

TRAFFIC RECORDS INTEGRATION PROGRAM

Traffic Records Integration Program: Utility of Integrating Washington State Courts Records with Washington State Crash Records

Joe Lee and Vasiliki Georgoulas-Sherry, PhD

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Abstract

Under the Washington Traffic Safety Commission (WSTC) grant, this report will show the utility of integrating Washington State Courts records with Washington State crash records in effort to evaluate the impact of crashes on the court system.

While this report's scope focuses solely on integrating Administrative Office of the Courts (AOC) and Department of Transportation (DOT) data, TRIP has successfully linked DOT, AOC, Washington State Patrol (WSP), and Department of Licensing (DOL) data. TRIP is currently integrating Department of Health (DOH) data, as well.

Background

The Traffic Records Integration Program (TRIP)

In 2019, the Washington Traffic Safety Commission (WTSC) awarded the Office of Financial Management (OFM) with a grant to manage the Washington State Traffic Records Integration Program (TRIP); this public health and safety effort is supported by funding from the National Highway Transportation Safety Administration (NHTSA)'s continuing efforts to combine public health and traffic safety data resources.

The purpose of the TRIP is to develop and maintain a data repository for public health and safety research to further the goals of the Vision Zero 2030¹ to achieve zero fatalities or serious injuries on our highways. This data repository will also enhance capacity to assess crash² risk factors and the human, administrative, and financial toll from crashes on Washington roadways. By integrating different data sources, issues with data collection or other systemic issues surrounding individual datasets might be overcome. This holistic approach will support a more comprehensive crash-outcome dataset to support public health and safety research.

With this effort, the TRIP will create an avenue of information for the public and policymakers to address long standing issues as well as new risks for drivers in Washington. The linkage of this data will give Washington the means to support public health traffic information to save lives. Additionally, research efforts with the TRIP data will help inform policy on efficient ways to reduce and eliminate fatalities and serious injuries from traffic collisions; this data repository aims to also provide comprehensive and longitudinal data to evaluate the effectiveness of efforts and programs, best practices, and evidence-based strategies designed to reaching the Vision Zero 2030.

While the scope of this report focuses solely on the integration of Administrative Office of the Courts (AOC) and Department of Transportation (DOT) data, TRIP has successfully been able to link DOT, AOC, Washington State Patrol (WSP), and Department of Licensing (DOL) data. TRIP is currently working on integrating Department of Health (DOH) data as well. The TRIP is currently leveraging of the aforementioned state data to look in depth at how vehicle crashes impact the public health and public safety of Washington state residents. Through this linkage, TRIP can incorporate data for each stage of a crash, and the events occurring thereafter – to the roadway, to the crash, to police interaction, to court interaction.

¹ Vision Zero is a multi-national road traffic safety project that aims to achieve a highway system with no fatalities or serious injuries involving road traffic. Washington's aims to complete this by 2030: [Target Zero – Washington's Strategic Highway Safety Plan](#)

² Defined in this report as a vehicle that collides with another vehicle, transportation tool, pedestrian, bystander, animal, or other stationary obstruction



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DOT's role

DOT in collaboration with the Washington State Patrol (WSP) collects and maintains the Collision Location Analysis System (CLAS) statewide crash database. Records are generated from Police Traffic Collision Reports (PTCR) and cleaned by DOT. Crash data may be supplemented from additional documentation submitted by the WSP. DOT develops the PTCR and subsequent documentation to meet reporting standards for the National Highway Traffic Safety Administration (NHTSA).

AOC's role

AOC maintains a statewide electronic court records database for all cases that courts see in Washington (Superior Court and Courts of Limited Jurisdiction (CLJ)). According to AOC³, "data are drawn from the Judicial Information System (JIS), a statewide system of computer applications employed by the courts for recording and processing cases - the Supreme Court, all three divisions of the Court of Appeals, and all state superior courts are represented."

Utility of DOT and AOC Linkage

The Impact of Crashes on the Court System

A driver typically enters the court system when they are charged for committing an unlawful action while in a vehicle. The severity of that charge is usually related to the severity of the unlawful action. There are many ways a driver can enter the court system (e.g., speeding, driving impaired, recklessly driving, etc.) and a driver can end up in the court system without getting into a crash.⁴ However, this report will only look at crash records within the court system since crashes are the foundation of TRIP data.

Crashes in Washington are public health and safety issues that commonly cross over into the court system. Crashes can often lead to disability, injury, property or physical damage, or fatality. While minor crashes often yield little to no injury and major crashes can produce more serious injury, the reverse can also be true. According to DOT's crash data portal⁵, in 2021, there were a total of 103,245 crashes in 2021. Within those crashes, there were: 663 fatalities, 2,921 produced suspected serious injury, 13,268 produced suspected minor injury, 23,745 produced possible injury, and 196,539 produced no apparent injury.

There are several factors that contribute to crashes and are typical reasons that drivers enter the court system. These reasons include crashes from driving under the influence (DUI) of drugs and alcohol, and crashes that result in serious injury or fatality. Driver actions, distracted driving, road conditions, and operating speeds can also contribute to the crash's severity. Laws involving crashes can be classified as traffic-related such as hitting a pedestrian or non-traffic-related resulting from driving without a license⁶, and can involve civil⁷ and/or criminal

³ For more information, review: [Washington State Courts - Caseloads of the Courts - Understanding Caseload Data](#)

⁴ For example, a driver can get a DUI without getting into a crash.

⁵ [WSDOT - Crash Data Portal \(wa.gov\)](#)

⁶ Defined as injury occurring with a vehicle that is not directly in traffic.

