

Annual Report to the Legislature and Governor | 2021

Washington State Patrol | Forensic Laboratory Services Bureau Crime Laboratory Division



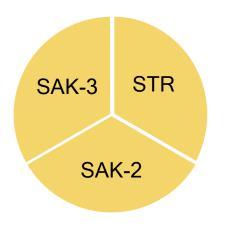
# **Summary**

This document is the annual report to the Washington State Legislature and Governor as directed by RCW 5.70.040. This report includes data collected by the Washington State Patrol (WSP) Crime Laboratory Division (CLD) regarding the progress of forensic DNA testing of sexual assault kits (SAKs) in Washington State as of September 30, 2021, as well as recommendations to increase the laboratory system's capacity to reduce and eliminate the backlog of untested SAKs. Appended to this report is a compilation and status of laboratory submissions associated to rape/sex offense allegations investigated by law enforcement agencies in Washington State.

## Introduction

Sexual assault kits are collected at a medical facility and contain and preserve physical evidence from an individual after an allegation of sexual assault has been made. Forensic DNA results generated from evidence within these kits has the power to identify perpetrators, exonerate the innocent, and link other cases together through the use of the Combined DNA Index System (CODIS) database. On July 24, 2015, state legislation (RCW 5.70.040 and 5.70.050) went into effect that requires the DNA testing of every eligible SAK in Washington. This includes kits that were previously collected prior to July 24, 2015, but not yet submitted by law enforcement to a laboratory for DNA testing. Moving forward, law enforcement agencies must now request within thirty days of its receipt that a kit be tested, if the survivor consents to its testing and the incident has been reported to law enforcement. Additionally, state legislation enacted in 2019 instituted important time frames regarding the DNA testing of SAKs. With the resulting increase in submissions to the crime laboratory of evidence requiring forensic DNA testing, the WSP is working to prioritize and facilitate the testing of every SAK within the expected timelines outlined in RCW 5.70.040.

The WSP formed a combination of strategic testing initiatives to address the increased demand for DNA testing of SAKs in the state. Based on the investigative and/or court timelines (if any) associated with the kit submission, as well as the offense date in relation to when the law took effect (July 24, 2015), the WSP expanded the categories of DNA testing for the incoming SAKs, distinguishing them into three testing categories:



- "STR:" Existing testing category; evidence is part of an active investigation or is needed for a pending trial proceeding.
- "SAK-3:" New testing category; evidence was previously un-submitted to the lab and offense occurred prior to July 24, 2015.
- "SAK-2:" New testing category; evidence is part of a non-active investigation and offense occurred on or after July 24, 2015.

### Initiative #1- Facilitate the DNA Testing of all SAK-3 Category of SAKs

The Washington State Attorney General's Office (AGO) completed an inventory in 2018, concluding that **9,232** SAKs existed across the state, but had not been submitted previously to a forensic laboratory. Additionally, the AGO received a \$3 million Sexual Assault Kit Initiative (SAKI) grant in 2017 to help initiate multi-disciplinary reform in testing these previously un-submitted kits. In compliance with RCW 5.70.050, the WSP will facilitate the testing of each submitted SAK-3 request by December 1, 2021 as a partner with the AGO and the SAKI project.

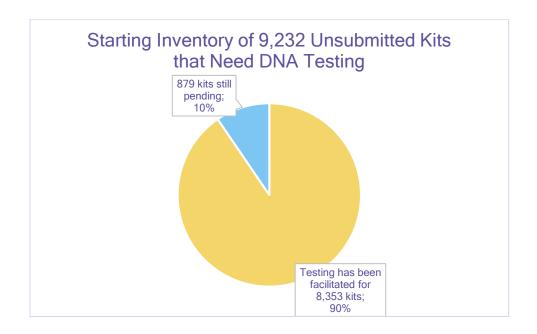
Initiative #2- Improve the timeliness of DNA Testing for SAKs (SAK-2 and STR Categories)
In compliance with RCW 5.70.040, the WSP is taking steps to ensure that a sexual assault kit will be processed for DNA within 45-days of its receipt into the laboratory starting May 1, 2022. Timely forensic DNA results positively impact the criminal justice system, helping to provide investigative leads, exonerate the innocent, and provide valuable information to those affected by crime. This initiative involves a multi-pronged approach:

- Eliminate the existing backlog caused by the rapid influx of SAK submissions.
- Reduce laboratory processing times without sacrificing quality by streamlining workflows, adopting screening methods that have increased sensitivity and can be automated, and utilizing lean management principles.

