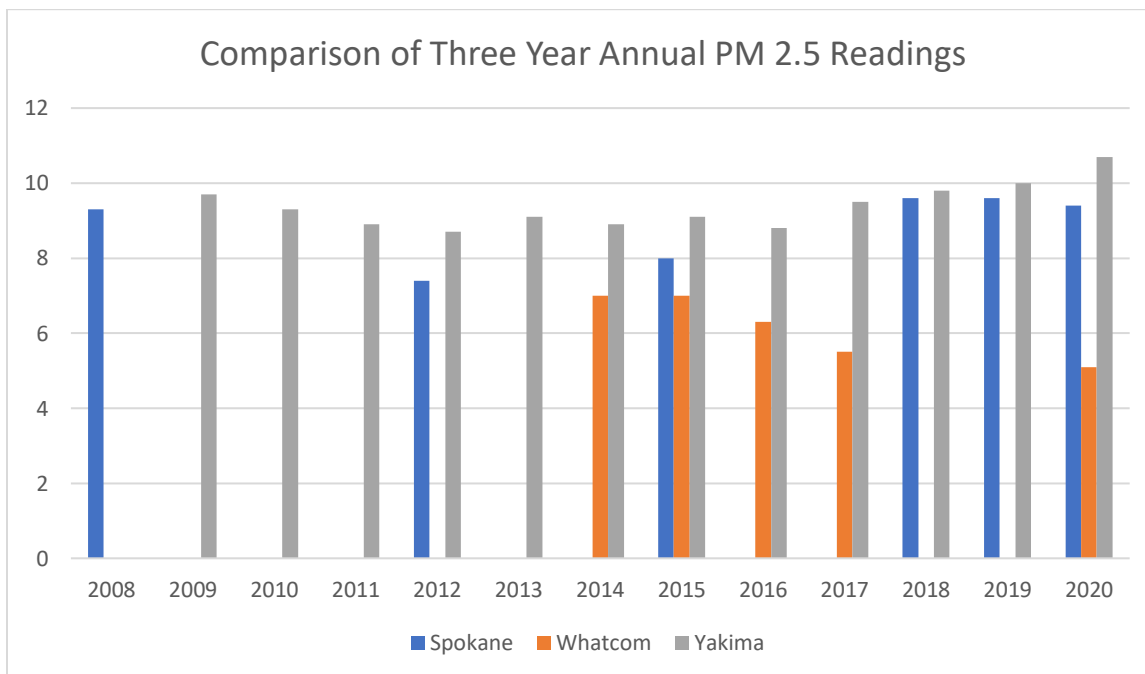


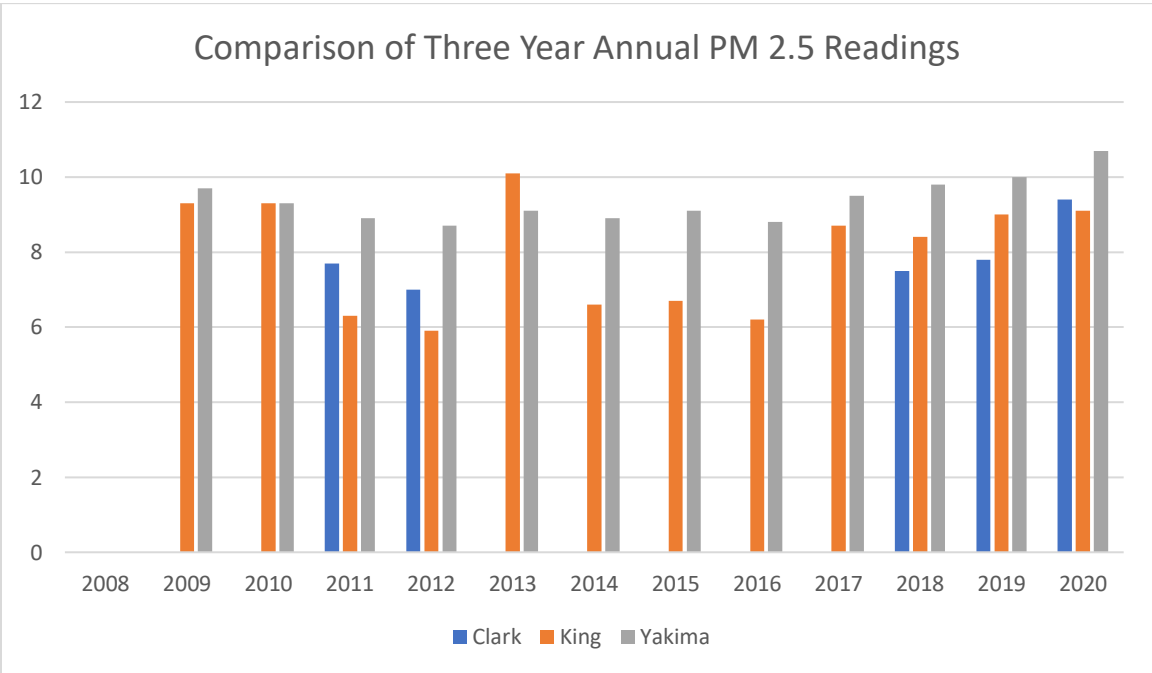
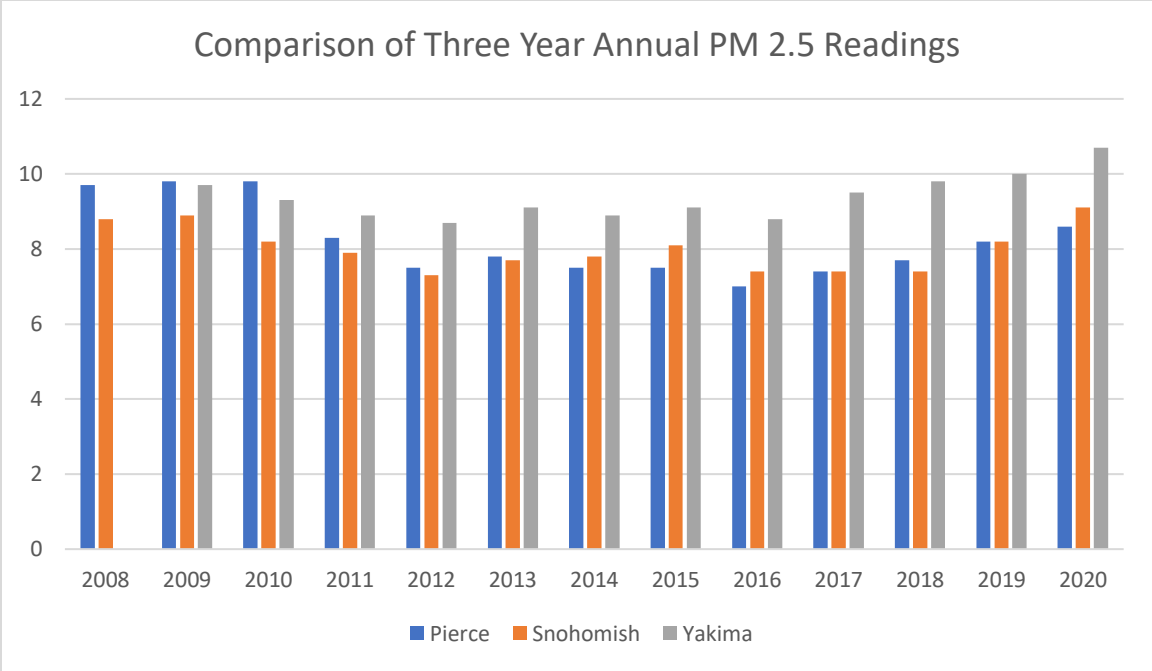
Data from EPA's Design Values Web Page

