhelmed with these opportunities and options.
- Who are we really capturing with an “opt in” type of programs?
- We really need to evaluate the program and what it is achieving and also how it is structured and if it works for the communities we are working with

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Evaluating the program and ensuring it is in alignment with our priorities to make sure we are working together not against one another.
- There is a reluctance of schools to often “opt” into these types of programs because they are so overwhelmed with these opportunities and options.
- Who are we really capturing with an “opt in” type of programs?
- We really need to evaluate the program and what it is achieving and also how it is structured and if it works for the communities, we are working with.
- Look for additional more multi-pronged approach to support young drivers.
- Focused on young drivers in media and messaging/education and enforcement for “100 safe days of summer.”
- Should consider moving beyond just the teens in the driver’s seat program and how can we focus on this work in a different way. Can we include education in health class or within middle school and high school curriculum since there are health and safety impacts?
- We should not be confined within the school system for our education, consider community resources and other platforms.

## **STEP #5: Implementation**

What is your plan for implementation?

- Some are skeptical of teens in the driver's seat because of it being "opt in" and its ability to impact the young drivers.
- Have anecdotal evidence that "safe driving pledges" may not have an impact on creating safer drivers.

## **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We need to ensure that evaluation is core to anything that we are working on, are we meeting the needs of the groups that are being impacted
- WTSC is conducting surveys to gather data on driver behavior that is currently underway
- Changing a culture is really a challenge, if that is really possible, and also difficult to evaluate.

## Evaluation Area: People Biking, Walking, and Rolling

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Contracting equity – how much are groups paid for those observations, include community
- Criminal justice
- Education
- Environment
- Food access and affordability
- Health
- Planning and development
- Transportation

Additional Comments:

- Skepticism of the effectiveness of pedestrian education and flyers – not been shown to work from the education side, more interest in the other measure
- People tend not to take the education in a foreign language, including Spanish language because they want to speak English.
- Importance of communities being involved becomes critical to know what they need and own the issue at hand. We need understand the impact and potential improvement to come up with effective ways to create change
- Want to see this program result in more walking and rolling, not just reducing injuries/fatalities. Do vehicles slow down and do more people walk? Is there more lighting, shade, separated sidewalk to make it more pleasant and this also impacts safety?

### STEP #2: Data

What's the data? What does the data tell us?

#### **Known Data:**

Table: Percent low income as determined by percent of students on reduced or free lunch program for each school district along the portion of the Pacific Highway between mileposts 6.15-24.17.

School District	Percent Low -Income (Reduced or free school Lunch Program)	Total Students per district	Number Low Income per district	Total Percent Low income across all school districts
Highline	60.8%	18860	11460	
Tukwila	75.2%	2763	2077	
Kent	52.5%	25739	13512	
Federal Way	65.5%	21856	14315	
<b>Total</b>		69218	41364	<b>59.8%</b>

<b>Total for WA State</b>				<b>53.9%</b>
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These areas have a low-income percent of 59.8% which is 5.9% higher than the Washington State average of 53.9%.

**Table 3:** Percent Individuals with Limited English Proficiency (Ages 5+)

<b>Region</b>	<b>Percent Limited English proficiency</b>
SeaTac/Tukwila	25.5%
Kent West	19.2%
Burien	18.2%
Federal Way/Dash Point/Woodmont	14%
East Federal Way	11.5%
Des Moines/Normandy Park	11.2%
Federal Way – Central Military Rd	14%

Additionally, the below table (Table 4) outlines the percent of 3<sup>rd</sup> Graders reading at grade level within each school district along Pacific Highway south. Using percent of 3<sup>rd</sup> Graders Reading at Grade 3 level as a meaningful benchmark for youth reading proficiency.

**Table 4:** Percent of 3<sup>rd</sup> Graders Reading at Grade 3 Level

<b>School District</b>	<b>Percent Reading at Grade Level</b>
Highline	38.5%
Tukwila	40.2%
Kent	51.3%
Federal Way	40.9%

Key Learnings from the 2021-2022 Grant Year Observational Survey and Enforcement Activities:

- There was an overall decrease of 50% in the percent of cars speeding along South SR 99 between the pre-enforcement survey and the second post-enforcement survey
- The number and percent of cars speeding varied by location but generally the cities that were able to deploy more patrols had larger and longer sustaining decreases in incidences of speeding.
- Top speed of a vehicle observed along this stretch of road was ~100mph
- There was no observed difference in the occurrence of the other driver and pedestrian behaviors between the pre and two post enforcement patrols. More information would be useful for targeting changes to these behaviors.
- This report did not evaluate the impact of the media and social media that accompanied this campaign. Billboards and posters were placed along this roadway later in the summer and were not part of this observational period
- It is unknown how the previous state-wide distracted driving campaign influenced the outcomes in these surveys.