### TESTING PROGRESS FOR SAK-3 CASES

The WSP's primary testing strategy for this category of kits is an outsourcing approach, using available federal grant and state funding to support any active outsourcing contracts.

- The WSP maximized its outsourcing capacity by maintaining professional services contracts with three private laboratories.
- All DNA results generated by the outsourcing labs are reviewed by the WSP for quality and for entry into the CODIS database (when eligible) by WSP DNA scientists.



As of September 30, 2021, 8,353 SAK-3 cases (or 90 percent of the original inventory) have been shipped by the law enforcement agencies to one of WSP's approved outsourcing laboratories for analysis. Of these, DNA testing by the vendor and the subsequent ownership review by WSP forensic scientists for the entry of any eligible DNA profiles into CODIS has occurred for 5,027 SAK-3 cases. To date, 2,037 total DNA profiles from these completed SAK-3 cases have been entered into CODIS, resulting in 776 CODIS hits to offender samples, and 159 case-to-case hits.

In order to meet the legislative mandate, 879 additional SAK-3 cases still need to be outsourced for testing prior to December 1, 2021. Furthermore, DNA testing still needs to be completed by the vendor laboratories in a total of 2,748 SAK-3 cases.

## TESTING PROGRESS FOR SAK-2 CASES

The WSP's testing strategy for this category of kits is a combination of outsourcing (using available federal grant and state funding) and inhouse testing by WSP forensic scientists.

- Construction for a new space in the WSP Vancouver Crime Laboratory facility was completed in July 2020, adding 2,150 square feet of laboratory and office space to accommodate increased staffing and new High-throughput (HTP) robotic equipment.
- The initial staffing and training of a new HTP DNA section specializing in SAKs occurred throughout 2020. The team consists of a supervising forensic scientist, a technical lead scientist, one laboratory technician, one evidence custodian, and ten DNA forensic scientists.
- Completing the forensic DNA training for these new staff was prioritized in 2021. Seven
  forensic scientists successfully finished their training program on or before July 2021 and
  have been conducting independent DNA casework of SAKs since.
- The WSP Vancouver Laboratory's three large robotic platform instruments finished being programmed in January of 2021 (delayed due to COVID-19 pandemic). The phased validation to conduct HTP automated sample processing was also prioritized in 2021. The automated SAK screening process was completed in March and staff were authorized to use this automated method in June. Additionally, the evaluation of the DNA purification technology was completed and a vendor was selected in July, allowing the validation activities for that phase to begin (still ongoing).
- Between January of 2020 and September 2021, the SAK-2 backlog has decreased by 9%, as shown in Figure 1. 39% of the current SAK-2 backlog is outsourced and is either awaiting WSP review and or testing by the vendor laboratory.

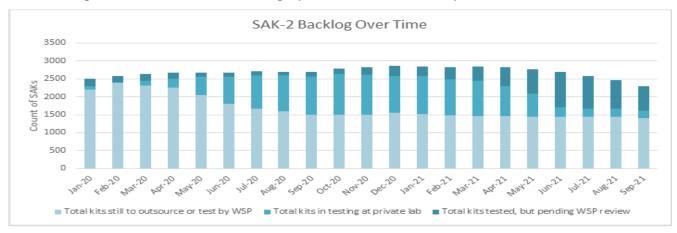


Figure 1: Count of pending SAKs that are categorized as SAK-2 requests and make up the SAK-2 backlog. When a kit is outsourced, it isn't defined as complete until the results are reviewed by WSP scientists.