<https://www.epa.gov/air-trends/air-quality-design-values>

Three Year Annual Average PM 2.5 County Comparison – Washington State

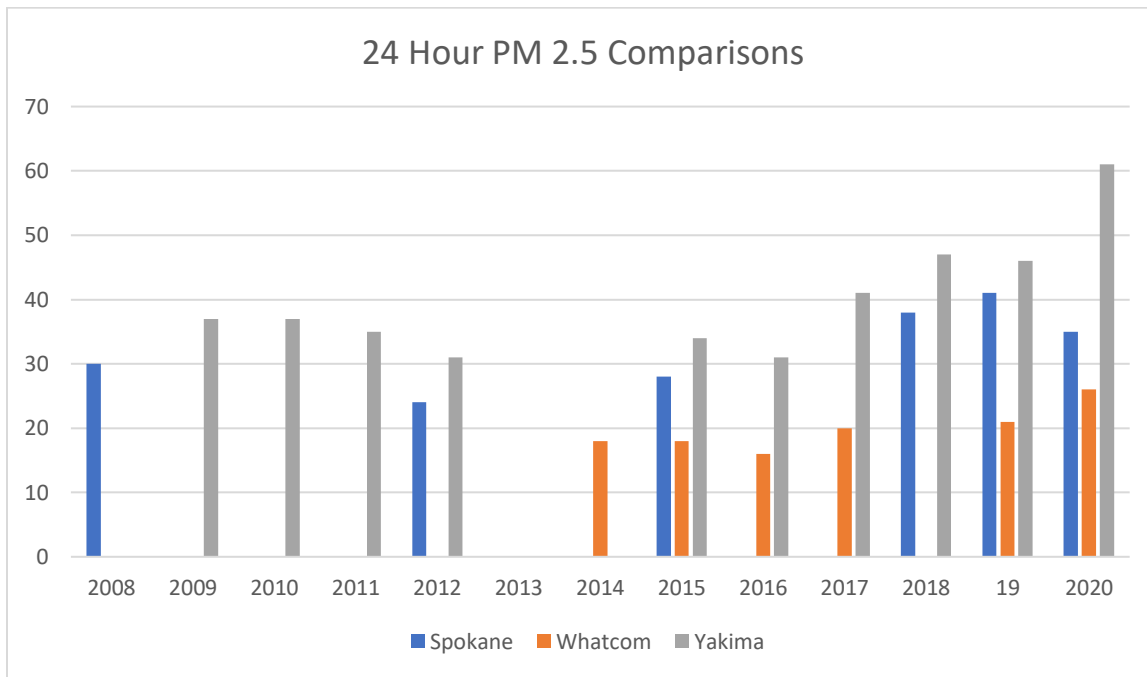
Years	Clark	King	Pierce	Snohomish	Spokane	Whatcom	Yakima
2018 - 2020	9.4	9.1	8.6	9.1	9.4	5.1	10.7
2017 - 2019	7.8	9.0	8.2	8.2	9.6		10.0
2016 - 2018	7.5	8.4	7.7	7.4	9.6		9.8
2015 - 2017		8.7	7.4	7.4		5.5	9.5
2014 - 2016		6.2	7.0	7.4		6.3	8.8
2013 - 2015		6.7	7.5	8.1	8.0	7.0	9.1
2012 - 2014		6.6	7.5	7.8		7.0	8.9
2011 - 2013		10.1	7.8	7.7			9.1
2010 - 2012	7.0	5.9	7.5	7.3	7.4		8.7
2009 - 2011	7.7	6.3	8.3	7.9			8.9
2008 - 2010		9.3	9.8	8.2			9.3
2007 - 2009		9.3	9.8	8.9			9.7
2006 - 2008			9.7	8.8	9.3		
2005 - 2007							
2004 - 2006							
2003 - 2005							