### **Additional Data Needs**

- How has the population changed with time and demographic?
- Could use some data on pedestrian exposure, using modeling, need a denominator to compare data across time.
- Comparison to other communities
- More investment in community focus groups or input instead of just printed materials
- More granularity on the circumstances of the traffic collisions, time of day, safe crossing, etc.
- Pedestrians like more responsive signals, more crossings, ease of crossing and walking. Provides the control back to pedestrian.
- Need near misses data as well to understand the full picture.
- Are walkers using the crosswalks that are provided? Near transportation stops? New businesses? Near education locations?

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Campaigns with community to use specific crossing areas could be effective.
- Continual data collection to have lasting change in communities and sustainability of programs.
- We could post more education and materials in driving schools and incorporate into curriculum to reach new drivers.
- Need more community engagement and follow-up to ensure change.
  - Gather input from and provide information at community safety fairs and community activities where a lot of people are already assembled.
  - Make sure we are engaged with the bicycling communities.
  - Identify organizations that help communities that are low income (resource fairs, food banks, homeless, etc.) to partner for information gathering.
  - Social media to gather feedback and promoting safe behavior.
  - Recognizing that people are working at different times and holding events/gathering feedback at different times throughout the day.
  - Materials in different languages, translation, interpretation, reaching those with lower English proficiency.
  - Public health clinics and healthcare for the homeless.
  - People using transit services (they are already walking, biking, and using transport).

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Review of all the HVE work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Should we be tracking where officers are focusing their enforcement efforts and review that for equity
- Potential inequities around enforcement and economic consequences of the tickets

- Are there impacts to walkers and rollers because of the enforcement campaigns and having more police in the community?
- Those to walk and roll will benefit from measures to make it safer.
- Environmental benefit of less cars

#### **STEP #5: Implementation**

What is your plan for implementation?

- Will need additional resources to support ongoing data collection, ongoing support to ensure impact of program, near miss and speed data.

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- Ensure positive messages are maintained. Make it easier for people to enjoy their communities and promote walking and reduce car use.
- Reduce carbon emissions and increase environmental partnerships. Increased health impact

## Evaluation Area: People Riding Motorcycles

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Criminal justice
- Economic development – with safer movement through the area, reducing the billions of dollar burden of crash and injury/death
- Education
- Environment – alternative options to driving
- Food access and affordability – increasing safe routes and transportation options
- Government practices – with policy work
- Health
- Human services
- Planning and development – driver behavior and safe system approach, reduce human error
- Transportation
- Other – all roadway users of the transportation system
- Pedestrians – safer movement through the communities

### STEP #2: Data

What's the data? What does the data tell us?

#### Known data:

Motorcycle fatalities in King County 2012-2022

Year	Fatalities
2012	19
2013	13
2014	12
2015	15
2016	18
2017	15
2018	14
2019	21
2020	19
2021	17
2022	21

1. People Riding motorcycles account for 15% of the fatalities in King County 2017-2021. This is not a level one priority in King County (9<sup>th</sup>)
2. Of the motorcyclist fatalities in King County 2012-2021, 53% had a speeding driver involved and 48% had a drug positive driver involved.
3. Motorcycle fatalities were up 44% state-wide in 2022 over previous years. This is a jump not seen before

#### Additional Data Needs

- Has motorcycle ownership gone up with car prices going up?
- Are we motorcycle rallies being tracked? What is their impact on safety? Could be useful for targeting messaging.
- Age breakdown on those impacted. Beyond fatalities also.