## TESTING PROGRESS FOR STR-SAK CASES

The WSP's testing strategy for this category of kits is in-house testing by WSP forensic scientists.

- Staffing for eight new DNA forensic scientist positions and one new laboratory technician position, all located at WSP crime laboratories throughout the state to enhance our capacity statewide, was completed in 2020. One additional laboratory technician position still needs to be filled due to turnover.
- As of September 30, 2021, seven of the eight new DNA scientists have completed their full training program and are authorized to conduct casework. The remaining one new scientist has completed about 98 percent of their training plan (expected completion in the next few months), but is authorized to screen evidence to generate samples ready for DNA testing.
- A new screening workflow recommended by the National Forensic DNA community and
  offering increased detection/sensitivity and integration with automated platforms, was
  adopted by the WSP CLD in the fall of 2020 and implemented in all five WSP DNA labs by
  spring of 2021.
- Between January of 2020 and September 2021, the STR-SAK backlog has decreased by 52%, as shown in Figure 2.

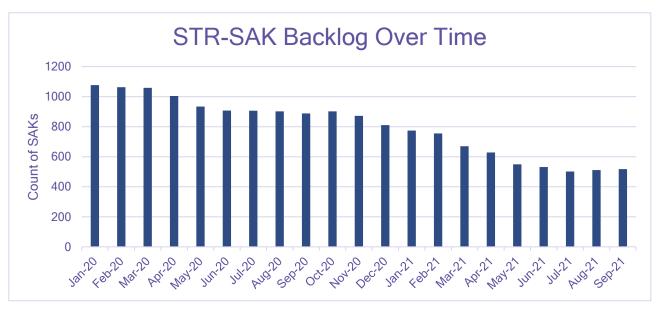


Figure 2: Count of pending SAKs that are categorized as STR-SAK requests and make up the STR-SAK backlog.

## **CONCLUSION**

Since RCW 5.70.040 and 5.70.050 were adopted on July 24, 2015, and the subsequent 74 months of time that have since followed, the WSP has received 31,639 requests for DNA testing related to investigations of sexual assault or other sex offenses. This equates to a 312 percent increase in laboratory requests for DNA testing compared to the 7,686 requests received by the WSP CLD in the 74 month timeframe prior to the law taking effect. This significant increase in demand for testing has impacted the laboratories' ability to provide timely DNA results in any criminal investigation, including those related to sexual assaults, homicides, assaults, and property crimes. This can be seen in the figure below that depicts the size of the backlog of pending testing requests and the average age of those pending requests. 2021 has finally seen a decline of the age of the backlog as a result of the increased staffing, completion of training, and implementation of process improvements.

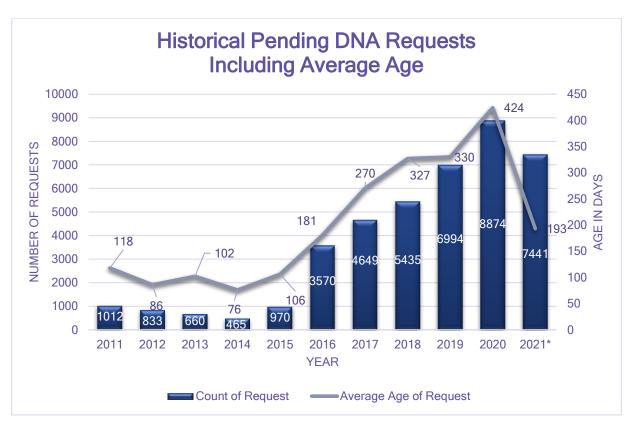


Figure 3: Count and average age (in days) of pending requests for DNA testing pertaining to all offenses and categories of testing. This is looking back the past eleven years and shows the current year's status (\*) through September 30<sup>th</sup>.