⁷ The civil justice system emphasizes lawsuits, damages, and monetary claims to compensate the victim.



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charges⁸. Linking DOT and AOC data provides context and outcomes to crashes that wouldn't be possible to evaluate without TRIP.

Integrating DOT and AOC

Integrating DOT and AOC data creates inquiry paths for traffic safety work to include post-crash legal outcomes. Linking these two datasets can provide potential outcomes for crashes that enter the court system. Researchers can link a driver to crash details such as the number of vehicles involved, the types of injuries, or a DUI conviction. Fatal crash data can now expand to include legal outcomes. So, if a crash fatality is tied to legal actions regarding DUIs or dangerous driving, then we can evaluate a more complete picture of public health and safety. Furthermore, leveraging the linkage of datasets can fill gaps in data reporting improving data accuracy using the court system.

Additionally, the AOC data gains the inverse of the DOT by gaining the circumstances of the inciting event leading to court involvement. The inciting event can inform the types of charges from multiple vehicles involved in a crash or pedestrian involvement. A crash that causes serious injuries or fatalities may have implications in the types of charges a person faces. For example, the circumstances behind reckless driving, DUIs, or vehicular assault convictions now have more context. The context around an inciting event can expand from 'vehicular assault' or 'homicide' if the victim had a seat belt on, or if a biker had a helmet when being struck. The larger picture that the DOT data gives the AOC data the bigger picture, especially when the court records have been limited to only use RCW codes or conviction rates of traffic related charges. Linking the DOT and AOC increases the power of public health and public safety information.

Methods and data

Since crashes are the basis of the TRIP data repository, this report uses data from the DOT's CLAS⁹. As the intent of this report is to evaluate the utility of integrating Washington State Courts records, the AOC's Court Contact and Recidivism Database (CCRD)¹⁰ will be utilized. The data sets from both agencies span 10 years, from 2009 to 2019. As such, the linkage of the data extends the scope of a crash to the associated outcomes, the contact, and results of court involvement.

The DOT-AOC subsample

As the DOT crash record is the basis of the TRIP repository, the DOT and AOC datasets are linked through a unique ID generated by TRIP's data warehouse. For further details on the linkage process, see Appendix A. Using this unique ID, the date of the crash and offense were utilized to identify crashes that end up in the court system¹¹. This linked subsample contains 2,140,514 crashes from 1,678,907 unique individual drivers from the DOT's CLAS data set and 1,416,692 court records (representing 879 types of charges) over those 10 years. It is important to note that the links among any agency datasets is a subsample of both datasets. That means they may not fully capture the same trends as if the two sets stood alone.

⁸ The criminal justice system emphasizes on disciplining for violating criminal law, and in these cases, defendants can face consequences such as losing their liberty or incarceration. Crashes that involve criminal charges include hit-and-run accidents, DUIs, reckless driving, and fleeing the police.

⁹ Dataset that maintains statewide crash data and is managed by DOT.

¹⁰ AOC maintains a statewide court records database for all cases that courts see in Washington (Superior Court and Courts of Limited Jurisdiction (CLJ))

¹¹ The date of a crash is from the WSDOT data, and the date of the offense is from the AOC.



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Table 1 shows counts and frequencies of DOT crashes and population estimates for Washington by year and by sex. While the overall state population is almost evenly distributed in terms of sex, the sex distribution in DOT crashes is skewed towards males. On an annual basis, the subsample shows that males make up well above their annual average, contributing 58% to all crashes over the 10 years.

Table 1: Counts and frequencies of DOT crashes and population estimates for Washington by year and by sex (Source: DOT, AOC, and U.S. Census Bureau)

Year	DOT Crashes Source: DOT & AOC		Washington State Population Source: U.S. Census Bureau retrieved from OFM	
	Male (n, %)	Female (n, %)	Male (n, %)	Female (n, %)
2009	12,941 (71.1%)	5,380 (28.9%)	3,330,741 (49.9%)	3,341,418 (50.1%)
2010	12,270 (69.7%)	5,402 (30.3%)	3,349,707 (49.8%)	3,374,833 (50.2%)
2011	12,113 (69.4%)	5,419 (30.6%)	3,372,248 (49.8%)	3,395,652 (50.2%)
2012	12,738 (71.7%)	5,214 (28.3%)	3,397,971 (49.8%)	3,419,799 (50.2%)
2013	11,410 (70.5%)	4,960 (29.5%)	3,431,037 (49.9%)	3,451,363 (50.1%)
2014	11,132 (70.7%)	4,870 (29.3%)	3,474,653 (49.9%)	3,493,517 (50.1%)
2015	11,757 (71.6%)	4,985 (28.4%)	3,521,914 (49.9%)	3,539,496 (50.1%)
2016	12,318 (70.2%)	5,629 (29.8%)	3,583,710 (49.9%)	3,599,990 (50.1%)
2017	12,284 (70.5%)	5,627 (29.5%)	3,647,541 (49.9%)	3,662,759 (50.1%)
2018	12,460 (71.6%)	5,434 (28.4%)	3,706,524 (49.9%)	3,721,046 (50.1%)
2019	10,280 (70.9%)	4,849 (29.1%)	3,766,161 (49.9%)	3,780,249 (50.1%)

Note: Due to missing, incomplete, unmatched, or inconsistent data, DOT crashes results may be under reported. Reported DOT crashes comes from the subsample population when linked to AOC data – as not all crashes move to the court system, DOT crashes are likely under reported. Some of the OFM population estimates were based on 2010 U.S. Census data since the 2020 U.S. Census data was not fully released by the time of publication.