- Evaluated differences among regions in King County, identify neighborhoods and sub-neighborhoods that could help identify disparities in relation to racial inequities (may need to combine across years for some smaller sub-regions)
- Point level data for fatalities that include race and ethnicity
- Need race and ethnicity data for all crash data (including serious injuries and minor injuries)
- Is there data that we could pay for that could help support our needs (internal to PH or other data sources or expertise)
- Integration of data is needed to support understanding the full scope and impacts

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Engagement might be similar to speed. Speed a particular importance with motorcycles.
- Gathering behavioral information from motorcyclists themselves on their concerns
- Work with the individual cities within the county and see what their community engagement processes look like for developing local priorities. How do we show all of the levels of engagement to support our full community
- Conversation with law enforcement on how they engage their community and from their perspective how they think we could engage.

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Review of all the HVE work for equitable implementation across our community. Including which corridors are being targeted and what the demographics are of those communities. If enforcement is already happening in disadvantaged communities because that is where the corridors are in general. Should we be tracking where officers are focusing their enforcement efforts and review that for equity.
- WTSC has removed historical requirements for number of stops per hour and stops for equipment etc.
- Our group needs to continue to be a voice for changing the fines and fees structures around tickets and citations to have a lower burden on our lower socio-economic status areas and people.
- Break down the silos between the community experience and where we are currently operating as a community (who's streets, our streets report)
- More data and information could help focus future dollars for improvement on the engineering side/transportation.
- Consequence is disproportionate levels of ticketing in the black and BIPOC communities and could lead to other more severe injury or outcomes associated with the stops.

### **STEP #5: Implementation**

- Do not have adequate funding to address strategies beyond HVE currently.
- Do not have the personnel to support other strategies beyond HVE currently.

- Items that are priority 1 are fully resources because of grant deliverables could create inequities because of what is supported with funding/resources and not.
- Staffing in law enforcement has improved and we are able to support additional enforcement operations.
- Officers that are operating in HVE are more trained to support the traffic work, but this has not been evaluated with data to understand the possible impacts.
- We should emphasize the engineering component of this work more to ensure we are making lasting change as well as supporting equity.
- Push NHTSA to shift their funding more toward the safe systems approach.

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We are tracking outcomes of our target zero work throughout the year and providing that feedback to our funder and steering committee.
- How do we know if we are having an overall impact in the community, by the numbers it might not seem clear that we are, but if we weren't doing this it could be even worse.
- Engagement of partners with the community in this process is so important.
- Have worked hard to support communications and coordination of best practices in our work, WTSC often follows our lead.
- Accountable to WTSC throughout our funding reporting, auditing, etc.
- Want to ensure that our HVE work is not leading to unnecessary use of force situations and complaints.

## Evaluation Area: Heavy Trucks

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Criminal justice
- Economic development – with safer movement through the area, reducing the billions of dollar burden of crash and injury/death
- Education
- Environment – alternative options to driving
- Food access and affordability – increasing safe routes and transportation options
- Government practices – with policy work
- Health
- Human services
- Planning and development – driver behavior and safe system approach, reduce human error
- Transportation
- Other – all roadway users of the transportation system
- Pedestrians – safer movement through the communities

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data:

Heavy Truck involved fatalities in King County 2012-2021

Year	Fatalities	Percent of the State Total
2012	8	2%
2013	6	1%
2014	2	0%
2015	12	2%
2016	8	1%
2017	12	2%
2018	14	3%
2019	12	2%
2020	9	2%
2021	23	3%
2022	19	

1. Heavy trucks account for 12% of fatalities in King County 2017-2021, it is not a level on priority (9<sup>th</sup>)

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- No Comments Gathered

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- No Comments Gathered

### **STEP #5: Implementation**

What is your plan for implementation?

- No Comments Gathered

### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We are tracking outcomes of our target zero work throughout the year and providing that feedback to our funder and steering committee.
- How do we know if we are having an overall impact in the community, by the numbers it might not seem clear that we are, but if we weren't doing this it could be even worse.
- Engagement of partners with the community in this process is so important.
- Have worked hard to support communications and coordination of best practices in our work, WTSC often follows our lead.
- Accountable to WTSC throughout our funding reporting, auditing, etc.

## Evaluation Area: Traffic Data Systems

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Education
- Government practices
- Health – prevention of injury and death
- Jobs
- Planning and development
- Transportation

Additional Comments:

- Continue to work with WTSC to support this work
- Launched the Evaluation and Data Support Workgroup
- Working with KCMEO for King County fatality data and create an ongoing report for King County
- Working with KC Metro on vulnerable road user incidents and create an ongoing report for King County

### STEP #2: Data

What's the data? What does the data tell us?