At this time, ninety percent of the estimated amount of previously un-submitted kits have been outsourced to a private laboratory and are at various stages of the testing process. The WSP has two months left to facilitate the DNA testing of the remaining 879 SAK-3 cases in order to be in compliance with the December 1, 2021 requirement. Subject to the timely submission by law enforcement of any outstanding SAK-3 requests to the laboratory, the WSP is expecting to remain on track with this testing initiative.

Approximately forty percent of the current SAK-2 backlog has been outsourced to a private laboratory for testing and these pending requests are at various stages of the testing process. The WSP has seven months left to eliminate the SAK-2 and STR-SAK backlogs, and complete any necessary process improvements to ensure a 45-day testing turnaround time for these types of requests that are received on or after May 1, 2022. Projections for the elimination of the SAK-2 and STR-SAK backlogs over the next seven months include the continued prioritization of testing of sexual assault evidence over other offense types as much as possible, leveraging the use of automation and technology in as much of the testing process, and focusing on validating and training in a full HTP model (targeted to be realized in 2022). Unanticipated delays as a result of the ongoing COVID-19 pandemic, most notably causing delays to the new automated equipment's programming and validation activities, as well as a reduced reliance on the outsourcing of the SAK-2 backlog due to the expiration of state funds at the end of the fiscal year, impacted the backlog reduction of the SAK-2 backlog in particular. Subject to the timely replacement of scientific staff lost due to attrition, and the validation of a fully automated model of SAK testing can be proven to provide high-quality, robust results, the WSP is expecting to be track with the STR-SAK backlog reduction target of May 2022, but is delayed by about six months in eliminating the entire backlog of SAK-2 requests. The WSP is exploring grant funds and supplemental state funds in order to mitigate this delay and reestablish the support of our outsourcing strategy for a portion of SAK-2s to get back on track.

## RECOMMENDATIONS

### Increase internal capacity to test more cases

The WSP must increase our internal capacity to test more cases, so that we can eliminate the backlog of untested SAKs and improve our testing turnaround times to provide timely results. This must be accomplished while maintaining a high level of quality. The WSP recommends achieving this mission through the expertise of its scientific staff, process improvements, and collaboration with stakeholders and its outsourcing partners.



### **Technical Expertise**

- Provide focused and ongoing training to build the technical expertise of staff.
- Prioritize employee engagement to prevent burnout and reduce employee turnover.
- Maintain the size of the WSP DNA program consisting of 78 scientists and laboratory technicians.
- Foster a statewide, team-based mentality to share manpower and resources across the state for labs needing temporary assistance due to staffing and training needs.

### **Process Improvements**

- Adopt automated sample processing workflows with robotic equipment.
- Enhance sensitivity in screening of SAK samples to detect samples for DNA testing.
- Identify and reduce wait times in work processes if they do not add value.

#### Collaboration

- Gain perspective and insight by communicating with stakeholders from law enforcement, victim advocacy groups, the medical community, and the judicial system.
- Partner with outsourcing laboratories to add capacity when rate and quantity of evidence submissions exceed WSP resources.

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Aberdeen Police Department	0	84	49	2	33
Adams County Sheriff's Office	0	41	24	2	15
Airway Heights Police Department	1	55	32	5	19
Algona Police Department	0	9	9	0	0
Anacortes Police Department	14	37	27	17	7
Arlington Police Department	0	53	27	2	24
Asotin County Sheriff's Office	0	29	16	1	12
Auburn Police Department	3	297	214	11	75
Bainbridge Island Police Department	0	18	15	0	3
Battle Ground Police Department	1	37	25	2	11
Bellevue Police Department	3	197	119	9	72
Bellingham Police Department	81	299	217	62	101
Benton County Sheriff's Office	0	64	32	3	29
Bingen-White Salmon Police Department	0	4	3	0	1
Black Diamond Police Department	0	16	14	0	2
Blaine Police Department	0	7	4	0	3
Boise Police Department	0	1	1	0	0
Bonney Lake Police Department	0	38	14	2	22
Bothell Police Department	0	61	38	0	23
Bremerton Police Department	5	203	86	12	110
Brewster Police Department	0	2	2	0	0
Brier Police Department	0	2	0	0	2
Buckley Police Department	0	9	5	0	4
Burlington Police Department	0	43	20	1	22
Camas Police Department	0	26	15	1	10
Castle Rock Police Department	0	6	3	1	2
Central Washington University Police Department	0	1	0	0	1
Centralia Police Department	0	120	64	7	49
Chehalis Police Department	0	2	1	0	1
Chehalis Tribal Police Department	0	2	1	0	1
Chelan County Sheriff's Office	0	166	62	4	100
Cheney Police Department	1	66	54	3	10
Chewelah Police Department	0	1	1	0	0