Table 2 shows counts and frequencies of DOT crashes and population estimates for Washington by year and by race. The population estimates for Washington revealed that most of the population were white (81%) while the BIPOC (Black, Indigenous, and/or people of color community) presented slightly less than a fifth of the Washington population. However, most DOT crashes were perpetuated by individuals identified as white. And almost a fourth (23.5% in 2013 to 30.0% in 2019) of the DOT crashes were perpetuated by individuals identified as BIPOC community members. These demographic factors allow the TRIP to assess the impact of crashes in Washington in a meaningful way to organize and understand the dynamics of a given sample.

Table 2: Counts and frequencies of DOT crashes and population estimates for Washington by year and by race (Source: DOT, AOC, and U.S. Census Bureau)

Year	DOT Crashes (Source: AOC & DOT)					
	White	AA	AI/AN	Asian	NHOPI	Two or more races
2009	14,430 (78.7%)	1,552 (8.5%)	645 (3.5%)	709 (3.9%)	*(0.0%)	1,385(7.6%)
2010	13,792 (78.0%)	1,664 (9.4%)	540 (3.1%)	685 (3.9%)	*(0.0%)	1,407(8.0%)
2011	13,583 (77.5%)	1,543 (8.8%)	495 (2.8%)	739 (4.2%)	*(0.0%)	1,472(8.4%)
2012	13,861 (77.2%)	1,750 (9.8%)	550 (3.1%)	785 (4.4%)	*(0.0%)	1,434(8.0%)
2013	12,707 (77.6%)	1,484 (9.1%)	482 (2.9%)	654 (4.0%)	*(0.0%)	1,336(8.2%)
2014	11,888 (74.3%)	1,619 (10.1%)	625 (3.9%)	625 (3.9%)	*(0.0%)	1,507(9.4%)
2015	12,464 (74.4%)	1,721 (10.3%)	523 (3.1%)	774 (4.6%)	*(0.0%)	1,629(9.7%)
2016	13,264 (73.9%)	1,885 (10.5%)	533 (3.0%)	787 (4.4%)	*(0.0%)	1,830(10.2%)
2017	13,241 (73.9%)	1,924 (10.7%)	570 (3.2%)	768 (4.3%)	*(0.0%)	1,790(10.0%)
2018	13,149 (73.4%)	2,121 (11.9%)	491 (2.7%)	740 (4.1%)	*(0.0%)	1,795(10.0%)
2019	10,957 (72.3%)	1,651 (10.9%)	472 (3.1%)	705 (4.7%)	12 (0.1%)	1,698(11.2%)

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Washington State Population (Source: U.S. Census Bureau retrieved by OFM)						
Year	White	AA	AI/AN	Asian	NHOPI	Two or more races
2009	5,516,129 (82.7%)	248,046 (3.7%)	120,665 (1.8%)	476,540 (7.1%)	42,152 (.6%)	268,627 (4.0%)
2010	5,535,262 (82.3%)	252,333 (3.8%)	122,649 (1.8%)	491,685 (7.3%)	43,505 (.6%)	279,106 (4.2%)
2011	5,558,647 (82.1%)	254,975 (3.8%)	123,131 (1.8%)	496,520 (7.3%)	44,052 (.7%)	290,575 (4.3%)
2012	5,583,952 (81.9%)	258,262 (3.8%)	123,975 (1.8%)	504,478 (7.4%)	44,870 (.7%)	302,233 (4.4%)
2013	5,614,896 (81.6%)	263,231 (3.8%)	125,372 (1.8%)	518,205 (7.5%)	46,315 (.7%)	314,381 (4.6%)
2014	5,656,054 (81.2%)	270,427 (3.9%)	127,574 (1.8%)	538,928 (7.7%)	48,367 (.7%)	326,820 (4.7%)
2015	5,704,884 (80.8%)	277,380 (3.9%)	129,780 (1.8%)	561,331 (7.9%)	50,140 (.7%)	337,895 (4.8%)
2016	5,774,170 (80.4%)	286,814 (4.0%)	132,404 (1.8%)	588,265 (8.2%)	52,366 (.7%)	349,681 (4.9%)
2017	5,841,468 (79.9%)	296,766 (4.1%)	134,676 (1.8%)	620,150 (8.5%)	54,637 (.7%)	362,603 (5.0%)
2018	5,894,435 (79.4%)	307,228 (4.1%)	136,431 (1.8%)	657,141 (8.8%)	56,915 (.7%)	375,420 (5.1%)
2019	5,944,674 (78.8%)	319,305 (4.2%)	138,490 (1.8%)	698,194 (9.3%)	59,393 (.8%)	386,354 (5.1%)

Note: Due to missing, incomplete, unmatched, or inconsistent data, WSP arrest events results may be under reported. Some of the OFM population estimates were based on 2010 U.S. Census data since the 2020 U.S. Census data was not fully released by the time of publication. WSP and U.S. Census Bureau data did not present with similar racial categories, and caution should be taken when interpreting results. Definitions: African American (AA); American Indian or Alaska Native (AI/AN); Native Hawaiian or Other Pacific Islander (NHOPI). Due to low N standards, some data is redated.

Table 3 shows the count and frequency of traffic-related¹² and non-traffic¹³ related crashes, cases, and charges with total linked subsample between the two datasets. Overall, the traffic and non-traffic annual charges, cases, and collisions appear stable, with no major increases or decreases. Over the 10-year period, more traffic-related records are generated until 2019 where more nontraffic court records were created due to crashes.