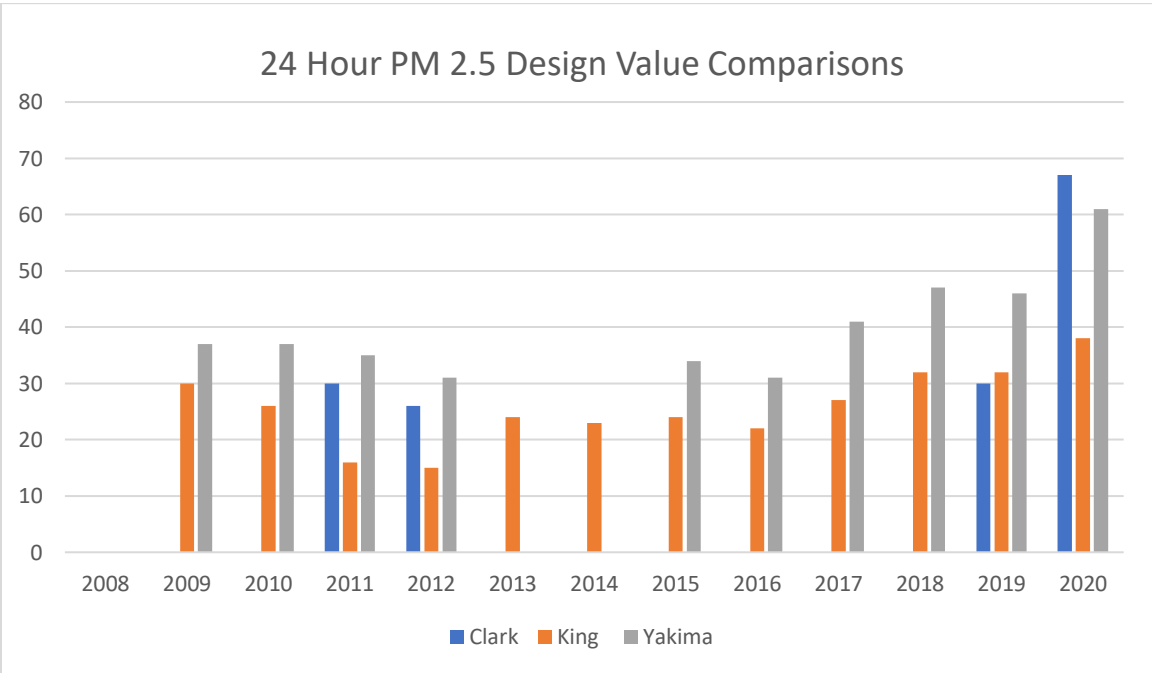
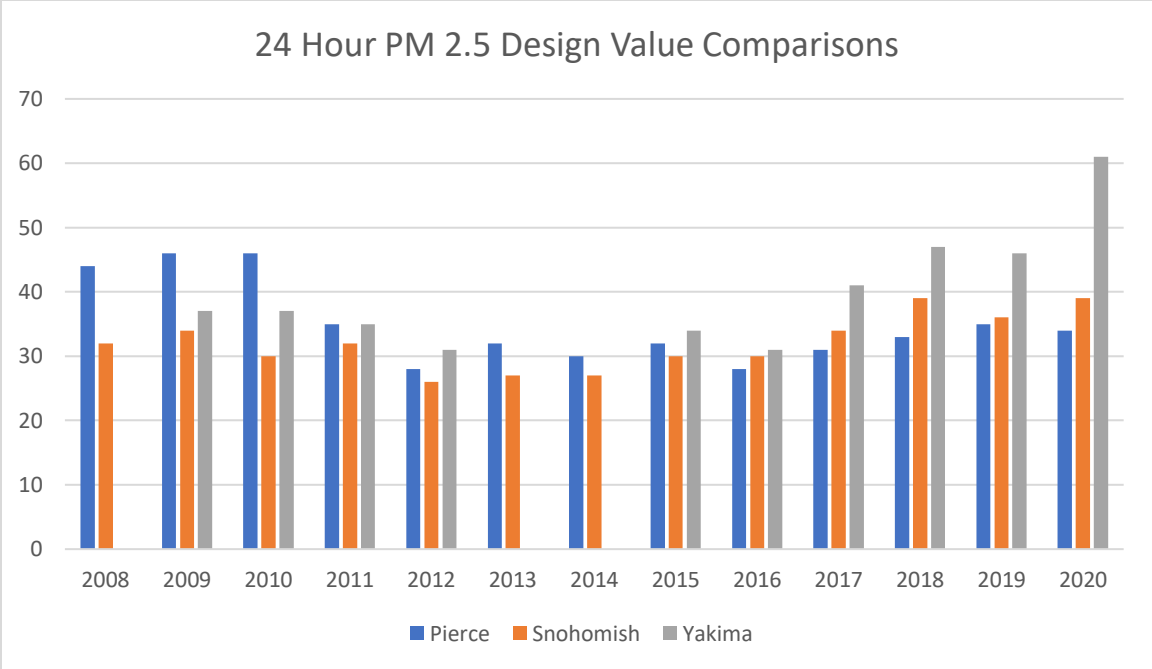