**List of Data systems we have ready access to:**

1. Washington State Patrol Accident Reports
2. Washington Traffic Safety Commissions data and dashboards
3. WSDOT data and dashboards
4. King County Medical Examiner's Office death reports
5. Child Death Review Reports
6. King County Sherriff's MAR reports
7. King County Distracted Driving Survey

### Additional Data Needs

- Race and ethnicity data continues to be a gap
- Hospital and healthcare data
- Integration of all of our data sources to be able to pull comprehensive pictures of our data.
- [External-Equity-Data-Tools-1.pdf \(wa.gov\)](#)
- CDC demographic and socio-economic data
- King County demographic and socio-economic impact dashboard
- Collection of data with surveys and hearing directly from community.
- Looking beyond fatality and serious injury data at all crashes and how those are impacting our communities at a whole.

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Direct community surveys and community engagement to get at more of the anecdotal data on how they are impacted and their priorities.
- Some of these needs could be easily achieved (e.g. driving school map)
- Make data more easily digestible (info graphics) and ensure people can integrate the data. How is the government data working for me – digest it and deliver it appropriately.
- Translate findings into every language that is represented in the data.
- Breakdown for the common person on what each organization has to do with the traffic safety picture.
- One-sheet so the driving schools and others so they know what resources are available to them to support their work.
- Community engagement on how data is used once gathered, ensuring the community helps steward the process of analysis and presentation and digestion.

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- No Comments Gathered

### **STEP #5: Implementation**

What is your plan for implementation?

- We need our data sources to be more integrated.
- With funding resources this would be realistic but might need additional funding to achieve.
- Would need additional personnel to ensure integration of data sources.

### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We need to ensure that evaluation is core to anything that we are working on, are we meeting the needs of the groups that are being impacted.
- WTSC is conducting surveys to gather data on driver behavior that is currently underway.

## Evaluation Area: Evaluation, Analysis and Diagnosis

### Step #1: Impacts

What does this proposal have an ability to impact?

- Community engagement
- Government practices
- Health
- Planning and development

### STEP #2: Data

What's the data? What does the data tell us?

#### Additional Data Needs

- Are there other communities that we can compare our evaluation work with?
- Race and ethnicity data continues to be a gap
- Hospital and healthcare data
- Integration of all of our data sources to be able to pull comprehensive pictures of our data
- [External-Equity-Data-Tools-1.pdf \(wa.gov\)](#)
- CDC demographic and socio-economic data
- King County demographic and socio-economic impact dashboard
- Collection of data with surveys and hearing directly from community and trends
- Looking beyond fatality and serious injury data at all crashes and how those are impacting our communities at a whole.

### STEP #3: Community Engagement

How have communities been engaged? Are there opportunities to expand engagement?

- A lot of the materials we are putting out could go even deeper into inclusion (color blind, deaf, etc.) those that might not as traditionally be included in an equity review. Every aspect of the spectrum of inclusion.
- Make data more easily digestible (info graphics) and ensure people can integrate the data. How is the government data working for me – digest it and deliver it appropriately.
- Translate findings into every language that is represented in the data.
- Breakdown for the common person on what each organization has to do with the traffic safety picture.
- One-sheet so the driving schools and others so they know what resources are available to them to support their work
- Community engagement on how data is used once gathered, ensuring the community helps steward the process of analysis and presentation and digestion.

### STEP #4: Advancing Equity

What are your strategies for advancing racial equity or mitigating unintended consequences?

- A lot of the materials we are putting out could go even deeper into inclusion (color blind, deaf, etc.) those that might not as traditionally be included in an equity review. Every aspect of the spectrum of inclusion.

#### **STEP #5: Implementation**

What is your plan for implementation?

- No Comments Gathered

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- We need to ensure that evaluation is core to anything that we are working on, are we meeting the needs of the groups that are being impacted.
- WTSC is conducting surveys to gather data on driver behavior that is currently underway.

## Evaluation Area: Cooperative Automated Transport

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Economic development
- Environment
- Government practices
- Health – positive impacts, reducing collisions and severity
- Planning and development – planning of roads
- Transportation
- Utilities – more electric powered vehicles
- Other – positive impact on people who are not able to drive themselves
- Community equity – harder for computers to see people of color, and at night especially with dark clothing

### STEP #2: Data

What's the data? What does the data tell us?