Table 3: Count and Frequency of Traffic-Related and Non-traffic Related Records by Crashes, Cases, and Charges (Source: DOT and AOC)

Year	Traffic-related			Non-traffic-related		
	Crashes (n, %)	Cases (n, %)	Charges (n, %)	Crashes (n, %)	Cases (n, %)	Charges (n, %)
2009	6,701 (9.8%)	6,917(9.8%)	7,603 (9.9%)	6,290 (9.6%)	6,577 (9.8%)	7,095 (9.5%)
2010	6,386 (9.3%)	6,582 (9.3%)	7,233 (9.4%)	6,197 (9.4%)	6,436 (9.5%)	6,965 (9.3%)
2011	6,384 (9.3%)	6,521 (9.2%)	7,209 (9.4%)	6,129 (9.3%)	6,316 (9.4%)	6,875 (9.2%)
2012	6,430 (9.4%)	6,589 (9.3%)	7,281 (9.5%)	6,149 (9.3%)	6,344 (9.4%)	6,958 (9.3%)
2013	5,897 (8.6%)	6,052 (8.6%)	6,646 (8.6%)	5,639 (8.6%)	5,754 (8.5%)	6,384 (8.5%)
2014	5,888 (8.6%)	6,062 (8.6%)	6,671 (8.7%)	5,418 (8.2%)	5,565 (8.3%)	6,214 (8.3%)
2015	6,124 (8.9%)	6,270 (8.9%)	6,836 (8.9%)	5,864 (8.9%)	5,963 (8.8%)	6,681 (8.9%)
2016	6,397 (9.3%)	6,560 (9.3%)	7,113 (9.2%)	6,322 (9.6%)	6,402 (9.5%)	7,242 (9.7%)
2017	6,520 (9.5%)	6,702 (9.5%)	7,289 (9.5%)	6,120 (9.3%)	6,214 (9.2%)	7,066 (9.4%)
2018	6,512 (9.5%)	6,788 (9.6%)	7,169 (9.3%)	6,167 (9.4%)	6,289 (9.3%)	7,129 (9.5%)
2019	5,457 (7.9%)	5,542 (7.9%)	5,900 (7.7%)	5,519 (8.4%)	5,585 (8.3%)	6,356 (8.5%)
Totals	68,696	70,585	76,950	65,814	67,445	74,965

Note: Traffic related records are defined by Rules of the Road in the Revised Code of Washington and non-traffic are all other Title 46: Motor Vehicles related charges.

Table 4 shows the top 10 overall traffic-related charges from 2009 to 2019 broken up by type of charge. Approximately 75% of all charges were one of the top 10 overall charges. The 10 charges can be broken down in into three categories: substance-related, improper vehicle operation, and dangerous driving. These three categories show how integrating these two datasets provides a new way to evaluate the public health and safety of crashes in Washington.

¹² Traffic related records are generated by DUIs, vehicular assaults, or reckless driving etc.

¹³ Non-traffic related records are ownership issues, off-road vehicles, or lack of insurance, etc



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Table 4: Top 10 Traffic-Related Charges 2009-2019 (Source: DOT and AOC)

Law Number	Law Description	Charges (n, %)	Charge Type
*SW 46.61.502	DUI – GROSS MISDEMEANOR	53,860 (28.1%)	Substance Related
*SW 46.20.342.1C	DRIVING WITH INVALID LICENCE 3 RD DEGREE	37,946 (19.8%)	Improper Vehicle Operation
*SW 46.52.020	HIT AND RUN ATTENDED VEHICLE	16,563 (8.6%)	Dangerous Driving
*SW 46.61.500	RECKLESS DRIVING	8,324 (4.3%)	Dangerous Driving
*SW 46.52.010.1	HIT/RUN UNATTENDED VEHICLE	7,815 (4.1%)	Dangerous Driving
*SW 46.52.010.2	HIT/RUN UNATTENDED PROPERTY	6,494 (3.3%)	Dangerous Driving
SMC 115602000	D.U.I.	4,692 (2.4%)	Substance Related
*SW 46.20.005	NO VALID OPERATING LICENSE-WITHOUT ID	3,838 (2.0%)	Improper Vehicle Operation
*SW 46.20.740	OPERATING VEHICLE W/O IGNITION INTERLOCK	3,679 (1.9%)	Improper Vehicle Operation
*SW 46.20.342.1B	DRIVING WITH INVALID LICENCE 2 ND DEGREE	3,539 (1.8%)	Improper Vehicle Operation

Note: All frequencies are the result of the TRIP linkage and have a Crash associated with every charge. (SW)-Statewide, (SMC)-Seattle Municipal Code.

Limitations

With any data, comes its limitations. This report identifies a few major limitations, and there are likely more not listed that could impact work that utilized this data.

TRIP

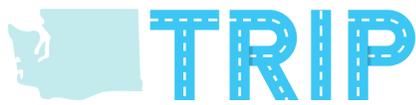
The current major limitation of TRIP is in the linkage process where records have incomplete identification information. Reasons behind this can include but not be limited to incidences such as hit-and-runs where a crash occurs and does not have access to a person at the time a report is filed; a lack of identification to confirm person’s ID while going through the courts can lead to similar situations; a lack of full identification information means a record can’t be linked.

DOT

The limitations of the DOT data come from a few sources in the collection process. PTCRs are filled out by law enforcement, which an officer can supplement after they submit the initial report. The process limits the information’s reliability and completeness. An example of limited reliability is the injury categories where definitions of fatalities and serious injuries are well defined, but lower-level injuries or no apparent injuries are recorded by a non-medical professional (which limits the reliability of some records). Injuries such as internal bleeding or concussion also may not be visible. That means they’re miscategorized as ‘minor’ or ‘no apparent injury.’ The Blood Alcohol Content (BAC) field in the DOT data comes from roadside breathalyzer tests or through toxicology testing. In the case of the latter, supplemental reporting form the officer is needed to update crash records. The process underreports the BAC data in the crash data because officers do not consistently submit supplemental documentation to update the data. Point-of-contact data collection processes and follow-up reporting involving crashes represents an ongoing concern for TRIP data limitations. For the full list of DOT variables see Appendix B.