24 Hour PM 2.5 Design Value Comparisons – Washington State

Years	Clark	King	Pierce	Snohomish	Spokane	Whatcom	Yakima
2018 - 2020	67	38	34	39	35	26	61
2017 - 2019	30	32	35	36	41	21	46
2016 - 2018		32	33	39	38		47
2015 - 2017		27	31	34		20	41
2014 - 2016		22	28	30		16	31
2013 - 2015		24	32	30	28	18	34
2012 - 2014		23	30	27		18	
2011 - 2013		24	32	27			
2010 - 2012	26	15	28	26	24		31
2009 - 2011	30	16	35	32			35
2008 - 2010		26	46	30			37
2007 - 2009		30	46	34			37
2006 - 2008			44	32	30		
2005 - 2007							
2004 - 2006							
2003 - 2005							





Data by County

Chelan

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		
2017 - 2019		
2016 - 2018		
2015 - 2017		
2014 - 2016	5.6	21
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Clark

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.4	67
2017 - 2019	7.8	30
2016 - 2018	7.5	
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012	7.0	26
2009 - 2011	7.7	30
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

King

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.1	38
2017 - 2019	9.0	32
2016 - 2018	8.4	32
2015 - 2017	8.7	27
2014 - 2016	6.2	22
2013 - 2015	6.7	24
2012 - 2014	6.6	23
2011 - 2013	10.1	24
2010 - 2012	5.9	15
2009 - 2011	6.3	16
2008 - 2010	9.3	26
2007 - 2009	9.3	30
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Kitsap

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	5.8	26
2017 - 2019	4.9	20
2016 - 2018	4.6	19
2015 - 2017	4.7	16
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Kittitas

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	7.8	39
2017 - 2019	8.3	38
2016 - 2018	8.1	40
2015 - 2017	7.6	
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Okanogan

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	11.9	66
2017 - 2019		60
2016 - 2018		62
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Pierce

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	8.6	34
2017 - 2019	8.2	35
2016 - 2018	7.7	33
2015 - 2017	7.4	31
2014 - 2016	7.0	28
2013 - 2015	7.5	32
2012 - 2014	7.5	30
2011 - 2013	7.8	32
2010 - 2012	7.5	28
2009 - 2011	8.3	35
2008 - 2010	9.8	46
2007 - 2009	9.8	46
2006 - 2008	9.7	44
2005 - 2007		
2004 - 2006		
2003 - 2005		

Skagit

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		
2017 - 2019	5.8	18
2016 - 2018	5.8	18
2015 - 2017	5.9	13
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Snohomish

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.1	39
2017 - 2019	8.2	36
2016 - 2018	7.4	39
2015 - 2017	7.4	34
2014 - 2016	7.4	30
2013 - 2015	8.1	30
2012 - 2014	7.8	27
2011 - 2013	7.7	27
2010 - 2012	7.3	26
2009 - 2011	7.9	32
2008 - 2010	8.2	30
2007 - 2009	8.9	34
2006 - 2008	8.8	32
2005 - 2007		
2004 - 2006		
2003 - 2005		

Spokane

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.4	35
2017 - 2019	9.6	41
2016 - 2018	9.6	38
2015 - 2017		
2014 - 2016		
2013 - 2015	8.0	28
2012 - 2014		
2011 - 2013		
2010 - 2012	7.4	24
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008	9.3	30
2005 - 2007		
2004 - 2006		
2003 - 2005		

Stevens

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		38
2017 - 2019		
2016 - 2018		
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Whatcom

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	5.1	26
2017 - 2019		21
2016 - 2018		
2015 - 2017	5.5	20
2014 - 2016	6.3	16
2013 - 2015	7.0	18
2012 - 2014	7.0	18
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Yakima

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	10.7	61
2017 - 2019	10.0	46
2016 - 2018	9.8	47
2015 - 2017	9.5	41
2014 - 2016	8.8	31
2013 - 2015	9.1	34
2012 - 2014	8.9	
2011 - 2013	9.1	
2010 - 2012	8.7	31
2009 - 2011	8.9	35
2008 - 2010	9.3	37
2007 - 2009	9.7	37
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Annual PM 2.5 and 24 Hour PM 2.5 compiled by Three Year Periods

2018 – 2020

County	Annual PM 2.5	24 Hour PM 2.5
Clark	9.4	67
King	9.1	38
Kitsap	5.8	26
Kittitas	7.8	39
Okanogan	11.9	66
Pierce	8.6	34
Snohomish	9.1	39
Skagit		
Spokane	9.4	35
Stevens		38
Whatcom	5.1	26
Yakima	10.7	61