#### Known Data

[Do-AV-Technologies-Keep-us-Safe\\_Sept2019.pdf \(wa.gov\)](#)

A national study found that driver errors (e.g., inattention, distraction, driving too fast, misjudging vehicle gaps and speeds, overcorrecting, poor steering, drowsiness, etc.) are the critical reason for about 94 percent of U.S. traffic crashes.

In June 2019 HLDI posted an updated summary of their findings from these studies. This update reports that forward collision warning (FCW) alone reduced front-to-rear crashes by 27 percent (compared to controls) and reduced injury-related front-to-rear crashes by 20 percent. Vehicles that combined FCW and automatic emergency braking (AEB) showed reductions of 50 percent in front-to-rear crashes and 56 percent in injury-related front-to-rear crashes. Lane departure warning (LDW) reduced single-vehicle sideswipe and head-on crashes by 11 percent and injury-related crashes of the same types by 21 percent. Blind spot detection (BSD) reduced lane-change crashes by 14 percent and injury-related lane-change crashes by 23 percent. Finally, rear automatic braking (RAB) with rear-view camera and parking sensors reduced backing crashes by 78 percent. The only negative finding HLDI reported was that damage claims for insured AV-equipped vehicles averaged \$104 higher compared to insured vehicles not equipped with these sensitive and expensive technologies.

The AAA Foundation for Traffic Safety reviewed the results from multiple studies of five crash-prevention systems and concluded that their crash-prevention potential was “substantial”. The total number of crashes that these technologies could have prevented or mitigated in 2016 was 2,748,000, in turn leading to 1,128,000 fewer injuries and 9,496 fewer deaths. It is important to note that the crash-reduction estimates for these technologies decreased as crash severity increased.

Interactions between humans and advanced technology systems often yield a paradoxical outcome known as behavioral adaptation. This means, as a recent study puts it, that “Modifications of the driving task environment...will result in changes to a driver’s behavior that can complicate the net effect of any intended safety improvement.” In the case of AV technologies, the increasing range of driver-assistance technologies (tending toward complete vehicle control with no input from the driver), has increased driver disengagement from the driving task regardless of AV company warnings that drivers must be ready to take control of the vehicle under certain conditions. Many drivers adapt to these systems by improving their behaviors to avoid triggering the annoying or unnerving effects of driver-warning and driver-assistance. It has also been shown that increasing driver understanding of the functionality of their AV systems improves their use of these powerful safety technologies while minimizing the negative impacts of behavioral adaptation.

### **Additional Data Needs**

- Would like to see some local data for King County or within the region.
- Would like some additional information on shared mobility (uber, lyft).
- Data on the interaction between user behavior and education on the technology and the changes in outcomes we are seeing with the implementation.
- Socioeconomic status of vehicle owners and technology. Some of these new technologies are very expensive at present and could lead to an exacerbation of disparities.

### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Education and behavioral changes in drivers with the newer technologies
- Socioeconomic status of vehicle owners and technology. Some of these new technologies are very expensive at present and could lead to an exacerbation of disparities.
- Set limitations on what type of vehicles you might be able to drive based on what technology you are tested on (i.e. only drive standard if you are trained and tested on a standard vehicle).
- Teaching everyone how to driver properly no matter the technology they have in their car, but not everyone has access to driving schools and driver education.

### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Education and behavioral changes in drivers with the newer technologies
- Socioeconomic status of vehicle owners and technology. Some of these new technologies are very expensive at present and could lead to an exacerbation of disparities.
- Set limitations on what type of vehicles you might be able to drive based on what technology you are tested on (i.e. only drive standard if you are trained and tested on a standard vehicle).
- Teaching everyone how to driver properly no matter the technology they have in their car, but not everyone has access to driving schools and driver education.
- Vehicles with this technology are not available to all socioeconomic groups. Hopefully the self-driving vehicles part of the shared mobility network would be more affordable to all users.

- Commercial fleet turnover can take a long time and these new technologies will take a while to integrate into all fleets. Could there be regulations that would make it required to have some of these technologies' standard similar to how backup cameras, seatbelts, and airbags are now.
- The technology is already available and cheap (\$300) to implement but there needs to be requirements to have it standard in all vehicles, not just higher end vehicles.
- Some more rules coming out by 2025 to implement some technology.

#### **STEP #5: Implementation**

What is your plan for implementation?