AOC

Court records are outcome oriented, so information is simply the result of steps in the judicial process. There are no inputs to what created a record so a DUI does not record the difference between a drug impairment vs. an



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alcohol impairment. Similarly, a vehicular assault could be hitting another vehicle, or it could be pedestrian. The records are what reach the court, which means these are not arrest records and do not contain information about what happened on site; only that someone made an infraction. The subset of AOC data involving crashes that reaches the court limits the ability to engage in a broader analysis of general crash related trends. The clearest discrepancy is DUIs since they are the most frequent court records coming from crashes but are the least frequent circumstance involved in a crash. As of the beginning of 2023, the AOC data maximum potential linkage encompasses 9.2% of people in Washington crashes from 2009-2019. For the full list of AOC variables see Appendix C.

Conclusion

TRIP linking DOT and AOC data creates avenues for public health and safety research. Linking this data means people can better evaluate events from ‘crash to court to drivers’ in Washington.

The addition of legal outcomes to crashes and the context of those outcomes can be leveraged through the links TRIP created. TRIP encourages those interested in crash data and related court records to [request data](#) from TRIP. You can also dive into the data using the [TRIP dashboards](#) to find out what can be accomplished with linked data. Please reach out for any further information [TRIP staff](#).

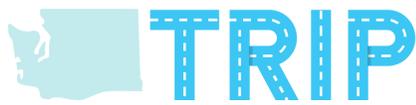


Appendix A

The TRIP Linkage Process

The TRIP linkage process has two key parts. The first is the creation of a Primary Key (PKey) and the second is a Linkage ID (ID). A PKey is the minimum necessary combination of variables needed to uniquely identify a person in a specific dataset. The minimum necessary parts of a PKey will depend on what is available in any given dataset. A complete PKey will have all the minimum variables required attached to one record. An example of a complete PKey would be someone's first name, middle name, last name, and date of birth having at least a first name, last name, and date of birth. One way to increase the possibility of improving the matching results is to have a tiered PKey system which requires more information in the dataset to attempt. To follow on the example previously used, if a data set were to also have the last four digits of a social security number (SSN) it may be possible to have the first set of PKeys using a person's full name, date of birth, and the last four of the SSN. If the first set of PKeys is incomplete the second set of PKeys could be a person's full name and date of birth. Identifying and creating a complete PKey is the first step in the linkage process.

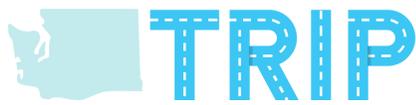
Once a complete PKey has been identified and created, an ID is bound to all records with those associated PKeys. The relationship between the PKey and the ID is a many-to-one relationship. The linkage process uses both a probabilistic and a deterministic matching algorithm. The two matching methods leverage all available datasets in the OFM data warehouse. As the data warehouse expands the linkage outcomes will change. A series of quality control checks to improve the linkage results are conducted once the matching is done. The linkage checks start with a set of automated rules leading to an as-needed manual review of remaining issues with matching. The quality control checks are tailored to each dataset.



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Appendix B

Variables	Variable Description	Count	Variables	Variable Description	Count
ID	TRIP Unique ID	191,156	CcrdLawDescription	RCW Description-AOC	191,156
Colli_Rpt_Num	Collision Report Number-DOT	191,156	CcrdLawClass	Felony Law class-AOC	14,008
Record_Type	Collision Report Type-DOT	191,156	CcrdLawSeverity	Washington State Institute Public Policy Law Severity code-AOC	191,156
Unit_Num	Unit Number-DOT	191,156	CcrdChargeNumber	Information Number-AOC	191,156
Sobr_typ_Cd	Driver's Sobriety-Dot	188,051	CcrdChargeSeqNumber	Court Information-AOC	191,156
Alch_Test_Result	Alcohol Test Results-DOT	42,642	CcrdAdjudicationDate	Date Charge resolved-AOC	166,204
Drug_Recogn_Cls_Cd_1	DRE Assessment 1-DOT	10,845	CcrdSentenceDate	Sentence Date-AOC	64,048
Drug_Recogn_Cls_Cd_2	DRE Assessment 2-DOT	2,828	CcrdDispositionCode	See Court Contact and Recidivism Database Disposition Code-AOC	191,156
State_Typ_Cd	State Code-DOT	191,031	CcrdDispositionText	Description for Court Contact and Recidivism Database Disposition Code-AOC	191,156
Air_Bag_Typ_Cd	Driver Airbag Status-DOT	189,252	CcrdCourtCode	Court Code-AOC	191,156
Restr_Sys_Typ_Cd	Driver Restraint Use-Dot	189,701	CcrdCounty	County Code and Name-AOC	191,156
Ejctn_Typ_Cd	Driver Ejection-DOT	189,743	PerAmbiguity	Person May Have More Than One Research ID-AOC	204
Helmet_Use_Cd	Driver Helmet Use-DOT	48,654	perid_X	Record Availability Indicator-AOC	0
Injur_Typ_Cd	Driver Injury Class-DOT	191,133	Dob	Date of Birth-AOC	184,219
Age	Driver Age-DOT	191,156	mDOB	Indicator for Identify Unique ID for Multiple Dates of Births-AOC	7,750
FirstName	Frist Name-DOT	191,156	Sex	Sex-AOC	191,090
MiddleName	Middle Initial-DOT	172,698	Race	Race-AOC	174,065
LastName	Last Name-DOT	191,156	Ethnicity	Ethnicity-AOC	40,440
Suffix	Suffix-DOT	90	RaceA	Race Asian-AOC	8,022
Nickname	Nickname-DOT	0	RaceB	Race Black-AOC	19,008
Gender_Typ_Cd	Driver Gender-DOT	187,786	RaceI	Race Native American/ Native Alaskan-AOC	5,936
On_duty_Police_Ofcr_Ind	On Duty Indicator-DOT	191,156	RaceM	Multi-Race Indicator-AOC	374
Drvr_Misc_Actn_Typ_Cd_1	Driver Miscellaneous Actions 1-DOT	96,415	RaceO	Race Other-AOC	214
Drvr_Misc_Actn_Typ_Cd_2	Driver Miscellaneous Actions 2-DOT	20,551	RaceP	Race Native Hawaiian and Pacific Islander-AOC	39
Drvr_Misc_Actn_Typ_Cd_3	Driver Miscellaneous Actions 3-DOT	3,674	RaceW	Race White-AOC	144,587
Liaby_Ins_Ind	Driver Liability Insurance Indicator-DOT	191,156	RaceR	Race Refused-AOC	0
Cited_Typ_Cd	Cited-DOT	152,588	RaceY	Old multi-race indictor-AOC	17,091
Ctrb_Circums_Typ_Cd_1	Driver Contributing Circumstances 1-DOT	191,013	EthnicH	Hispanic-AOC	26,642