2017 - 2019

County	Annual PM 2.5	24 Hour PM 2.5
Clark	7.8	30
King	9.0	32
Kitsap	4.9	20
Kittitas	8.3	38
Okanogan		60
Pierce	8.2	35
Skagit	5.8	18
Snohomish	8.2	36
Spokane	9.6	41
Stevens		
Whatcom		21
Yakima	10.0	46

2016 - 2018

County	Annual PM 2.5	24 Hour PM 2.5
Clark	7.5	
King	8.4	32
Kitsap	4.6	19
Kittitas	8.1	40
Okanogan		62
Pierce	7.7	33
Skagit	5.8	18
Snohomish	7.4	39
Spokane	9.6	38
Stevens		
Whatcom		
Yakima	9.8	47

2015 - 2017

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King	8.7	27
Kitsap	4.7	16
Kittitas	7.6	
Okanogan		
Pierce	7.4	31
Skagit	5.9	13
Snohomish	7.4	34
Spokane		
Stevens		
Whatcom	5.5	20
Yakima	9.5	41

2014 - 2016

County	Annual PM 2.5	24 Hour PM 2.5
Chelan	5.6	21
Clark		
King	6.2	22
Kitsap		
Kittitas		
Okanogan		
Pierce	7.0	28
Skagit		
Snohomish	7.4	30
Spokane		
Stevens		
Whatcom	6.3	16
Yakima	8.8	31

2013 – 2015

County	Annual PM 2.5	24 Hour PM 2.5
Clark		36
King	6.7	24
Kitsap		
Kittitas		
Okanogan		
Pierce	7.5	32
Skagit		
Snohomish	8.1	30
Spokane		29
Stevens		
Whatcom	7.0	18
Yakima	9.1	34

2012 - 2014

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King	6.6	23
Kitsap		
Kittitas		
Okanogan		
Pierce	7.5	30
Skagit		
Snohomish	7.8	27
Spokane	7.9	24
Stevens		
Whatcom		
Yakima	8.9	

2011 – 2013

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King	10.1	24
Kitsap		
Kittitas		
Okanogan		
Pierce	7.8	32
Skagit		
Snohomish	7.7	27
Spokane	8.0	28
Stevens		
Whatcom		
Yakima	9.1	

2010 – 2012

County	Annual PM 2.5	24 Hour PM 2.5
Clark	7.0	26
King	5.9	15
Kitsap		
Kittitas		
Okanogan		
Pierce	7.5	28
Skagit		
Snohomish	7.3	26
Spokane	7.4	24
Stevens		
Whatcom		
Yakima	8.7	31

2009 – 2011

County	Annual PM 2.5	24 Hour PM 2.5
Clark	7.7	30
King	6.3	16
Kitsap		
Kittitas		
Okanogan		
Pierce	8.3	35
Skagit		
Snohomish	7.9	32
Spokane		
Stevens		
Whatcom		
Yakima	8.9	35

2008 – 2010

County	Annual PM 2.5	24 Hour PM 2.5
Clark	7.8	27
King	6.6	16
Kitsap		
Kittitas		
Okanogan		
Pierce	8.9	38
Skagit		
Snohomish	8.2	30
Spokane		
Stevens		
Whatcom		
Yakima	9.3	37

2007 – 2009

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King	9.3	26
Kitsap		
Kittitas		
Okanogan		
Pierce	9.8	46
Skagit		
Snohomish	8.9	34
Spokane		
Stevens		
Whatcom		
Yakima	9.7	37

2006 – 2008

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King		
Kitsap		
Kittitas		
Okanogan		
Pierce	9.7	44
Skagit		
Snohomish	8.8	32
Spokane	9.3	30
Stevens		
Whatcom		
Yakima		

2005 – 2007

County	Annual PM 2.5	24 Hour PM 2.5
Clark		
King	9.0	31
Kitsap		
Kittitas		
Okanogan		
Pierce	10.2	43
Skagit		
Snohomish	9.5	35
Spokane	9.8	31
Stevens		
Whatcom		
Yakima		