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Clallam County Sheriff's Office	0	58	39	6	13
Clark County Sheriff's Office	7	353	148	35	177
Clarkston Police Department	0	24	4	0	20
Cle Elum Police Department	0	5	1	0	4
Clyde Hill Police Department	0	3	0	0	3
Coast Guard Investigative Service	1	4	5	0	0
Colfax Police Department	0	2	2	0	0
College Place Police Department	0	7	4	3	0
Columbia County Sheriff's Office	0	5	2	2	1
Colville Police Department	0	18	5	1	12
Colville Tribal Police Department	1	50	47	2	2
Connell Police Department	0	10	6	0	4
Coulee Dam Police Department	0	1	1	0	0
Cowlitz County Sheriff's Office	1	104	78	7	20
Darrington Police Department	0	11	8	0	3
Des Moines Police Department	5	118	81	8	34
Douglas County Sheriff's Office	0	72	55	1	16
Dupont Police Department	0	26	5	4	17
Duvall Police Department	0	10	9	0	1
East Wenatchee Police Department	3	55	43	2	13
Eastern Washington University Police Department	0	13	15	0	-2
Eatonville Police Department		9	0	0	9
Edmonds Police Department	0	151	95	9	47
Ellensburg Police Department	3	113	32	5	79
Elma Police Department	0	3	3	0	0
Enumclaw Police Department	0	10	8	0	2
Ephrata Police Department	0	29	15	2	12
Everett Police Department	5	852	621	22	214
Evergreen State College Police Department	1	2	1	0	2
Everson Police Department	0	22	19	0	3
Fairchild Air Force Base/OSI	0	4	2	2	0
Federal Way Police Department	8	393	151	8	242
Ferndale Police Department	0	58	24	5	29

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Ferry County Sheriff's Office	0	4	4	0	0
Fife Police Department	0	94	53	6	35
Fircrest Police Department	0	6	1	0	5
Forks Police Department	0	12	7	1	4
Franklin County Sheriff's Office	1	15	11	1	4
Garfield County Sheriff's Office	0	4	3	0	1
Garfield Police Department	0	1	1	0	0
Gig Harbor Police Department	0	13	6	1	6
Gold Bar Police Department	0	10	4	4	2
Goldendale Police Department	0	17	12	1	4
Grand Coulee Police Department	0	13	3	1	9
Grandview Police Department	0	22	7	0	15
Granite Falls Police Department	0	19	7	0	12
Grant County Sheriff's Office	4	99	63	6	34
Grays Harbor County Sheriff's Office	5	70	46	4	25
Hoquiam Police Department	0	29	22	1	6
Island County Sheriff's Office	1	82	36	5	42
Issaquah Police Department	2	48	30	0	20
Jefferson County Sheriff's Office	0	31	20	1	10
Joint Animal Services	0	3	3	0	0
Kalama Police Department	1	9	7	2	1
Kalispel Tribal Police	0	11	10	1	0
Kelso Police Department	0	88	55	1	32
Kennewick Police Department	0	186	122	4	60
Kent Police Department	1	385	353	2	31
Kettle Falls Police Department	1	10	4	1	6
King County Sheriff's Office	22	1035	961	37	59
Kirkland Police Department	5	203	125	11	72
Kitsap County Sheriff's Office	4	318	175	25	122
Kittitas County Sheriff's Office	1	23	21	0	3
Klickitat County Sheriff's Office	0	15	8	2	5
La Center Police Department	0	3	3	0	0
Lacey Police Department	0	175	77	6	92