TRAFFIC RECORDS INTEGRATION PROGRAM

Variables	Variable Description	Count	Variables	Variable Description	Count
Ctrb_Circums_Typ_Cd_2	Driver Contributing Circumstances 2-DOT	70,732	EthnicN	Nonhispanic-AOC	14,137
Ctrb_Circums_Typ_Cd_3	Driver Contributing Circumstances 3-DOT	15,708	EthnicR	Refused Ethnicity-AOC	26
Year	Year-DOT	191,156	EthnicU	Ethnicity Unknown-AOC	150,716
PKey	Person Key-DOT	191,156	EthnicityImputed	Imputed Hispanic-AOC	26,202
ResearchID	WSCCR Research ID-AOC	191,156	JcsNumber1	JUVIS 1-AOC	66,015
CcrdCaseID	Court Case Unique ID-AOC	191,156	JcsNumber2	JUVIS 2-AOC	2,868
CcrdCourtLevel	Court Level-AOC	191,156	JcsNumber3	JUVIS 3-AOC	270
CcrdCaseType	Court Contact and Recidivism Database Case Type-AOC	191,156	JcsNumber4	JUVIS 4-AOC	46
CcrdCaseFileDate	Date Case was Filed-AOC	191,156	JcsNumber5	JUVIS 5-AOC	2
CcrdOffenseDate	Date of Offense-AOC	191,156	JcsNumber6	JUVIS 6-AOC	0
CcrdLawNumber	RCW or local law-AOC	191,156	birthyear	Year of Birth-AOC	191,156



TRAFFIC RECORDS INTEGRATION PROGRAM

Appendix C

Name	Description
ResearchID	Unique ID created for database for linkage purposes for Person
CcrdCaseID	Created for Court Case ID databases DISCIS and SCOMIS
CcrdCourtLevel	The level of Court
CcrdCaseType	Delinquency Criminal Offenses, CT=Criminal Traffic, CN=Criminal Non-Traffic
CcrdCaseFileDate	Date Case was Filed
CcrdOffenseDate	Date of Offense
CcrdLawNumber	Law Code
CcrdLawDescription	Description of Law Code
CcrdLawClass	Felony RCW in SCOMIS.
CcrdLawSeverity	Created by Washington State Institute Public Policy
CcrdChargeNumber	The number is used to associate the count with the corresponding information or amended information, JCS and DISCIS set to 1 SCOMIS: 1=original charge, Charges filed on the last information are adjudicated
CcrdChargeSeqNumber	Order of Charges
CcrdAdjudicationDate	Date of Adjudication
CcrdSentenceDate	Date of Sentencing
CcrdDispositionCode	Result/ Status of Charges
CcrdDispositionText	A free text field, JRS records, it displays SCOMIS case number if Referral-case relationship exists in the system. For vacated but retained records, it displays "VACATED(R)" to reflect the current status in the system
CcrdCourtCode	Court Code
PerAmbiguity	Non-1:1 person matching, AOC provided
perid_X	demographic data availability indicator
Sex	Binary Variable
Race	Categorical Race Variable
Ethnicity	Categorical Ethnicity Variable