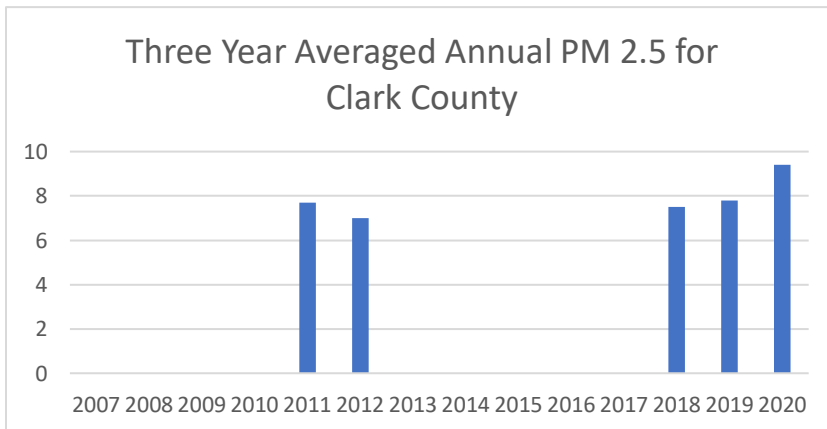
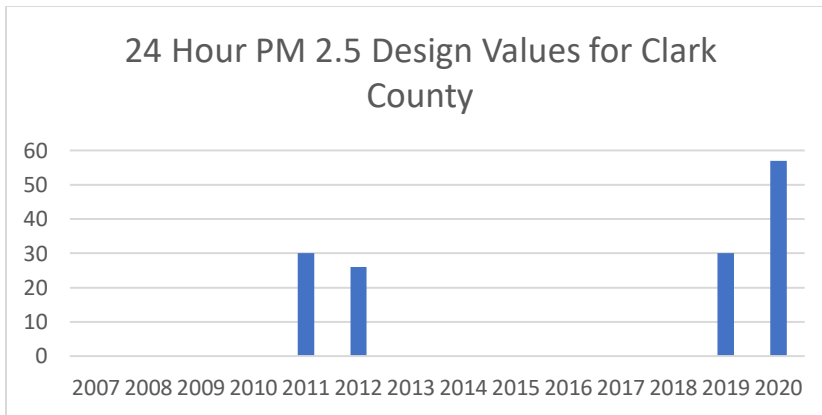
Data by County for Three Year Periods with Graphs

Chelan

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		
2017 - 2019		
2016 - 2018		
2015 - 2017		
2014 - 2016	5.6	21
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

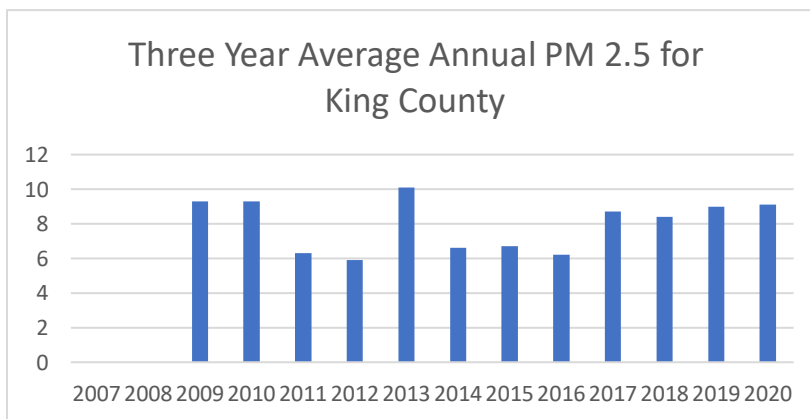
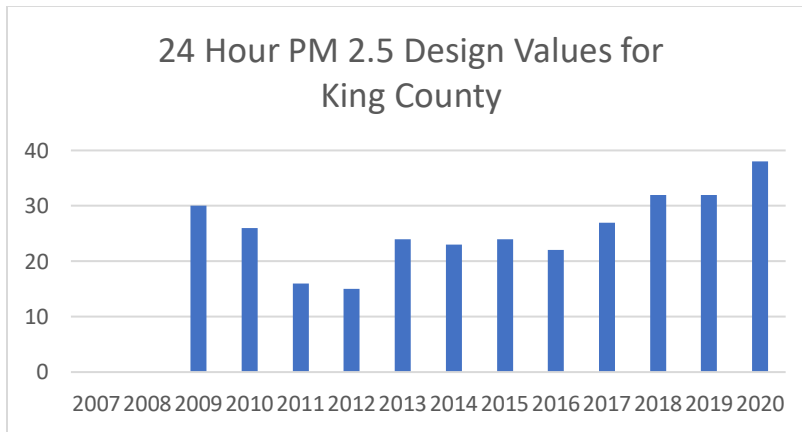
Clark

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.4	67
2017 - 2019	7.8	30
2016 - 2018	7.5	
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012	7.0	26
2009 - 2011	7.7	30
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		



King

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.1	38
2017 - 2019	9.0	32
2016 - 2018	8.4	32
2015 - 2017	8.7	27
2014 - 2016	6.2	22
2013 - 2015	6.7	24
2012 - 2014	6.6	23
2011 - 2013	10.1	24
2010 - 2012	5.9	15
2009 - 2011	6.3	16
2008 - 2010	9.3	26
2007 - 2009	9.3	30
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		



Kitsap

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	5.8	26
2017 - 2019	4.9	20
2016 - 2018	4.6	19
2015 - 2017	4.7	16
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Kittitas