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Lake Forest Park Police Department	0	19	4	0	15
Lake Stevens Police Department	1	104	45	4	56
Lakewood Police Department	1	272	161	24	88
Lewis County Sheriff's Office	3	69	60	5	7
Liberty Lake Police Department	3	16	18	0	1
Lincoln County Sheriff's Office	0	12	6	1	5
Long Beach Police Department	2	4	5	1	0
Longview Police Department	0	155	106	10	39
Lummi Nation Police Department	0	26	15	2	9
Lynden Police Department	0	7	7	0	0
Lynnwood Police Department	3	129	83	4	45
Mabton Police Department	0	2	2	0	0
Marysville Police Department	0	209	49	37	123
Mason County Sheriff's Office	3	102	80	5	20
Mattawa Police Department	0	7	5	0	2
McChord AFB/OSI	0	2	1	1	0
McCleary Police Department	0	7	2	0	5
Mercer Island Police Department	0	10	5	0	5
Mill Creek Police Department	0	42	19	6	17
Milton Police Department	0	9	6	1	2
Monroe Police Department	4	95	51	1	47
Montesano Police Department	0	5	1	0	4
Morton Police Department	0	11	6	1	4
Moses Lake Police Department	1	92	54	7	32
Mount Vernon Police Department	4	106	73	5	32
Mountlake Terrace Police Department	0	26	17	1	8
Moxee City Police Department	0	1	1	0	0
Moxee Police Department	0	4	3	1	0
Mukilteo Police Department	0	46	24	2	20
Napavine Police Department	0	1	1	0	0
Naval Criminal Investigative Service	0	3	2	1	0
Newport Police Department	0	3	2	0	1
Normandy Park Police Department	0	3	3	0	0

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Oak Harbor Police Department	3	49	39	3	10
Ocean Shores Police Department	0	25	4	2	19
Okanogan County Sheriff's Office	0	42	38	0	4
Olympia Police Department	0	227	123	7	97
Olympic National Park	0	0	0	0	0
Omak Police Department	0	43	28	3	12
Oroville Police Department	0	2	2	0	0
Orting Police Department	0	11	4	0	7
Othello Police Department	0	31	27	0	4
Pacific County Sheriff's Office - Long Beach	0	6	4	0	2
Pacific County Sheriff's Office - South Bend	0	20	8	0	12
Pacific Police Department	1	6	3	0	4
Pasco Police Department	0	263	153	12	98
Pend Oreille County Sheriff's Office	0	31	20	2	9
Pierce County Sheriff's Department	5	1244	536	27	686
Port Angeles Police Department	3	149	72	6	74
Port of Seattle Police Department	0	11	3	0	8
Port Orchard Police Department	2	52	26	1	27
Port Townsend Police Department	0	10	8	0	2
Poulsbo Police Department	0	17	16	0	1
Prosser Police Department	0	12	10	0	2
Pullman Police Department	0	137	68	19	50
Puyallup Police Department	1	137	89	0	49
Puyallup Tribal Police Department	0	7	0	0	7
Quincy Police Department	0	31	24	3	4
Raymond Police Department	0	18	10	0	8
Redmond Police Department	0	111	47	5	59
Renton Police Department	3	250	196	8	49
Republic Police Department	0	1	1	0	0
Richland Police Department	1	177	139	9	30
Ridgefield Police Department	0	2	0	1	1
Ritzville Police Department	0	3	3	0	0
Royal City Police Department	0	4	4	0	0