TRAFFIC RECORDS INTEGRATION PROGRAM

Appendix D

Collision Data Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Transaction_Type	Transaction Type
Case_Num	Case Number
Local_Agy_Code	Local Agency Code
Colli_Date	Collision Date
Colli_Time	Collision Time
RuralUrbanInd	Rural/Urban Code
State_Functional_Class	State Functional Class
Federal_Functional_Class	Federal Functional Class
Fire_Ind	Fire Resulted Indicator
Stol_Vehcl_Ind	Stolen Vehicle Indicator
Hit_Run_Ind	Hit & Run Indicator
Most_Sev_Inj_Typ_Cd	Injury Severity Type
First_Colli_Typ_Cd	First Collision Type
Sec_Colli_Typ_Cd	Second Collision Type
First_Obj_Struck_Typ_Cd	1 st Object Struck
Sec_Obj_Struck_Typ_Cd	2 nd Object Struck
Jct_Relat_Typ_Cd	Junction Relationship
Invstg_Agy_Cd	Investigating Agency
Rdwy_Surfc_Cond_Typ_Cd	Roadway Surface Conditions
Wea_Typ_Cd	Weather Conditions
Litng_Cond_Typ_Cd	Light Conditions
Wrkzn_Typ_Cd	Work Zone Status
Loc_Char_Typ_Cd	Location Character
Rdwy_Char_Typ_Cd	Roadway Character
Intnl_Ind	Intentional Action Indicator
Med_Caused_Ind	Medically Caused Indicator
Non_Trfc_Ind	Non Traffic Indicator
Legal_Intrvtn_Ind	Legal Intervention Indicator
Police_Dispatch_Time	Police Dispatched Date and Time
Police_Arrive_Time	Police Arrival Date and Time
Year	Year



TRAFFIC RECORDS INTEGRATION PROGRAM

Vehicle Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Trfc_Ctrl_Typ_Cd	Traffic Control
Postd_Speed	Posted Speed
Rdwy_Surfc_Typ_Cd	Roadway Surface Type
Veh_Cls_Cd	Vehicle Classification
Veh_Typ_Cd	Vehicle Type
Veh_Use_Typ_Cd	Vehicle Usage
VIN	Vehicle Identification Number (VIN)
Regist_St	Vehicle Registration State or Province
Veh_Actn_Typ_Cd_1	Vehicle Actions 1
Veh_Actn_Typ_Cd_2	Vehicle Actions 2
Veh_Actn_Typ_Cd_3	Vehicle Actions 3
Veh_Cond_Typ_Cd_1	Vehicle Conditions 1
Veh_Cond_Typ_Cd_2	Vehicle Conditions 2
Veh_Cond_Typ_Cd_3	Vehicle Conditions 3
Seq_Event_Typ_Cd_1	Sequence of Events 1
Seq_Event_Typ_Cd_2	Sequence of Events 2
Seq_Event_Typ_Cd_3	Sequence of Events 3
Seq_Event_Typ_Cd_4	Sequence of Events 4
Hazar_Matl_Typ_Cd	Hazardous Materials Indicator
Dirn_Mvmt_From	Direction Movement From
Dirn_Mvmt_To	Direction Movement To
Rdwy_Typ_Cd	Rural/Urban Code
Year	

Driver Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Sobr_typ_Cd	Driver's Sobriety
Alch_Test_Result	Alcohol Test Results
Drug_Recogn_Cls_Cd_1	DRE Assessment 1
Drug_Recogn_Cls_Cd_2	DRE Assessment 2
State_Typ_Cd	State Code



TRAFFIC RECORDS INTEGRATION PROGRAM

Name	Description
Air_Bag_Typ_Cd	Driver Airbag Status
Restr_Sys_Typ_Cd	Driver Restraint Use
Ejctn_Typ_Cd	Driver Ejection
Helmet_Use_Cd	Driver Helmet Use
Injur_Typ_Cd	Driver Injury Class
Age	Driver Age
Gender_Typ_Cd	Driver Gender
On_duty_Police_Ofcr_Ind	On Duty Indicator
Drvr_Misc_Actn_Typ_Cd_1	Driver Miscellaneous Actions 1
Drvr_Misc_Actn_Typ_Cd_2	Driver Miscellaneous Actions 2
Drvr_Misc_Actn_Typ_Cd_3	Driver Miscellaneous Actions 3
Liaby_Ins_Ind	Driver Liability Insurance Indicator
Cited_Typ_Cd	Cited
Ctrb_Circums_Typ_Cd_1	Driver Contributing Circumstances 1
Ctrb_Circums_Typ_Cd_2	Driver Contributing Circumstances 2
Ctrb_Circums_Typ_Cd_3	Driver Contributing Circumstances 3
Year	Year
Record_Type	Collision Report Type
Unit_Num	Unit Number
Sobr_typ_Cd	Driver's Sobriety
Year	

Passenger Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Air_Bag_Typ_Cd	Passenger Airbag Status
Restr_Sys_Typ_Cd	Passenger Restraint Use
Ejctn_Typ_Cd	Passenger Ejection
Helmet_Use_Cd	Passenger Helmet Use
Injur_Typ_Cd	Passenger Injury Class
Age	Passenger Age
Gender_Typ_Cd	Passenger Gender
Seat_Pos_Typ_Cd	Passenger Seat Position
Year	



TRAFFIC RECORDS INTEGRATION PROGRAM

Pedestrian Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Ped_Pedcyc_Loc_Typ_Cd	
Ped_Pedcyc_Cloth_Vis_Typ_Cd	Clothing Visibility
Ped_Actn_Typ_Cd	Actions
Sobr_Typ_Cd	Driver's Sobriety
Alch_Test_Result	Alcohol Test Results
Drug_Recogn_Cls_Cd_1	DRE Assessment 1 or 2
Drug_Recogn_Cls_Cd_2	
Ped_Typ_Cd	Pedestrian Status
Helmet_Use_Cd	Pedestrian Helmet Use
Injur_Typ_Cd	Injury Class
Age	Age
Gender	Gender
Ctrb_Circums_Typ_Cd_1	
Ctrb_Circums_Typ_Cd_2	Contributing Circumstances 1, 2, or 3
Ctrb_Circums_Typ_Cd_3	
Dirn_Mvmt_From	Direction Of Mvmt From
Dirn_Mvmt_To	Direction Of Movement To
Hazar_Matl_Typ_Cd	Hazardous Materials Indicator
Cited_Typ_Cd	Cited
Year	