- Beyond our involvement policy we would need an increase funding, personnel, and ongoing data, collection, etc. to achieve our goals.

If the answer to any of these questions is no, what resources or actions are needed?

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- This area of technology in vehicles is constantly evolving. There are impacts from access to the technology, driver education, how it is used on the roads, and on collisions and outcomes.

## Evaluation Area: Safe System Approach

### Step #1: Impacts

What does this proposal have an ability to impact?

- Children and youth
- Community engagement
- Contracting equity
- Environment
- Government practices
- Health
- Planning and development
- Transportation

Additional Comments:

- We don't have good ways to measure how much we are increasing walking and rolling on top of reducing injuries and fatalities.
- Our community movement goals should be to get to work, reduce carbon, reduce vehicle speeds, increasing walking and rolling.
- Ensuring there are denominators for our numbers (i.e. need a number for exposure for walking and rolling).
- In focus groups ask community how they want to see more people walking and rolling and accessing the local communities (not just preventing injuries), how the community functions and has an identity, where do you feel you want to have this positive change?
- More young people taking public transport, more diversity
- Investing in walking and rolling and those taking public transportation is an equity focus in itself

### STEP #2: Data

What's the data? What does the data tell us?

#### Additional Data Needs

- Data on how people get to work for our communities
- Vehicle speed data locally obtainable and create a heat map on where people are speeding, across region.
- Walking data
- Denominator data to compare across regions
- Lighting data
- Community safety data
- Estimate or capture data on injuries not in crash data and connect this data to census level data to determine disparities.
- Focus group with our Engineering committee on what "safe system" strategies have been deployed in their cities.
- Granular data on air quality from pollution and effects on communities

- Has anyone looked at the safety of an "all walk" area? Downtown would be a great place for that. Could remove the right or left turn pedestrian collisions because no cars would be moving while pedestrians are moving and no pedestrians while cars are moving. It also shortens the time people need to cross since they can cross a street at a diagonal instead of having to cross two times

#### **WTSC Data Needs:**

1. Detailed data on vehicle speed
2. Cell phone data that estimated walking and biking
3. Commuting data on how people are moving around
4. Evaluation of high visibility enforcement work for equity
5. Contributing factors for walker and roller collisions and near misses

#### **STEP #3: Community Engagement**

How have communities been engaged? Are there opportunities to expand engagement?

- Starting to involve more in the all-partner meetings (yearly)
- Have someone involved with more knowledge on disability
- Focus on drivers' education and promoting safety for all road users

#### **STEP #4: Advancing Equity**

What are your strategies for advancing racial equity or mitigating unintended consequences?

- Safe system solutions are hard for communities to visualize. Can we compare to similar cities or areas that have adopted these solutions using picture to increase understanding.
- How can things that improve efficiency at intersections support the safety for all users?
- Enforcement has a double-edged issue. It does get at the riskiest person but there are concerns about the equity of implementation, those that may not respond to educations and messaging
- Participants from all communities, especially those that are disabled, who are walking and rolling.

#### **STEP #5: Implementation**

What is your plan for implementation?

- Most engineering needs not covered by WTSC funding and should look at other sources of funding.
- Need to ensure successful implementation.
- Underfunded to support on-going data collection, public reporting, and community engagement.
- Need to identify remote options to continue to gather data and invest in these areas.
- Resources for targeted enforcement such as photo enforcement.
- Additional investment in engineering changes for safe systems.
- Additional investment on connecting data and presenting and understanding of the areas and topics of need.
- Also need to increase safe system concept and knowledge among traffic safety world.

- Are there creative ways to support zoning and urban planning to support safety and equity, lighting, etc.
- More information sharing between agencies on ideas and concepts that have been successful on implementing the safe system approach, success stories, even low-cost projects and smaller concepts that make an impact.

#### **STEP #6: Accountability and Evaluation**

How will you ensure accountability, communicate, and evaluate results?

- Need more evaluation of safe system practices to be able to continue this in other communities.
- Can we require safety to be part of the current building and development costs, donation of funds for other portions of the community?
- Money is number one, where does it come from and go equitably to all that need it.

#### **WTSC Data:**

6. Detailed data on vehicle speed
7. What do we have for cell phone data that estimated walking and biking
8. Commuting data on how people are moving around
9. Evaluation of high visibility enforcement work for equity
10. Contributing factors for walker and roller collisions and near misses