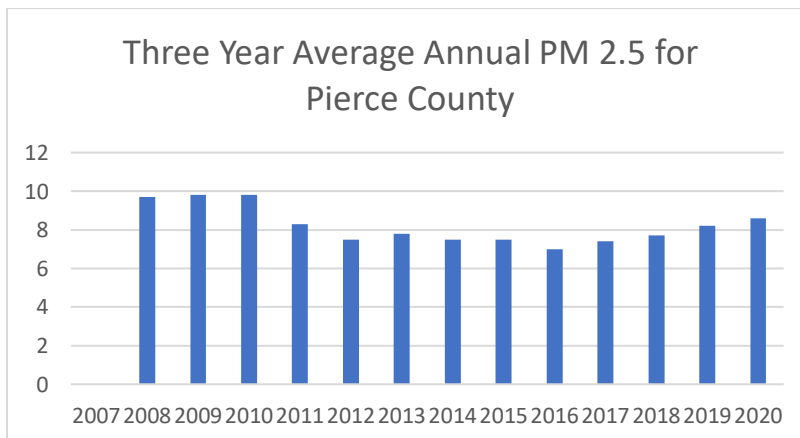
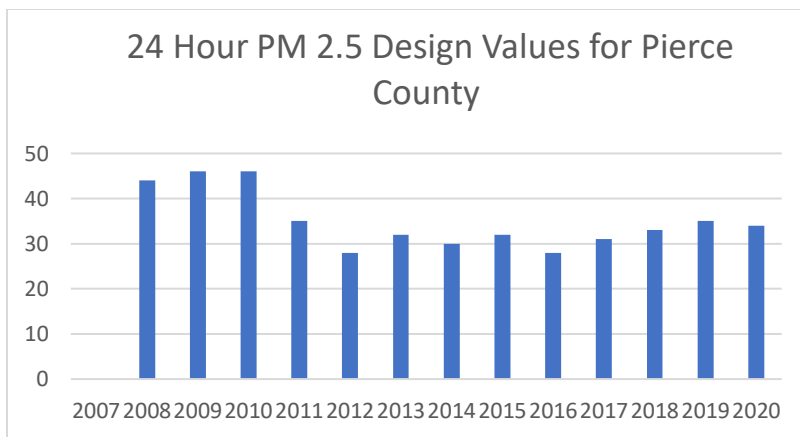
Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	7.8	39
2017 - 2019	8.3	38
2016 - 2018	8.1	40
2015 - 2017	7.6	
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Okanogan

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	11.9	66
2017 - 2019		60
2016 - 2018		62
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Pierce

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	8.6	34
2017 - 2019	8.2	35
2016 - 2018	7.7	33
2015 - 2017	7.4	31
2014 - 2016	7.0	28
2013 - 2015	7.5	32
2012 - 2014	7.5	30
2011 - 2013	7.8	32
2010 - 2012	7.5	28
2009 - 2011	8.3	35
2008 - 2010	9.8	46
2007 - 2009	9.8	46
2006 - 2008	9.7	44
2005 - 2007		
2004 - 2006		
2003 - 2005		

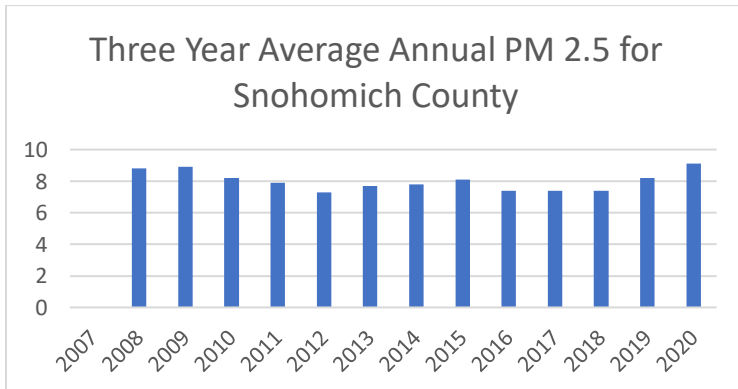
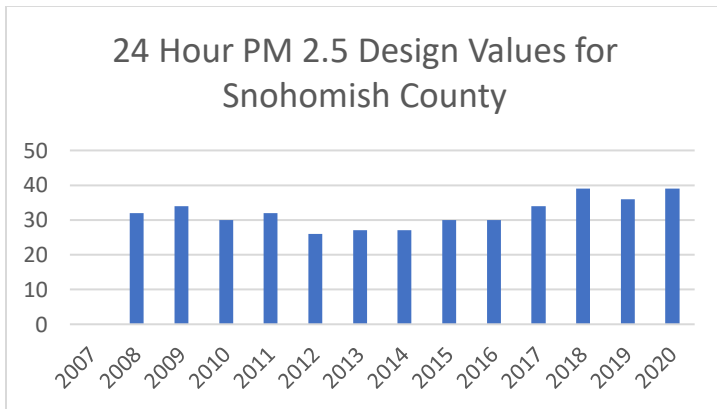


Skagit

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		
2017 - 2019	5.8	18
2016 - 2018	5.8	18
2015 - 2017	5.9	13
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