Cyclist Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Ped_Pedcyc_Loc_Typ_Cd	Cyclist location
Ped_Pedcyc_Cloth_Vis_Typ_Cd	Clothing Visibility
Pedcyc_Actn_Typ_Cd	Cyclist Action type
Sobr_Typ_Cd	Driver's Sobriety
Alch_Test_Result	Alcohol Test Results
Drug_Recogn_Cls_Cd_1	DRE Assessment 1
Drug_Recogn_Cls_Cd_2	DRE Assessment 2
Pedcyc_Typ_Cd	Pedalcyclist Was Using



TRAFFIC RECORDS INTEGRATION PROGRAM

Name	Description
Helmet_Use_Cd	Pedalcyclist Status
Injur_Typ_Cd	Injury Class
Age	Age
Gender	Gender
Ctrb_Circums_Typ_Cd_1	Contributing Circumstances 1, 2, or 3
Ctrb_Circums_Typ_Cd_2	
Ctrb_Circums_Typ_Cd_3	
Dirn_Mvmt_From	Direction Of Movement From
Dirn_Mvmt_To	Direction Of Movement To
Hazar_Matl_Typ_Cd	Hazardous Materials Indicator
Cited_Typ_Cd	Cited
Year	

Cyclist Passenger Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Helmet_Use_Cd	Passenger Helmet Use
Injur_Typ_Cd	Passenger Injury Class
Age	Passenger Age
Gender	Passenger Gender
Year	

Property Owner Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Unit_Num	Unit Number
Hazar_Matl_Typ_Cd	Hazardous Material Type
Cited_Typ_Cd	Cited Type
Year	

City Location Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type



TRAFFIC RECORDS INTEGRATION PROGRAM

Name	Description
cty_num	City Number
City_Str_Name	Street Name
City_Str_Name.1	Street Name
City_Str_Name.2	Street Name
City_Str_Name.3	Street Name
City_Str_Name.4	Street Name
Block_Num	Block Number
Distn_From_Ref_Pt	Distance From Reference Location
Ref_Pt_Miles_Feet_Ind	Miles/Feet Indicator
Cmps_Dirn_Typ_Cd	Compass Direction Type
Year	

County Location Variable Table

Name	Description
i..Colli_Rpt_Num	Collision Report Number
Record.Type	Report Type
CountyNumber	County Number
Cnty_Road_Num	Roadlog Number
Cnty_Road_MP	Roadlog Milepost
MP_AB_Ind	County Road Milepost Ahead/Back Indicator
Diagram_Data	Diagram Data
Intrsec_Cnty_Road_Num	Intersecting County Road Number
Intrsec_Cnty_Road_MP	Intersecting County Road Milepost
Intrsec_Cnty_Road_MP_AB_Ind	Intersecting County Road Milepost Ahead/Back Indicator
Year	Year

Other Route Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
Misc_Trfcway_Typ_Surr_Key	
Primary_Trafficway	Primary Trafficway
Intersecting_Trafficway	Intersecting Trafficway
Secondary_Trafficway_1	Secondary Trafficway 1
Secondary_Trafficway_2	Secondary Trafficway 2
Reference_Location	Reference Location
Misc_Trfcway_Num	
Misc_Trfcway_MP	



TRAFFIC RECORDS INTEGRATION PROGRAM

Name	Description
Block_Num	Block Number
Distn_From_Ref_Pt	Distance From Reference Location
Ref_Pt_Miles_Feet_Ind	Miles/Feet Indicator
Cmps_Dirn_Typ_Cd	
Year	

State Route Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Collision Report Type
SR_Num	State Route Number
RRT_Code	RRT Code
RRQ	RRQ Code
ARM	ARM
Milepost	Milepost
MP_AB_Ind	Milepost AB Indicator
SR_Addl_Info_Cd	Additional Information
Veh_1_Cmps_Dirn_Typ_Cd	Vehicle 1 Compass Direction
Veh_1_Mvmnt_Dirn_Typ_Cd	Vehicle 1 Movement Direction
Veh_1_MP_Dirn_Typ_Cd	Vehicle 1 Milepost Direction
Diag_Colli_Typ_Cd	Diagram Collision Type
Veh_2_Cmps_Dirn_Typ_Cd	Vehicle 2 Compass Direction
Veh_2_Mvmnt_Dirn_Typ_Cd	Vehicle 2 Movement Direction
Veh_2_MP_Dirn_Typ_Cd	Vehicle 2 Milepost Direction
Impct_Loc_Typ_Cd	Impact Location
CityNumber	City Number
CountyNumber	County Number
Crossroad_Cls_Typ_Cd	Type of Crossroad
Region_Num	Region Number
Ramp_Loc_Typ_Cd	Ramp Location Type
Pass_as_Ok	Passing lanes used
Year	

Commercial Carrier Variable Table

Name	Description
Colli_Rpt_Num	Collision Report Number
Record_Type	Record Type
Unit_Num	Unit Number



TRAFFIC RECORDS INTEGRATION PROGRAM

Name	Description
Inter_Intra_St_Ind	Commercial Carrier Interstate Indicator
USDOT_Num	Commercial Carrier USDOT Number
Comrcl_Veh_Cls_Typ_Cd	
Cargo_Body_Typ_Cd	Commercial Carrier Cargo Body
Num_Axle	Commercial Carrier Number of Axles
GVWR	Commercial Carrier GVWR
Placard_Num	Commercial Carrier Hazmat Placard Number
Placard_Suff_Typ_Cd	Commercial Carrier Placard Suffix
Year	