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Ruston Police Department	0	0	0	0	0
Salem Police Department	0	2	2	0	0
San Juan County Sheriff's Office	0	16	5	1	10
Seattle Police Department	220	3081	2371	170	760
Sedro Woolley Police Department	0	44	20	2	22
Selah Police Department	0	20	14	2	4
Sequim Police Department	0	29	15	0	14
Shelton Police Department	0	38	24	3	11
Skagit County Sheriff's Office	2	69	41	2	28
Skamania County Sheriff's Office	0	39	15	0	24
Snohomish County Sheriff's Office	83	1312	614	73	708
Snohomish Police Department	0	12	6	2	4
Snoqualmie Police Department	0	23	14	1	8
Soap Lake Police Department	1	4	5	0	0
South Bend Police Department	0	6	5	0	1
Spokane County Sheriff's Office	4	870	721	39	114
Spokane Police Department	10	1767	1383	44	350
Spokane Tribal Police Department	0	1	1	0	0
Stanwood Police Department	0	28	13	0	15
Steilacoom Police Department	0	1	1	0	0
Stevens County Sheriff's Office	0	44	38	2	4
Stillaguamish Police Department	0	1	1	0	0
Sultan Police Department	1	10	3	0	8
Sumas Police Department	0	8	6	0	2
Sumner Police Department	0	16	8	2	6
Sunnyside Police Department	1	49	32	9	9
Suquamish Tribal Police Department	0	11	9	1	1
Swinomish Tribal Police Department	0	3	2	0	1
Tacoma Police Department	10	1659	1150	68	451
Tenino Police Department	0	1	1	0	0
Thurston County Sheriff's Office	1	168	97	6	66
Tieton Police Department	0	1	1	0	0
Toledo Police Department	0	1	1	0	0

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
Toppenish Police Department	0	32	27	2	3
Tukwila Police Department	5	194	156	9	34
Tulalip Tribal Police Department	0	25	16	3	6
Tumwater Police Department	1	103	41	4	59
Twisp Police Department	0	1	1	0	0
Union Gap Police Department	0	41	29	4	8
University of Washington Police Department	0	9	7	0	2
Upper Skagit Tribal Police Department	0	2	2	0	0
Vancouver Police Department	10	1296	1149	73	84
Wahkiakum County Sheriff's Office	0	10	7	0	3
Walla Walla County Sheriff's Office	0	24	14	5	5
Walla Walla Police Department	2	104	42	5	59
Wapato Police Department	0	34	2	0	32
Warden Police Department	0	7	3	0	4
Washington State Parks	0	1	1	0	0
Washington State University Police Department	0	27	7	1	19
Washougal Police Department	0	39	23	0	16
Wenatchee Police Department	0	117	55	2	60
West Richland Police Department	1	39	34	0	6
Western Washington Univeristy Police Department	0	7	1	0	6
Westport Police Department	0	8	1	0	7
Whatcom County Sheriff's Office	4	194	115	16	67
Whitman County Sheriff's Office	0	23	21	0	2
Winlock Police Department	0	2	1	0	1
Woodland Police Department	1	16	12	1	4
Woodway Police Department	0	2	2	0	0
WSP-Bellevue	0	2	2	0	0
WSP-Investigative Assistance Division	0	0	0	0	0
WSP-Marysville	0	4	4	0	0
WSP-Moses Lake	0	1	1	0	0
WSP-Olympia	0	7	7	0	0
WSP-Spokane	0	6	6	0	0
WSP-Tacoma	0	13	8	2	3

Agency	Pend. Start	Received	Completed	Cancelled	Pend. End
WSP-Tumwater	0	1	0	1	0
WSP-Union Gap	0	5	5	0	0
WSP-Wenatchee	0	4	4	0	0
Yakima County Sheriff's Office	0	222	152	4	66
Yakima Police Department	10	755	401	33	331
Yelm Police Department	0	9	2	0	7
Zillah Police Department	0	1	1	0	0
Totals for 07/24/2015 to 09/30/2021	603	25093	16586	1215	7895