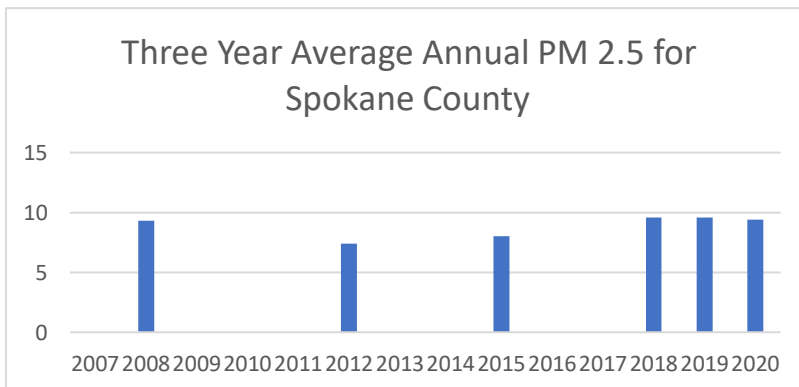
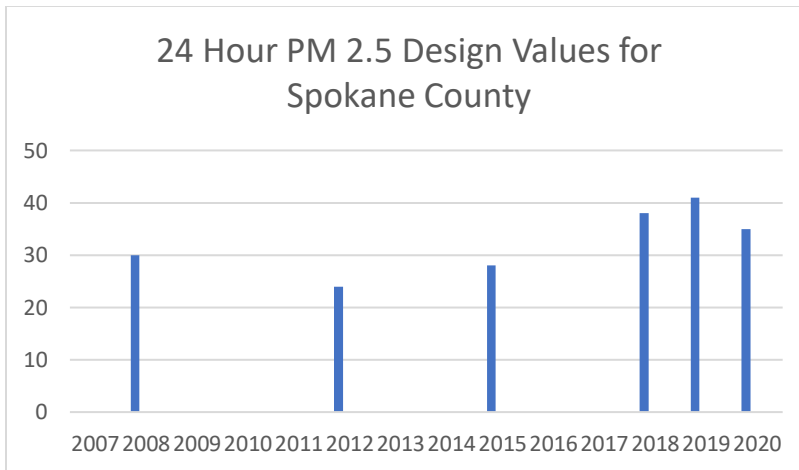
Snohomish

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.1	39
2017 - 2019	8.2	36
2016 - 2018	7.4	39
2015 - 2017	7.4	34
2014 - 2016	7.4	30
2013 - 2015	8.1	30
2012 - 2014	7.8	27
2011 - 2013	7.7	27
2010 - 2012	7.3	26
2009 - 2011	7.9	32
2008 - 2010	8.2	30
2007 - 2009	8.9	34
2006 - 2008	8.8	32
2005 - 2007		
2004 - 2006		
2003 - 2005		



Spokane

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	9.4	35
2017 - 2019	9.6	41
2016 - 2018	9.6	38
2015 - 2017		
2014 - 2016		
2013 - 2015	8.0	28
2012 - 2014		
2011 - 2013		
2010 - 2012	7.4	24
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008	9.3	30
2005 - 2007		
2004 - 2006		
2003 - 2005		

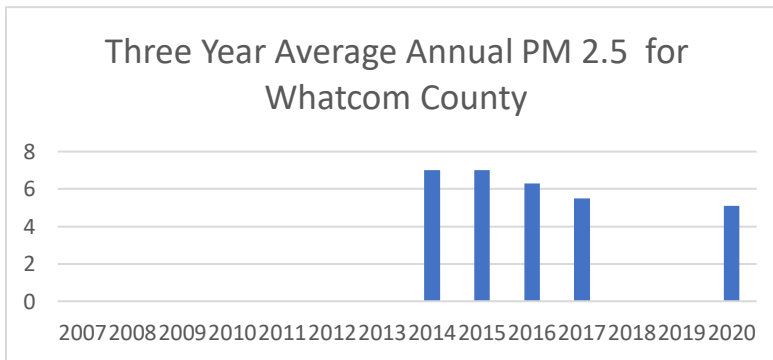
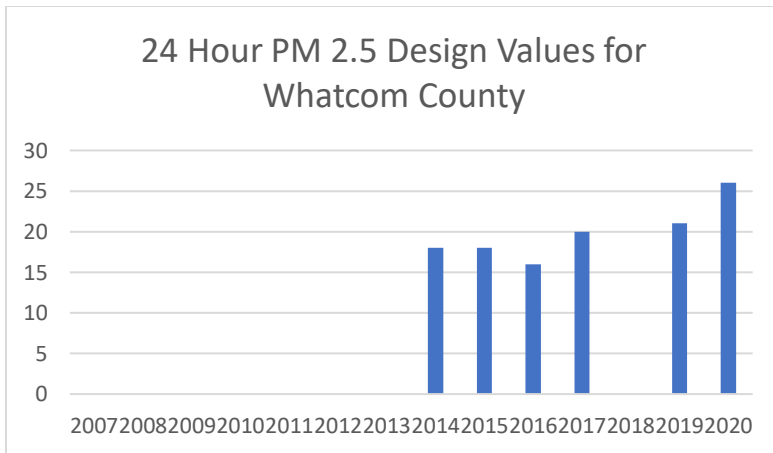


Stevens

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020		38
2017 - 2019		
2016 - 2018		
2015 - 2017		
2014 - 2016		
2013 - 2015		
2012 - 2014		
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		

Whatcom

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	5.1	26
2017 - 2019		21
2016 - 2018		
2015 - 2017	5.5	20
2014 - 2016	6.3	16
2013 - 2015	7.0	18
2012 - 2014	7.0	18
2011 - 2013		
2010 - 2012		
2009 - 2011		
2008 - 2010		
2007 - 2009		
2006 - 2008		
2005 - 2007		
2004 - 2006		
2003 - 2005		



Yakima

Years	Annual PM 2.5	24 Hour PM 2.5
2018 - 2020	10.7	61
2017 - 2019	10.0	46
2016 - 2018	9.8	47
2015 - 2017	9.5	41
2014 - 2016	8.8	31
2013 - 2015	9.1	34
2012 - 2014	8.9	
2011 - 2013	9.1	
2010 - 2012	8.7	31
2009 - 2011	8.9	35
2008 - 2010	9.3	37
2007 - 2009	9.7	37
2006 - 2008		
2005 - 2007		

